2nd Annual National Conference of
Epidemiology Foundation of India

EFICON 2021

29th-30th October, 2021

Community Medicine and Family Medicine
School of Public Health
All India Institute of Medical Sciences Jodhpur

Theme : Transforming Global Health by Integrating Medical, Social and Behavioral Interventions

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2nd Annual National Conference of
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Community Medicine and Family Medicine
School of Public Health
All India Institute of Medical Sciences, Jodhpur

Theme :
Transforming Global Health by Integrating Medical, Social and Behavioral Interventions

Supported by
National Medical Commission(NMC)
and
Department of Biotechnology (DBT)

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EFICON 2021

29th to 30th October, 2021

Message from Chief Patron

Dr. Sanjeev Misra
Director & CEO
AIIMS Jodhpur

A warm welcome to AIIMS Jodhpur for the Second Annual National Conference of Epidemiology Foundation of India – EFICON 2021 being organised by the Department of Community Medicine and Family Medicine and School of Public Health.

AIIMS Jodhpur is a leading medical institute of international repute catering to the preventive and curative health care needs of the people of India. With a dynamic faculty leading from the forefront, AIIMS Jodhpur is achieving new milestones on all fronts.

As we emerge from the shadows of the pandemic, this conference will provide a unique opportunity to network, share experiences and deliberate on the best practices in epidemiology and public health. Thus, the theme "Transforming Global Health: Integrating Medical, Social and Behavioural Interventions" envisages to boost the practice of epidemiology and bring together students and experts on a common academic platform. The virtual environment of the conference will also be a unique experience for the delegates for its visual appeal.

I convey my best wishes for the success of the conference.

Dr. Sanjeev Misra

2nd Annual National Conference of
Epidemiology Foundation of India

EFICON 2021

29th to 30th October, 2021

Message from Patron

Dr. Umesh Kapil
President, Epidemiology Foundation of India (EFI)
Professor, Dept. of Epidemiology and Clinical Research
Institute of Liver & Biliary Sciences, New Delhi

Epidemiology Foundation of India is extremely grateful to AIIMS Jodhpur for organizing the Second Annual Conference of EFI. We, all EFI members are sure that under this able leadership and guidance the Second Annual Conference of EFI will be a great success.

The Organizing Committee has developed a meticulous Scientific agenda, also the themes selected for the Conference are highly relevant to the current scenario of public health in the country. I am sure that more than 2000 members of EFI will be academically benefited from all the Plenary Sessions and invited Lectures held during the Annual EFI Conference.

I congratulate and sincerely thank all the organizing committee members at AIIMS Jodhpur and extend my best wishes for a successful organization of the conference.

Dr. Umesh Kapil

2nd Annual National Conference of
Epidemiology Foundation of India

EFICON 2021

29th to 30th October, 2021

Message from Organising Chairperson

Dr Kuldeep Singh
Dean (Academics)
Academic Head, School of Public Health
Professor and Head
Dept. of Pediatrics
AIIMS Jodhpur

Dear Colleagues and friends,

On behalf of AIIMS Jodhpur, it is my pleasure to invite all of the nationwide great scientists, academicians, young researchers and students to attend the EFICON 2021, 2nd annual national conference of Epidemiology Foundation of India organized by the Department of Community Medicine & Family Medicine (CMFM) and School of Public Health (SPH), AIIMS Jodhpur from 29th to 30th October 2021 with the theme "Transforming Global Health: Integrating Medical, Social and Behavioral Interventions".

Although the conference will be held on virtual mode, it will share an insight into the recent research and cutting edge technologies, which gains immense interest with the colossal and exuberant presence of adepts, young and brilliant researchers, and talented student communities.

Conference's goal is to bring together, a multi-disciplinary group of scientists and engineers from all over India to present and exchange break-through ideas relating to the public health. It promotes top level research and globalize the quality research in general, thus making discussions, presentations more internationally competitive and focusing attention on the recent outstanding achievements in the field of Public health, and future trends and needs.

I congratulate you for your commitment and active participation and wish you all the success.

Dr. Kuldeep Singh

2nd Annual National Conference of
Epidemiology Foundation of India

EFICON 2021

29th to 30th October, 2021

Message from Organising Chairperson

Dr Pankaja Raghav
Professor and Head
Dept. of Community Medicine & Family Medicine
AIIMS Jodhpur

Dear Colleagues,

We are indeed privileged and delighted to host the Second Annual National Conference of Epidemiology Foundation of India in the Blue City, Jodhpur. Jodhpur has a rich cultural legacy and traditional heritage & famous festivals of Rajasthan give you a factual sight of its prosperous inheritance. The conference will focus on various topics to address issues related to public health.

I express my sincere thanks to the office bearers of Epidemiology Foundation of India for giving us opportunity to host this conference. This task of organising National Conference would not have been possible without the efforts of the organising committee members, who have given their precious time in organizing this conference, I am particularly thankful to all the members of the Organizing committee. We are thankful to the sponsors of the conference, without financial support, such events would not have been possible.

The scientific programme has been planned to deliver the idea and experience by the eminent researchers and consultants across the country with the theme of Transforming Global Health by Integrating Medical, Social and Behavioural Interventions. We assure you of great academic feast through user friendly virtual platform, I am sure you will enjoy the conference. This is the great occasion for all of us to have an opportunity to interact with the leading researchers and public health practitioners across the country.

The organizing committee appreciates the hard work done by the faculty and staff and other volunteers from the institution to make the event a success. My warm wishes to all the participants and I wish conference would inspire us all to promote public health training and practices in India.

Dr. Pankaja Raghav

2nd Annual National Conference of
Epidemiology Foundation of India

EFICON 2021

29th to 30th October, 2021

Message from Organising Secretary

Dr Pankaj Bhardwaj
Vice Dean, Research
Additional Professor
Community Medicine & Family Medicine
Coordinator, School of Public Health (SPH)
AIIMS Jodhpur

With great ebullience and pleasure, I invite you all to EFICON 2021, the Second Annual National Conference of Epidemiology Foundation of India.

As we know the world is witnessing an unprecedented crisis of the COVID-19 pandemic, understanding the natural history of disease and implementing control and mitigation activities needs to be worked on. This demands an integrated approach of institutions, agencies, individuals, and resources to promote the participation of different stakeholders across the key sectors to develop a healthy society for all.

Understanding this need, the Department of Community Medicine and Family Medicine along with School of Public Health, AIIMS Jodhpur is organizing EFICON 2021 with the theme "Transforming global health: Integrating medical, social and behavioural interventions".

I truly believe that this conference will give all participants a platform to come together to learn and to widen the boundaries of knowledge through various plenary scientific sessions and scientific research presentations by pioneers of our country and various delegates.

It would be remiss to not mention the efforts put in by our team towards shaping this event in the best possible way. So, I would like to thank our members of faculty, residents and students for being the backbone during the preparation of the conference.

We look forward to your participation in EFICON 2021 and making it a success.

Dr. Pankaj Bhardwaj

2nd Annual National Conference of
Epidemiology Foundation of India

EFICON 2021

29th to 30th October, 2021

Message from Joint Organising Secretary

Dr Manoj Kumar Gupta
Associate Professor
Community Medicine & Family Medicine
AIIMS Jodhpur

It is with great pleasure that I invite you to EFICON 2021, Second Annual National Conference of Epidemiology Foundation of India.

AIIMS Jodhpur has always strived to be a pacesetter in quality medical education and research. To take this forward the Department of community Medicine and Family Medicine along with School of Public Health, AIIMS Jodhpur brings you EFICON 2021 with the theme "Transforming global health: Integrating medical, social and behavioural interventions"

Through Various plenary scientific sessions and scientific research presentations we will try providing ample opportunities for networking and socializing with epidemiological experts from across various states of India to understand the disease dynamics. I am sure that this conference will provide a platform for exchanging ideas by interaction and networking between professionals across various disciplines. The scientific sessions would help you to think differently towards innovative solutions to the current public health problems by sharing and learning, that will go a long way in the service of mankind. I hope that the participants would enjoy the feast of the scientific deliberations and refresh their knowledge.

We look forward to your participation and making EFICON 2021 a success.

Dr Manoj Kumar Gupta

2nd Annual National Conference of
Epidemiology Foundation of India

EFICON 2021

29th to 30th October, 2021

Message from Joint Organising Secretary

Dr Akhil Dhanesh Goel
Associate Professor
Community Medicine & Family Medicine
AIIMS Jodhpur

Public health challenges faced by the country are many and ever changing. The ongoing pandemic has demanded an even more integrated approach of institutions, agencies, individuals, and resources to promote the participation of policymakers, governments, and researchers across the key sectors and health specialists and communities to create healthy environments.

With this aim in mind the Department of Community Medicine and Family Medicine along with School of Public Health, AIIMS Jodhpur is organizing EFICON 2021, Second Annual National Conference of Epidemiology Foundation of India with the theme "Transforming global health: Integrating medical, social and behavioural interventions"

So, with immense pleasure I invite you to EFICON 2021, our heartfelt effort to provide a platform for professionals to interact, exchange ideas and create a network for a better tomorrow.

Looking forward to your active participation and making our efforts worthwhile.

Dr. Akhil D Goel

EFICON 2021
ORGANISING TEAM

Organizing Committee and Sub- Committee

Chief Patron	:	Prof Sanjeev Misra
Patron	:	Dr. Umesh Kapil
Organizing Chairperson	:	Dr. Kuldeep Singh
		Dr. Pankaja Raghav
Organizing Secretary	:	Dr. Pankaj Bharadwaj
Joint Organizing Secretary	:	Dr. Manoj Kumar Gupta
		Dr. Akhil Dhanesh Goel

Scientific Committee

Chairperson	:	Dr Neeti Rustagi
Co-Chairperson	:	Dr Srikanth Srinivasan
Members	:	Dr. Shaima Abdul Jabbar, Dr Mukund Gupta, Dr Bharat, Dr Suseender S, Dr Sandeep, Dr Vishal, Dr Anjali Agrawal, Dr Krishna Prajapat, Dr Divya Gehlot, Dr Shruti Goyal

Souvenir Committee

Chairperson	:	Dr Naveen KH
Co-Chairperson	:	Dr Yogesh Jain
Members	:	Dr Megha Mohanan, Kavitha M.G, Dr Kajal Taluja, Dr Ashwathy SR, Dr Vishal, Kanupriya Joshi, Dr Sejal Rathore, Dr Harimadhav V, Dr Bindiya CG

Treasurer Committee

Treasurer	:	Dr Suman Saurabh
Co-Treasurer	:	Dr Nitin Joshi
Members	:	Dr Sridevi G, Dr Devisowmiya T, Dr Annu Chaudhary, Dr Ishani Chaddha

Pre-Conference Committee

Chairperson	:	Dr Prasanna Thirunavukkarasu
Co-Chairperson	:	Dr P.P. Sharma
Members	:	Dr Manasvee Chopra, S. Varuni, Dr Tanvi Kaur Ahuja, Dr Swati Suman

Index

S.no.	Contents	Page no.
1.	About Epidemiology Foundation of India	13
2.	About Us	14
3.	Pre-conference workshops	18
4.	Conference i. Program overview ii. Detailed program iii. Oral presentation schedule iv. Poster presentation schedule	23
5.	MINDBENDERS QUIZ 2021	70
6.	Abstracts of Free paper presentation i. Adoloscent Health ii. Communicable Diseases iii. Covid-19 And Related Issues iv. Maternal And Child Health v. Mental Health vi. Miscellaneous vii. National Health Program viii. Non Communicable Diseases ix. Nutrition	74

About Epidemiology Foundation Of India

The Epidemiology Foundation of India (EFI) is a scientific consortium consisting of epidemiologists, medical teachers, bio-statisticians, researchers, and scientists from other related disciplines registered under Societies Registration Act XXI of 1860.

The broad objectives of the foundation cover development of human resources in epidemiology and bio-statistics, networking of the various Institutes at the national level for epidemiological purposes, and consultancies.

The Foundation provides a common platform to those practicing epidemiology to interact and benefit mutually towards sharing the development and applications of statistical techniques. EFI provide e-course on basic epidemiology, research methodology, hospital management and various issues of public health concern There are over 1000 life members of EFI spread all over India and abroad contributing towards development of epidemiology in the country.

Dr Umesh Kapil	President
Dr Chandra M Pandey	Vice-President
Dr V P Srivastava	Treasurer
Dr Ashok K Bhardwaj	Member
Dr Arti Kapil	Member
Dr Shivendra K Singh	Member
Dr C M Singh	Member
Dr Pradeep Aggarwal	Member

ABOUT US

AIIMS Jodhpur

All India Institute of Medical Sciences, Jodhpur (AIIMS Jodhpur) is an autonomous Institution established by Ministry of Health & Family Welfare, Government of India under the Pradhan Mantri Swasthya Suraksha Yojna (PMSSY). It came into existence as an Institute of National Importance by an Act of Parliament {The All India Institute of Medical Sciences (Amendment) Act, 2012 (No. 37 of 2012)}. The aim of the Institution is to correct regional imbalances in quality tertiary level healthcare in the country and attain self-sufficiency in graduate, postgraduate and super-specialty medical teaching and training.

AIIMS Jodhpur is one of the SIX NEW AIIMS established by the Ministry of Health & Family Welfare, Government of India under the Pradhan Mantri Swasthya Suraksha Yojna (PMSSY) with the aim of correcting regional imbalances in quality tertiary level healthcare in the country and attaining self-sufficiency in graduate and postgraduate medical education

These institutions are being established by an Act of Parliament on the lines of the original All India Institute of Medical Sciences in New Delhi which imparts both undergraduate and postgraduate medical education in all its branches and related fields, along with nursing and paramedical training to bring together in one place educational facilities of the highest order for the training of personnel in all branches of health care activity.

The Institute offers both undergraduate and postgraduate medical education in all its branches and related fields along with DM/MCh in multiple super specialties giving tremendous scope in advancement of learning in these areas. The super specialty trainee gets to work with dedicated medical teachers, learns innovative skills and the institute ensures to foster the spirit of research of the highest order. The medical degrees, diplomas and other academic distinctions granted by the Institute are recognized qualifications under the Indian Medical Council Act. The institute also trains nursing and paramedical students to bring them together in one place of the highest order for the training of personnel in all branches of health care activity.

AIIMS Jodhpur success in providing best treatment even to the least affordable in the society makes it a symbol of speciality care delivery of the future. The facility has multiple specialty and super specialty centre manage practically all types of disease conditions with support from pre- and Para-clinical departments.

At AIIMS research is not just a routine activity but rather a mission. As anywhere else, the primary purpose of research is to gratify curiosity by disciplined activity, thereby leading to creation of new knowledge. But at AIIMS, we are also conscious of the role research can play in improving the quality of teaching. A teacher engaged in research is up to date with recent information, and can also inculcate a spirit of enquiry and freedom of thought into his/her students. Finally, research at AIIMS is a part of our national endeavour to cultivate a scientific temper and to eliminate from our society the way of authority and superstition.

Department of Community Medicine and Family Medicine

The department of Community Medicine and Family Medicine has been engaged in providing health services through the following centers in rural and urban population of Rajasthan-

1. Urban Health Training Centre (UHTC) Pratap Nagar
2. Centre for Rural Health AIIMS (CRHA) Dhawa
3. Centre for Rural Health AIIMS (CRHA) Keru
4. Community Health Centre Dhundhara.

All the above health centers provide OPD services on daily basis. The skilled doctors are available at the centers to monitor health services with the help of competent paramedical and nursing staff.

Under graduate training:

The department of Community Medicine and Family Medicine is actively involved in teaching and training of under graduate medical students. The Department runs "Family Health Advisory Programme" to study the disease related factors, housing and environmental conditions in the family and community. The department also provides unique competency-based training to under graduates at health centres under the supervision of faculty members and senior residents. Also, under graduate students carry out short term research projects under the guidance of the faculty members.

Post Graduate training:

The post graduate students are admitted in two sessions each year. The post graduate students are trained and carry out thesis work under the guidance of eminent faculty members. They acquire the clinical skills as well as research skills during their tenure in the department. They also publish research articles of public health relevance in high quality journals.

Activities:

Apart from the routine UG and PG training the department is involved in observing international and national health days from time to time. All the members of the department are actively involved in the health education and awareness generation activities among the general public. Faculty members of the department are involved in intramural and extramural as well as multicentric research projects which is generating evidence base for the practice of community medicine, epidemiology and public health. As a mark of the quality research work, multiple research papers are being published every year by the faculty members and residents in journal with high impact factor. Faculty members of the department are members of various task forces at the national and

international level as well as members of various professional organizations and actively contribute to improving the health and well-being of public at large.

School of Public Health (SPH)

School of Public Health at AIIMS Jodhpur has been established to provide excellence in public health education, research and training along with highest standard of care to community. The Master of Public Health (MPH) program at AIIMS, Jodhpur was started in 2017 with the view of finding solutions for multitude of Public Health problems, to expand the existing capacity and to ensure that critical mass of Public Health experts is built and maintained. Since then, professionals are provided with the critical multidisciplinary training to help tackle various public health issues and achieve leadership positions. Recently, the Executive Program in Public Health Policy, Leadership and Management has also been started by to cater to the mid and senior level Public Health Managers.

SPH has been actively site in numerous projects carried out in collaboration with other organizations of national and international importance, such as “WHO Unity Study: Assessment of risk factors for coronavirus disease 2019 (COVID-19)”, “ICMR Study on COVID-19 Vaccine Effectiveness”, “National Clinical Registry for COVID-19”, “Resource Centre: Health Technology Assessment”, “WHO ICOPE (Integrated Care of Older Persons) model of assessment, care and referral of older persons”, “Assessment of effectiveness of IT enabled Equipment Management & Maintenance System (e-Upkaran) in Rajasthan”, “Randomized Multicentric Trial to determine the therapeutic efficacy of Ayush medicine NOQ19 in treatment of symptomatic COVID-19 patients”, “Effectiveness of Covaxin and Covishield Vaccines”, “Phase III, Randomized, Multi-centric Trial to Evaluate Efficacy, Safety and Immunogenicity of Novel Corona Virus -2019-nCov Vaccine”, “Model Health Promoting School Initiative by School of Public Health, AIIMS Jodhpur: A Feasibility Study”, “Overview of eHealth initiative in Rajasthan: An exploratory study”.

Along with the research, the school has been involved in various community-based activities independently, and in collaboration with various NGOs and state health authorities. WHO MR Campaign, Intensified Mission Indradhanush Program, Unnat Bharat Abhiyaan, COVID Vaccination, National Vector Bourne Disease Control Programme, National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke, Rapid Response Team for Swine Flu Surveillance, Breast Cancer Screening and Self Examination Sensitization to name a few and many other community based health screening and sensitization camps through the Social Outreach Cell of SPH, AIIMS Jodhpur. Over the years, our students have been offered placements at various national institutes such as National Health Systems Resource Centre, New Delhi; Care India; HelpAge International; National Institute for Implementation Research on Non-Communicable Diseases; INCELN; National Institute of Tuberculosis and Respiratory Diseases; Regional Medical Research Centre, Bhubaneshwar; PGIMER, Chandigarh and AIIMS Rishikesh and AIIMS Jodhpur.

PRE-CONFERENCE

Second Annual National Conference of
Epidemiology Foundation of India

EFICON 2021

29-30 October, 2021

Community Medicine and Family Medicine
School of Public Health
All India Institute of Medical Sciences, Jodhpur

One day Pre-conference Workshop
26th October 2021 VIRTUAL MODE

Electronic Data Capture in Epidemiology and Research

In collaboration with
JIPMER Puducherry & The Union

Workshop Plan

Time	Session	Resource Faculty
9.15am - 09.30 am	Login	
9.30 am - 10.00 am	Welcome & Inauguration	Chief Guest: **Prof R M Pandey** Head, Dept of Biostatics, AIIMS Delhi
10.00 am- 10.30 am	Importance of Data Capture Software's / Applications for Data Capture	Dr. Palanivel C
10.30 am- 11.00 am	Course Overview Introduction to Software and Installation	Dr. Pruthu TK
11.00 am - 11.15 am	Tea Break	
11.15 am - 12 noon	Demonstration and Exercise: Data Documentation Sheet	Dr. Palanivel C
12.00 noon – 01.00 pm	Demonstration and Exercise: Data Capture Form in Web Portal	Dr. Pruthu TK
01.00 pm – 02.00 pm	Lunch Break	
02.00 pm - 2.45 pm	Demonstration & Exercise: Mapping and Managing Users	Dr Jeby Jose Olickal
02.45 pm - 03.30 pm	Demonstration & Exercise: Entry in Mobile App, Syncing data & Exporting of Data	Dr Jeby Jose Olickal
03.30 pm - 03.45 pm	Coffee Break	
03.45 pm - 4.30 pm	Discussion and Queries	All Faculty

Resource Faculty

Dr Palanivel C, Additional Professor, Department of Preventive and Social Medicine
Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry

Dr Pruthu Thekkur, Senior Operational Research Fellow, Centre for Operational Research
International Union Against Tuberculosis and Lung Disease, Paris, France

Dr. Jeby Jose Olickal, Assistant Professor, Department of Public Health
NITTE deemed to be University, Mangalore, India

Chairperson, Pre-conference Committee: Dr. Prasanna Thirunavukkarasu
Co-Chairperson, Pre-conference Committee: Dr.P.P. Sharma

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Community Medicine and Family Medicine
School of Public Health
All India Institute of Medical Sciences, Jodhpur

One day Pre-conference Workshop

26th October 2021 VIRTUAL MODE

End Line Compliance Assessment for Cigarettes and Other Tobacco Products Act (COTPA)

In collaboration with

Department of Community & Family Medicine, AIIMS Rishikesh

Workshop Plan

Time	Topic	Resource Faculty
01.15 pm - 01.30 pm	Welcome	
01.30 pm - 02.00 pm	Inauguration	Chief Guest: **Prof Sonu Goel** (PGIMER Chandigarh, Director E-RCTC)
02.00 pm - 02.30 pm	Introduction about COTPA Sections	**Dr Mahendra Singh,** AIIMS, Rishikesh **Dr Yogesh Bahurupi,** AIIMS Rishikesh
02.30 pm - 03.00 pm	Capacity assessment of Participants	**Dr Pradeep Aggarwal,** AIIMS, Rishikesh **Dr. Nandita Sharma**, AIIMS Rishikesh **Dr. Dhanak Kanwar.** AIIMS Rishikesh
03.00 pm - 03.15 pm	Tea Break	
03.15 pm - 04.00 pm	Data Collection (Epi-collect installation and orientation)	**Mr. Arshdeep Singh,** AIIMS Rishikesh **Mr. Ankur Bisht,** AIIMS Rishikesh
04.00 pm – 04.30 pm	Discussion and Feedback	All Resource Faculty

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Community Medicine and Family Medicine
School of Public Health
All India Institute of Medical Sciences, Jodhpur

One day Pre-conference Workshop
27th October 2021 VIRTUAL MODE

Mathematical Modeling and Prediction in Infectious Disease Epidemiology

In collaboration with
Indian Institute of Public Health, Delhi, Public Health Foundation of India

Workshop Plan

Time	Session	
8.45 am - 09.00 am	Login	
9.00 am - 9.30 am	Welcome & Inauguration **Chief Guest** Dr Sitanshu S Kar, Professor & Head, Dept of PSM, JIPMER	
9.30 am - 10.30 am	Introduction to Modelling	**Resource Faculty** Dr Ashish Awasthi, Assistant Professor (INSPIRE Faculty) Dr Surabhi Pandey, Associate Professor Indian Institute of Public Health, Delhi Public Health Foundation of India
10.30 am - 10.45 am	Tea Break	
10.45 am - 11.45 am	Different types of Epidemiological Models - 1	
11.45 am - 12.00 pm	Bio Break	
12.00 pm - 01.00 pm	Different types of Epidemiological Models - 2	
01.00 pm - 02.00 pm	Lunch Break	
02.00 pm - 03.30 pm	Epidemiological Models: A Practical Approach	
03.30 pm - 03.45 pm	Coffee Break	
03.45 pm - 05.15 pm	Hands-on of Epidemiological Modelling	

Chairperson, Pre-conference Committee: Dr. Prasanna Thirunavukkarasu

Co-Chairperson, Pre-conference Committee: Dr.P.P. Sharma

Second Annual National Conference of
Epidemiology Foundation of India

EFICON 2021

29-30 October, 2021

Community Medicine and Family Medicine
School of Public Health
All India Institute of Medical Sciences, Jodhpur

One day Pre-conference Workshop

28th October 2021 VIRTUAL MODE

SOCIAL EPIDEMIOLOGY

In collaboration with

Centre for Public Health
School of Health Systems Studies (SHSS)
Tata Institute of Social Sciences (TISS), Mumbai

Workshop Plan

Time	Topic
08.45 am - 09.00 am	Welcome
09.00 am - 09.30 am	Inauguration Chief Guest: **Prof Amarjeet Singh**, Head, Dept of Community Medicine, PGIMER
09.30 am - 11.00 am	Introduction to SE: theory and Principles
11.00 am - 11.30 am	Tea Break
11.30 am - 01.00 pm	Approaches and Methods in Social Epidemiology
01.00 pm - 02.00 pm	Lunch Break
02.00 pm - 03.30 pm	Importance of context in SE Analysis - Case study Discussion / Class Activity 1) Ashram School girls and their health status 2) NCDs among Tribal and Rural Population
03.30 pm - 04.30 pm	Critical social epidemiology (Realist CMO)

Resource Faculty

Prof Mathew George, Professor, Centre for Public Health, SHSS, TISS
Dr Narendra Kakade, Chairperson, Centre for Public Health, SHSS, TISS
Dr Nilesh Gawde, Assistant Professor, Centre for Public Health, SHSS, TISS
Dr V Gowri, Assistant Professor, Centre for Public Health, SHSS, TISS
Prof Harshad Thakur, Professor, Centre for Public Health, SHSS, TISS

Chairperson, Pre-conference Committee: Dr. Prasanna Thirunavukkarasu
Co-Chairperson, Pre-conference Committee: Dr.P.P. Sharma

CONFERENCE

Program Overview

Time	DAY 1 (29th OCTOBER 2021)			DAY 2 (30th OCTOBER 2021)		
	Main Hall	Hall A	Hall B	Main Hall	Hall A	Hall B
09:00-09:30	INAUGURATION OF EFICON 2021			MATERNAL DEATH SURVEILLANCE AND RESPONSE (MDSR)	PAPER PRESENTATIONS **NCDs-1**	PAPER PRESENTATIONS **NCDs-2**
09:30-10:00	PROF. V. K. SRIVASTAVA ORATION					
10:00-11:00	GLOBAL HEALTH	FRONT-OF-PACKAGE LABELLING (FOPL)	PAPER PRESENTATIONS **MCH-1**	HEALTH TECHNOLOGY ASSESSMENT (HTA)	ETHICS IN MEDICAL PRACTICE AND RESEARCH	PAPER PRESENTATIONS **MCH-2**
11:00-12:00	ONE-HEALTH	NATIONAL TUBERCULOSIS ELIMINATION PROGRAM (NTEP)	PAPER PRESENTATIONS **Adolescent Health**	GENDER INEQUALITIES IN HEALTH AND WELL BEING	ADULT VACCINES	PAPER PRESENTATIONS **National Health Programs**
12:00-12:30	PROF. ABHAYA INDRAYAN ORATION			GERIATRIC HEALTH	AYUSH	PAPER PRESENTATIONS **Miscellaneous-2**
12:30-13:00	PUBLIC HEALTH EMERGENCY MANAGEMENT	APPLICATION OF GIS IN PUBLIC HEALTH	PAPER PRESENTATIONS **Mental Health**			
13:00-13:30				PAPER PRESENTATIONS **Covid-19 -1**	PAPER PRESENTATIONS **Covid-19- 2**	PAPER PRESENTATIONS **Covid-19- 3**
13:30-14:00	LUNCH BREAK					
14:00-15:00	TRIBAL HEALTH	WATER, SANITATION AND HYGIENE (WASH)	PAPER PRESENTATIONS **Communicable Diseases -1**	VALEDICTORY		
15:00-16:00	NUTRITION	PUBLIC HEALTH IN RAJASTHAN	PAPER PRESENTATIONS **Communicable Diseases-2**			
16:00-17:30	URBAN HEALTH	TOBACCO CESSATION	PAPER PRESENTATIONS **Miscellaneous-1**			

Detailed Program

EFICON- 2021

Second Annual National Conference of Epidemiology Foundation of India
29th to 30th October, 2021
All India Institute of Medical Sciences, Jodhpur

Day 1: 29th October 2021

Time	Main Hall
09:00-09:30	**INAUGURATION** **Chief Guest** Dr. Rakesh Sarwal - Additional Secretary - NITI Aayog, Govt. of India **Chief Patron** Prof. Sanjeev Misra, Director and CEO, AIIMS Jodhpur **Patron** Prof. Umesh Kapil, President, EFI, Professor, Epidemiology and Clinical Research, ILBS, New Delhi
09:30-10:00	**Prof. V. K. Srivastava Oration** Prof. Sanjeev Misra, Director and CEO, AIIMS Jodhpur **Chairpersons** Prof. Surekha Kishore, Executive Director, AIIMS Gorakhpur Dr. Sanjeev Kumar, Chair, Advisory Committee, Indian Alliance of Patients Group Chair, Indian Acad. of Public Health, Public Health Analyst

Day 1: 29th October 2021

Time	Main Hall	Hall A	Hall B
10:00-11:00	**GLOBAL HEALTH** 10:00-10:15 AM **Human Resources for Health: Strategic options for transforming Health System in India** Dr. Sanjay Zodpey Vice President - Academics, PHFI, New Delhi 10:15-10:30 AM **Health Equity in Bhutan: Understanding Access and Health Outcomes** Dr. Karma Tenzin Dy. Dean, Faculty of Post Graduate Medicine, Khesar Gyalpo University of Medical Sciences, Bhutan 10:30-10:45 AM **Understanding experiences of the Swedish health care system: A take home message for India** Dr. Yasmin Zaveri Roy, Senior Advisor at Embassy of Sweden, Delhi, India 10:45-11:00 AM **Questions and answers** **Chairpersons:** Dr. Harivansh Chopra, Professor and Ex-HOD, Community Medicine, LLRMC, Meerut, National President Elect, IAPSM India Dr. B.S. Garg Secretary, Kasturba Health Society. Director, Dr. Sushila Nayar School of Public Health	**FRONT-OF-PACK NUTRITION LABELLING TO PROMOTE HEALTHIER FOOD CHOICES: CURRENT PRACTICE AND OPPORTUNITIES** 10:00-10:15 AM **Front of Package Label and its role in controlling non communicable diseases.** Dr. Rashmi Kundapur Prof. (Add), Community and Family Medicine, AIIMS-Bibinagar, Hyderabad. 10:15-10:35 AM **Nutritional profile model: Setting the right context for strong Front of Package Label.** Dr. Umesh Kapil President, EFI Professor, Epidemiology and Clinical Research, ILBS, New Delhi 10:35-10:55 AM **Food industry resistance to progressive FOP nutrition labels** Ms. Vandana Shah Regional Director, South Asia Programs, Global Health Advocacy Incubator 10:55-11:00 AM **Call to action to public health professionals for strong FOPL in India.** Dr. Pradeep Aggarwal Prof.(Asso.), Dept. of Community and Family Medicine,	Free Oral Presentations **MCH-1** Dr. S. K. Singh Professor & Head, Community Medicine, KGMU, Lucknow Dr. Naveen K.H. Associate Professor, Community Medicine and Family Medicine, AIIMS Jodhpur

		AIIMS, Rishikesh **Chairpersons:** Dr. Rakesh Kakkar Professor & Head, Community & Family Medicine, AIIMS Mangalagiri Dr. Harishankar Joshi Professor & Head, Community & Family Medicine, AIIMS Gorakhpur	
11:00-12:00	**ONE-HEALTH** 11:00-11:15 AM **One Health Consortium, India** Dr. Nagendra R. Hegde Scientist-H, National Institute of Animal Biotechnology (NIAB), Hyderabad 11:15-11:30 AM **The Impact of forest loss and Biodiversity on Kyasanur Forest disease risk in the Western Ghats, India** Dr. Michael Walsh Senior Lecturer, Infectious Disease Epidemiology, Sydney School of Public Health, Co-Lead, One Health Node Sydney Institute for Infectious Diseases Faculty of Medicine and Health 11:30-11:45 AM **One Health Research: An urgent need for convergence** Dr. Deepak Saxena Professor and Acting Registrar, Indian Institute of Public Health, Gandhinagar	**NTEP: CURRENT UPDATES** 11:00-11:15 AM **NTEP Policy update** Dr. Anil J Purty Professor & HOD, Community Medicine, Registrar, Pondicherry Institute of Medical Sciences, Puducherry 11:15-11:30 AM **TB elimination activities in Rajasthan** Dr. Vinod Kumar Garg, State TB Officer, Rajasthan, Jaipur 11:30-11:45 AM **PMTPT** Dr. Ashok Bhardwaj Chairman NTF, NTEP Former Professor and Head, Dr. Radhakrishnan Medical College and Hospital, Hamirpur 11:45-12:00 PM **Role of Medical Colleges in NTEP**	Free Oral Presentations **Adolescent Health** Dr. Madhulekha Bhattacharya Former Professor & HOD, Community Medicine, SGT University Dr. Dinesh Walia, Professor, Community Medicine, GMCH

	11:45-12:00 PM **One Health Implementation: Challenges and Way Forward** Dr. Timo Falkenberg Senior Researcher, University of Bonn **Chairpersons:** Dr. Abhay Gaidhane Director School of Epidemiology and Public Health & Professor & Head of Community Medicine, J N Medical College, Wardha Dr. Subeer S. Majumdar Distinguished professor & former Director, National Institute of Animal Biotechnology (NIAB)	Dr. Gunjan Soni STF Chairman Rajasthan Senior Prof and Head, Respiratory Medicine, S.P. Medical College, Bikaner **Chairpersons:** Dr. Neeraj Agarwal Professor & Head, Community & Family Medicine, AIIMS Bibinagar Dr. Pradeep Deshmukh Professor & Head, Community & Family Medicine, AIIMS Nagpur	

Time	Main Hall
12:00-12:30	**Prof. Abhaya Indrayan Oration** Dr. Atanu Bhattacharjee, Assistant Professor Biostatistics, Section of Biostatistics, Centre for Cancer Epidemiology, Tata Memorial Centre **Chairpersons** Prof. Vikas Bhatia, Executive Director, AIIMS Bibinagar Prof. Dileep Mavalankar, Director, IIPH Gandhinagar

Time	Main Hall	Hall A	Hall B
12:30-13:30	**PUBLIC HEALTH EMERGENCY MANAGEMENT** 12:30-12:45 PM **Emergency Response Capacity Building during Active COVID-19 Response** Dr. Rajeev Sharma	**APPLICATION OF GIS IN PUBLIC HEALTH** 12:30-13:15 PM **Geospatial Technology for Public Health in India** Dr. S. Srinivasa Rao General Manager and Scientist, Regional Remote Sensing	Free Oral Presentations **Mental Health** Dr. Sonia Puri,

	U.S. Centers for Disease Control and Prevention (CDC), Country Office, India 12:45-13:00 PM **Importance of addressing One Health in India to prevent pandemics** Dr. Bitra George Country Director, FHI 360 Country Office, India 13:00-13:15 PM **Planning of the prehospital care, triage and field hospital** Dr. Priyanka Singh Global Health Security Agenda GHSA Liaison Coordinator, FHI 360 Country Office, India 13:15-13:30 PM **Questions and answers** Dr. Raju Thapa (Coordinator) Junior Consultant, National Institute of Disaster Management (NIDM), MHA, GoI **Chairpersons:** Dr. Jugal Kishore Director Professor & Head, Community Medicine, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi Dr. Suman Bhansali Professor, Community Medicine, Dr. S.N. Medical College, Jodhpur	Center (West), NRSC/ISRO, Jodhpur 13:15-13:30 PM **Questions and answers** **Chairpersons:** Dr. Arun Sharma Director, ICMR-NIIRNCD, Jodhpur Dr. Arun Kr. Aggarwal Professor, Community Medicine and School of Public Health, PGIMER Chandigarh	Associate Professor, Community Medicine, GMC Chandigarh Dr. Srikanth S., Associate Professor, Community Medicine and Family Medicine, AIIMS Jodhpur
13:30-14:00	Lunch		
14:00-15:00	**TRIBAL HEALTH** 14:00-14:20 PM **Ethnomedicine Practices of Tribal Healers**	**WASH** 15:00-15:15 PM **Prioritizing WASH assessment for HCFs: Practical**	Free Oral Presentations **Communicable**

	Prof. K. V. Somasundaram Director, School of Public Health & Social Medicine & Dean, Pravara Institute of Medical Sciences, Loni, Dist. - Ahmednagar. 14:20-14:40PM **Social Determinants of Tribal Health** Dr. Prashanth NS Health equity cluster lead & DBT/Wellcome Trust India Alliance Fellow, Assistant Director (Research), IPH Bengaluru 14:40-14:55PM **MITTRA (Managing Illness using Telemedicine for Tribal in Remote Areas) – A HYBRID MODEL** Dr. Kuldeep Singh Prof. & Head, Pediatrics, Principal Investigator, Centre of Excellence for Tribal Health, AIIMS Jodhpur 14:55-15:00PM **Questions and answers** Dr. Rakhi Driwedi (Coordinator) Research Scholar, Centre for Excellence for Tribal Health AIIMS Jodhpur **Chairpersons:** Dr. Jayendrakumar Kosambiya Professor & Head, Deptt of PSM, Govt. Medical College, Surat Dr. Paramita Sengupta Professor and Head Community Medicine & Family Medicine, AIIMS Kalyani	**reflections from a multi-level, multi-site study** Dr. Sandul Yasobant Researcher, IIPH Gandhinagar 15:15-15:30 PM **Improving Hygiene Behaviours Along the Continuum of Care in the Peri-Natal Period: a feasibility study** Dr. Robert Dreibelbis Associate Professor, Department of Disease Control, Deputy Director, Environmental Health Group, London School of Hygiene and Tropical Medicine 15:30-15:45 PM **Water and Sanitation issues in North India: Bridging the gaps for better health** Dr. Ravindra Khaiwal Addl. Professor of Environment Health, Community Medicine & School of Public Health, PGIMER, Chandigarh 15:45-16:00 PM **Questions and answers** **Chairpersons:** Dr. Puneet Misra Professor, Centre for Community Medicine, AIIMS Delhi Dr. Quazi Syed Zahiruddin Director (R&D), Associate Dean (Global Health), Adjunct Faculty Georgia Southern University, USA J.N. Medical College, Wardha	**Diseases -1** Dr. Pratibha Gupta, Professor & Head, Community Medicine, GMC, Faizabad Dr. Nitin Joshi, SPH, AIIMS Jodhpur
15:00-16:00	**ADDRESSING MATERNAL, ADOLESCENT AND CHILDHOOD OBESITY IN INDIA**	**PANEL DISCUSSION ON "PUBLIC HEALTH IN RAJASTHAN: LESSONS LEARNED AND FUTURE PROSPECTS"**	Free Oral Presentations

	Prof. K. V. Somasundaram Director, School of Public Health & Social Medicine & Dean, Pravara Institute of Medical Sciences, Loni, Dist. - Ahmednagar. 14:20-14:40PM **Social Determinants of Tribal Health** Dr. Prashanth NS Health equity cluster lead & DBT/Wellcome Trust India Alliance Fellow, Assistant Director (Research), IPH Bengaluru 14:40-14:55PM **MITTRA (Managing Illness using Telemedicine for Tribal in Remote Areas) – A HYBRID MODEL** Dr. Kuldeep Singh Prof. & Head, Pediatrics, Principal Investigator, Centre of Excellence for Tribal Health, AIIMS Jodhpur 14:55-15:00PM **Questions and answers** Dr. Rakhi Driwedi (Coordinator) Research Scholar, Centre for Excellence for Tribal Health AIIMS Jodhpur **Chairpersons:** Dr. Jayendrakumar Kosambiya Professor & Head, Deptt of PSM, Govt. Medical College, Surat Dr. Paramita Sengupta Professor and Head Community Medicine & Family Medicine, AIIMS Kalyani	**reflections from a multi-level, multi-site study** Dr. Sandul Yasobant Researcher, IIPH Gandhinagar 15:15-15:30 PM **Improving Hygiene Behaviours Along the Continuum of Care in the Peri-Natal Period: a feasibility study** Dr. Robert Dreibelbis Associate Professor, Department of Disease Control, Deputy Director, Environmental Health Group, London School of Hygiene and Tropical Medicine 15:30-15:45 PM **Water and Sanitation issues in North India: Bridging the gaps for better health** Dr. Ravindra Khaiwal Addl. Professor of Environment Health, Community Medicine & School of Public Health, PGIMER, Chandigarh 15:45-16:00 PM **Questions and answers** **Chairpersons:** Dr. Puneet Misra Professor, Centre for Community Medicine, AIIMS Delhi Dr. Quazi Syed Zahiruddin Director (R&D), Associate Dean (Global Health), Adjunct Faculty Georgia Southern University, USA J.N. Medical College, Wardha	**Diseases -1** Dr. Pratibha Gupta, Professor & Head, Community Medicine, GMC, Faizabad Dr. Nitin Joshi, SPH, AIIMS Jodhpur
15:00-16:00	**ADDRESSING MATERNAL, ADOLESCENT AND CHILDHOOD OBESITY IN INDIA**	**PANEL DISCUSSION ON "PUBLIC HEALTH IN RAJASTHAN: LESSONS LEARNED AND FUTURE PROSPECTS"**	Free Oral Presentations

	15:00-15:15 PM **Landscape study on estimates and predictors of obesity among children and adolescents in India** Dr, Vani Sethi Nutrition Specialist, UNICEF 15:15-15:30 PM **Regulations vs. Sales and Marketing of HFSS foods in India** Dr. Rachita Gupta National Professional Officer (Nutrition), WHO 15:30-15:45 PM **Leveraging governments schemes and programmes to address obesity** Dr. Shariqua Yunus Khan Nutrition Specialist, WFP 15:45-16:00 PM **Questions and answers** **Chairpersons:** Dr. Umesh Kapil Professor, ILBS, New Delhi Dr. J.S. Thakur Professor, Community Medicine and School of Public Health, PGIMER	Dr. Kusum Lata Gaur Sr. Professor, PSM, SMS Medical College, Jaipur Dr. Afzal Hakim Professor, PSM, SNMC, Jodhpur Dr. Rekha Acharya Professor, PSM, SP Medical College, Bikaner Dr. Vaseem Naheed Baig Professor & Head, Community Medicine, RUHS, Jaipur Dr. Rupesh kumar Associate Professor & HOD, Community Medicine, Govt. Medical College, Dungarpur **Chairpersons:** Dr. S.D. Gupta Trustee Secretary and Chairman, IIHMR University, Jaipur Dr. Amita Kashyap Professor of Community Medicine, SMS Medical College, Jaipur	**Communicable Diseases-2** Dr. Seema Jain, Professor & Head, Community Medicine, LLRM, Meerut Dr. Suman Saurabh, Assistant Professor, Community Medicine and Family Medicine, AIIMS Jodhpur
16:00-17:30	**URBAN HEALTH** 16:00-16:05 PM **Introductory Remarks** Dr. Rakesh Kumar Chief Advisor, PSI	**LANDSCAPING TOBACCO CESSATION: NOW OR NEVER!** 1600-16.10 PM **Objectives of Symposium** Dr. Shivam Kapoor The Union Address by the Chair	Free Oral Presentations **Miscellaneous-1** Dr. Rita Meena, Professor, Community Medicine, Dr. S.N.

	16:05-16:10 PM **Keynote Address** Dr. Yonette Thomas Founder and CEO, Urban Health 360 16:10-16:20 PM **Introduction of SAMAGRA** Dr. Sainath Banerjee Lead Operations Hub-SAMAGRA 16:20-16:30 PM **Journey of Urban Health in India** Mr. Gautam Chakravorty Development Assistance Specialist (Health Financing)-USAID 16:30-17:10 PM **Panel Discussion** Dr. P. Ashok Babu Joint Secretary, MoHFW Prof. Vikas K Desai Technical Director, Urban Health and Climate Resilience Centre of Excellence (UHCRCE) Dr. Sheila Vir (Nutrition) Founder Director, PHNDC Dr. Aparajita Gogoi (Gender) Executive Director, C3 Dr. Gaurav Arya (Child Health) Executive Director, CIFF Andrea Oyuela, Subject Matter Expert, Urban Food Systems, Urban	Dr. Rakesh Gupta RCF, Jaipur 16.10-16.25 PM **Epidemiology of Tobacco Cessation** Dr. Sonu Goel Professor, Community Medicine and School of Public Health, PGIMER 16.25-16.40 PM **Public health challenges and opportunities in tobacco cessation in India: role of dentist** Dr. Vikrant Mohanty Professor & Head of Department of Public Health Dentistry, MAIDS 16.40-16.55 PM **Tobacco Cessation under the National Tobacco Control Program** Dr. Shivam Kapoor Technical Advisor, The Union, New Delhi 16.55-17.10 PM **Role of Technology in Tobacco Cessation** Dr. Ravi Mehrotra Centre for Health Innovation and Policy (CHIP) Foundation, Noida, India 17.10-17.25 **Q&A** 17.25-17.30 PM **Summary and closing remarks** Dr. Shivam Kapoor	Medical College, Jodhpur Dr. Prasanna T, Associate Professor, Community Medicine and Family Medicine, AIIMS Jodhpur

	Health 360 Dr. Damodar Bachani (NCD and Urban Health), Deputy Project Director, JSI 17:10-17:20 PM **Open Discussion and Q&A** Dr. Rakesh Kumar 17:20-17:25 PM **Concluding remarks** Dr. Yonette Thomas 17:25-17:30 PM **Vote of Thanks.** Dr. Rakesh Kumar **Chairpersons** Dr. Yonette Thomas	**Chairpersons** Dr. Rakesh Gupta President, Rajasthan Cancer Foundation, Jaipur Dr. Ratan K Srivastava Deputy Director Covid team UP at Mamta Health Institute for Mother and Child	

Day 2: 30th October 2021

Time	Main Hall	Hall A	Hall B
09:00-10:00	**TRACKING PROGRESS TOWARDS REDUCING MATERNAL MORTALITY IN INDIA** 09:00-09:15 AM **Implementing maternal death surveillance and response- Guidelines** Dr. S.K. Sikdar Advisor, Maternal Health & Family Planning, MOHFW, GoI 09:15-09:30 AM **Strategies adopted by India to reduce maternal mortality** Dr. Dinesh Baswal Deputy Director Program MAMTA HIMC, Ex-Joint Commissioner, Maternal Health & Family Welfare 09:30-09:45 AM **Findings of Study on " Systems approach for assessment of Maternal Deaths in Rajasthan: Feasibility Study"** Dr. Pankaja Raghav Prof. & Head, Community Medicine & Family Medicine, AIIMS Jodhpur 09:45-10:00 AM **Newer Initiatives to improve maternal health (TBD)** Dr. Reeta Rasaily Scientist 'G' and Head, Division of RBMCH & Nutrition, Chief Nodal Officer-North East Region, ICMR **Chairpersons:** Dr. Suneela Garg National President, IAPSM, Professor of Excellence, Director Professor HAG, Maulana Azad Medical College & Associated Hospitals New Delhi	Free Oral Presentations **NCDs-1** Dr. Binod Patro Professor, Community & Family Medicine, AIIMS Bhubaneswar Dr. Surya Bali Professor, Community & Family Medicine, AIIMS Bhopal	Free Oral Presentations **NCDs-2** Dr. S.M. Salim Khan Professor & HOD, Community Medicine Government Medical College Srinagar (J&K) Dr. Neeti Rustagi, Additional Professor, Community Medicine and Family Medicine, AIIMS Jodhpur

Day 2 : 30th October 2021

	Dr. Himanshu Bhushan Advisor & Head, PHA Division, NHSRC Former Deputy Commissioner & I\C MH Division, MoHFW		
10:00-11:00	**HEALTH TECHNOLOGY ASSESSMENT (HTA)** 10:00-10:15 AM **Universal Health Coverage in India: HTA Perspective** Dr. Kavitha Rajsekar Scientist-E, ICMR, Dept. of Health Research, MoHFW 10:15-10:30 AM **Policy applications of HTA in India** Dr. Shankar Prinja Additional Professor of Health Economics, Community Medicine & School of Public Health, PGIMER 10:30-10:45 AM **TeCHO+ program in Gujarat: HTA Perspective** Dr. Somen Saha Associate Professor, IIPH, Gandhinagar 10:45-11:00 AM **Assessment of E- Health Programs: HTA Perspective** Dr. Pankaj Bhardwaj Vicee Dean (Research), Prof. (Additional), Community Medicine & Family Medicine, Coordinator, School of Public Health (SPH), AIIMS Jodhpur **Chairpersons:** Dr. Sanghamitra Pati, Scientist- G and Director, RMRCBB, ICMR Dr. Deepak B Saxena, Professor and Acting Registrar, IIPH Gandhinagar	**ETHICS IN MEDICAL PRACTICE AND RESEARCH** 10:00-10:15 AM **Ethical angle in incentivizing participation in Health Research** Dr. Anant Bhan Adjunct Professor in the Centre for Ethics, Yenepoya University, Mangalore 10:15-10:30 AM **Journalology Ethics or Ethics of Academic Publishing** Dr. Amar Jesani Consultant (Researcher/Teacher), Bioethics & Public Health 10:30-10:45 AM **Ethics in Medical Practice and Research** Dr. Nalin Mehta Director, NEIGRIHMS, Shillong 10:45-11:00 AM **Questions and Answers** **Chairpersons:** Dr. Pradeep Kumar Chief Editor IJCM, Professor, Dr. MKS Medical College, Ahmedabad, Gujarat Dr. Chandrakant Lahariya Public Policy and Health systems expert	Free Oral Presentations **MCH-2** Dr. Shaili Vyas, Professor, Community Medicine, HIMS, Dehradun Dr. P.P. Sharma, Associate Professor, Community Medicine and Family Medicine, AIIMS Jodhpur

11:00-12:00	**GENDER INEQUALITIES IN HEALTH AND WELL BEING** 11:00-11:15 AM **Why and how to account for social determinants of health such as sex, gender, ethnicity and immigration status in surveillance to address social inequalities?** Dr. Bilkis Vissandjee University of Montreal, Montreal, Quebec, Canada 11:15-11:30 AM **Measuring Gender Differentials in Health: A few pointers for computing Indicators** Dr. Mala Ramnathan Professor, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum 11:30-11:45 AM **Double Discrimination: Gender and Disability intersectionality** Dr. Satendra Singh Professor, Physiology, UCMS, Delhi Co-Chair: International Council for Disability Inclusion in Medical Education, MacLean Center for Clinical Medical Ethics fellow, University of Chicago 11:45-12:00 PM **Addressing Health Needs of Transgender Community: A Step towards Gender Equity** Dr. Aqsa Shaikh Associate professor, Department of Community Medicine, Hamdard Institute of Medical Sciences & Research **Chairpersons:** Dr. Nandini Sharma Prof. & Head, Community Medicine, Maulana Azad Medical College Dr. Mohua Moitra Prof. & Head, Community Medicine, GMC Baroda	**ADULT VACCINES** 11:00-11:15 AM **COVID-19 Vaccination Drive: Challenges faced during Planning and Implementation** Dr. N.K. Arora Chairman of India's COVID-19 Working Group, National Technical Advisory Group on Immunisation (NTAGI) 11:15-11:30 AM **Adult Immunization - A way forward** Dr. Naveen Thacker President Elect, International Pediatric Association (IPA) Director, Deep Children Hospital and Research Centre, Gandhidham 11:30-11:45 AM **Need of Adult Immunization and Target Vaccines** Dr. Madhu Gupta Professor, Community Medicine and School of Public, PGIMER 11:45-12:00 PM **Questions and Answers** **Chairpersons:** Dr. Anand Krishnan Professor, Center for Community Medicine, AIIMS Delhi Dr. A. M. Kadri, Secretary General, IAPSM, Executive Director, SHSRC, Gujarat	Free Oral Presentations **National Health Programs** Dr. Chandra M Pandey, Vice-President, Epidemiology Foundation of India Dr. Lalit Sankhe, Professor, Community Medicine, Grant Medical College, Mumbai

12:00-13:00	**GERIATRIC HEALTH** 12:00-12:15 PM **Need of the hour: National Program For Health Care of The Elderly** Dr. Anil Kumar, DDG, MoHFW 12:15-12:30 PM **UN Decade of Health Ageing 2021-2030** Dr. Atreyi Ganguly National Professional Officer, WHO, India 12:30-12:45 PM **Gaps in uses of ATs among elderly** Dr. Ravindra Singh, ICMR 12:45-13:00 PM **Epidemiology of Ageing in India** Dr. Ashish Goel, Professor & Head, Medicine, AIMS Mohali **Chairpersons:** Dr. Arvind Mathur, Director, Asian Centre for Medical Education, Research & Innovation (ACMERI) Dr. Sashi Kant, Professor & Head, Center for Community Medicine, AIIMS Delhi	**AYUSH** 12:00-12:15 PM **Contribution of Ayurveda in Universal Health Policy** Dr. Sudipta Kumar Rath Associate Professor of Dravyaguna, National Institute of Ayurveda (NIA), Jaipur 12:15-12:30 PM **Integrative approach of Cancer Management** Dr. Harish Bakhuni Associate Professor, Deptt. of Kayachikitsa, NIA, Jaipur 12:30-12:45 PM **Management of Diabetes Mellitus- Ayurveda Insights** Dr. Sumit Nathani Associate Professor , Dept. of Dravyaguna, NIA, Jaipur 12:45-13:00 PM **Open Discussion and Q&A** Dr. Kashinath Samagandi (Moderator) Associate Professor Dept. of Swasthavritta & Yoga (Ayurveda Preventive , Social Medicine & Yoga), NIA, Jaipur **Chairpersons:** Dr. Manish Chaturvedi Professor, Community Medicine, NIHFW Dr. Sanjay Rai Professor, Center for Community Medicine, AIIMS Delhi	Free Oral Presentations **Miscellaneous-2** Dr. V. P. Srivastava, Treasurer, Epidemiology Foundation of India Dr. Najam Khalique, Professor, Community Medicine, AMU
13:00-14:00	Free Oral Presentations **Covid-19 -1** Dr. Amir Khan Maroof	Free Oral Presentations **Covid-19 -2** Dr Arti Kapil	Free Oral Presentations **Covid-19 -3** Dr. Abhiruchi Galhotra,

	Professor, Community Medicine, UCMS Delhi Dr. Kalaiselvan G. Professor & Head, Community Medicine. SMVMCH, Puducherry	Member, Epidemiology Foundation of India Dr. Akhil D Goel Associate Professor, Community Medicine and Family Medicine, AIIMS Jodhpur	Professor, Community & Family Medicine, AIIMS Raipur Dr. Manoj Kumar Gupta, Associate Professor, Community Medicine and Family Medicine, AIIMS Jodhpur
14:00-14:15	**Invitation to 3rd EFICON** **Dr. S.K. Singh** **Professor, Community Medicine, KGMU, Lucknow**		
14:15-14:30	**Valedictory**		
Poster Sessions in Gallery	• **Maternal and Child Health** • **Adolescent Health** • **Mental Health** • **Communicable Diseases** • **Non-Communicable Diseases** • **COVID-19** • **National Health Programs** • **Miscellaneous**		

Judges for e- poster evaluation

- Dr. A Balaji, HOD, Community Medicine, Tagore Medical College, Chennai
- Dr. Abhishek Raut, Professor, Community Medicine, Mahatma Gandhi Institute of Medical Sciences,
- Dr. Ajeet Singh Bhadoria, Associate Professor (Community and Family Medicine), AIIMS Rishikesh
- Dr. Ali Jafar Abidi, Associate Professor, Community Medicine, AMU
- Dr. Amit Kaushik, Associate Professor, Community Medicine, RML Lucknow
- Dr. Anirban Dalui, Faculty, Community Medicine, R.G.Kar Medical College
- Dr. Anjana Verma, Assistant Professor, Community Medicine, Geetanjali Medical College and Hospital, Udaipur
- Dr. Archisman Mohapatra, Executive Director, GRID Council, New Delhi
- Dr. Arun Kumar, Assistant Professor, Community Medicine, Dr. S.N. Medical College, Jodhpur
- Dr. Charutha R, Assistant Professor, Community Medicine, Amrita Institute of Medical Sciences, Chennai
- Dr. D. Kuberan, Associate Professor and Head I/C, Department of Community Medicine, ESIC Medical College and PGIMSR, Chennai
- Dr. D. Thirunauukarasu, Professor, Department of Community Medicine, Karpaga Vinayagar Institute of Medical Sciences, Kancheepuram District, Tamilnadu
- Dr. D.R.Vedapriya, Professor and Head, Department of Community Medicine, SVMCHRC, Puducherry
- Dr. Debnath Dhrubajyoti Jahar, Associate Professor, Community & Family Medicine, AIIMS Mangalagiri
- Dr. Dewesh Kumar, Associate Professor, Community Medicine, Rajendra Institute of Medical Sciences, Ranchi
- Dr. Dharmesh Kumar Sharma, Associate Professor, Preventive and Social Medicine, SMS Medical College
- Dr. Forhad Akhtar Zaman, Additional Professor & Head, Community & Family Medicine, AIIMS Guwahati
- Dr. Harshal Salve, Additional Professor, Center for Community Medicine, AIIMS Delhi
- Dr. J. Barathalakshmi, Professor , Department of Community Medicine, Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry
- Dr. Karoline Priya, Professor, Institute of Community Medicine, Madras Medical College Chennai
- Dr. Kavitha Vasudevan, Professor and Head, Department of Community Medicine, Govt. Indira Gandhi Medical College and Research Institute, Puducherry

- Dr. Lalit Sankhe, Associate Professor, Community Medicine, Grant Medical College, Mumbai
- Dr. Latika Nath Sinha, Assistant Professor, Department of Community Medicine, Govt. Pali Medical College, Pali
- Dr. Manish Kumar Goel, Professor Community Medicine, Lady Hardinge Medical College
- Dr. Manish Kumar Singh, Community Medicine, Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow
- Dr. Manoj Kumar Verma, Assistant Professor, Community Medicine, Dr. S.N. Medical College, Jodhpur
- Dr. Medha Mathur, Assistant Professor, Community Medicine, Geetanjali Medical College and Hospital, Udaipur
- Dr. Mohan Bairwa, Associate Professor, Center for Community Medicine, AIIMS Delhi
- Dr. Neelam Anupama Toppo, Professor, Community Medicine, Netaji Subhash Chandra Bose Medical College, Jabalpur
- Dr. Nilanjana Ghosh, Assistant Professor, Community & Family Medicine, AIIMS, Guwahati
- Dr. Pragya Kumar, Additional Professor, Community & Family Medicine, AIIMS Patna
- Dr. Prashanth R.M, Associate Professor, Yenepoya Medical College, Karnataka
- Dr. Prem Kumar Mony, Professor, Community Medicine, St. John's National Academy of Health Sciences, Bangalore
- Dr. Rajat Vohra Professor, Community Medicine, Vice-Principal, Mahatma Gandhi Medical College & Hospital, Jaipur.
- Dr. Ranabir Pal, Professor, Community Medicine, MGM Medical College and LSK Hospital, Kishanganj
- Dr. Richa, Associate Professor, Community & Family Medicine, AIIMS Dibrugarh
- Dr. Salil Dube, Professor & Head, Community Medicine, Government Medical College, Pali
- Dr. Santosh Kumar, Associate Professor, Community & Family Medicine, AIIMS Rishikesh
- Dr. Savitri Sharma, Associate Professor, Community Medicine, Dr. S.N. Medical College, Jodhpur
- Dr. Shanti Dani, Professor, Department of Community Health, Christian Medical College, Vellore
- Dr. Siddharam, Assciate Professor, Community Medicine, Hasan Medical College
- Dr. Sunitha, Professor and Head, Department of Community Medicine, Govt. Thoothukudi Medical College, Tamilnadu
- Dr. Sushil Mathew John, Professor, Community Health, CMC Vellore
- Dr. V. Murugan, Professor and Head, Department of Community Medicine, AdhiParasakthi Institute of Medical Sciences, Melmaruvathur, Tamilnadu
- Dr. Vinod Joseph Abraham, Professor and Head, Community Health, CMC Vellore

"We acknowledge the contribution of all the Judges for evaluation of more than 150 e-posters"

ORAL & POSTER PRESENTATION

ORAL PRESENTATION

THEME: MATERNAL AND CHILD HEALTH 1

HALL: B

SESSION DATE AND TIME: 29th October, 10:00-11:00am

CHAIRPERSON: Dr. S. K. Singh, Dr. Naveen K.H.

ABSTRACT ID	TITLE	PRESENTER
Efi_62_93_MCH	Study of coverage and barriers of immunization among children of age 12-23 months in urban area of Rishikesh, Uttarakhand	TJ Asha
Efi_85_67_MCH	Effect of Women's and Partners' Education on Maternal Health Care Services Utilization in Five Empowered Action Group States of India: An analysis of 13,443 women of reproductive age	Bhavna Sahni
Efi_92_60_MCH	A study to assess the effectiveness of self-instructional module on minor ailments of children among anganwadi workers.	Dr. Nishant Gupta
Efi_197	Antimicrobial use among children age 0– 5 years of North Kashmir.	Dr. Sheema Samreen
Efi_50_107_MCH	Birth preparedness and complication readiness among women in North India-A Mixed study	Sujata Gupta
Efi_165_196_MCH	An epidemiological-association of infant and young child feeding practices in rural area of Bareilly district: A cross sectional study	Akanksha Sinha

ORAL PRESENTATION

THEME: ADOLESCENT HEALTH

HALL: B

SESSION DATE AND TIME:29th October 2021,11:00am-12pm

CHAIRPERSON: Dr. Madhulekha Bhattacharya, Dr. Manoj Kumar Gupta

ABSTRACT ID	TITLE	PRESENTER
Efi_27_131_ADOL	Knowledge, Attitude and Practices of Adolescent School Girls regarding Menstrual Hygiene in Lucknow District	DR. SHAHZEB ANSARI
Efi_27_131_ADOL	Determinants of Utilization of Reproductive and Sexual Health Services: A Study among Adolescents in a Rural Area of West Bengal	Ankush Banerjee
Efi_157_204_ADOL	A Cross Sectional Study of Unintentional Injuries among Children up to 14 years of Age in an Urban Slum Area	Dattaprasad Avinash Sawant
Efi_199	BURDEN OF OVERWEIGHT AND OBESITY AMONG SECONDARY AND SENIOR SECONDARY STUDENTS OF NEW DELHI MUNICIPAL COUNCIL SCHOOLS	Dr Poornima Tiwari

ORAL PRESENTATION
THEME: MENTAL HEALTH
HALL: B
SESSION DATE AND TIME: 29th October 2021, 12.30 pm to 13.30 pm
CHAIRPERSON: Dr. Sonia Puri, Dr. Srikanth S

ABSTRACT ID	TITLE	PRESENTER
Efi_13_145_MENT	Assessment of Burnout among the Medical Postgraduate Students working in hospitals attached to Bangalore Medical College and Research Institute, Bangalore	Dr K Md Shoyaib
Efi_18_140_MENT	Illness perception of self-reported morbidity amongst adults in a Rural Block of West Bengal	Dr Mita Basu
Efi_39_119_MENT	Assessment of knowledge, risk perception and psychological effect of COVID-19 pandemic among quarantined healthcare workers	NIKITA SHARMA
Efi_87_65_MENT	ASSESSMENT OF MENTAL HEALTH STATUS AMONG TYPE 2 DIABETICS IN URBAN FIELD PRACTICE AREA OF JSS MEDICAL COLLEGE, MYSURU	Dr Chandan N
Efi_124_241_MENT	A STUDY ON AWARENESS, ATTITUDE, PRACTICES AND NEED ASSESSMENT TOWARDS PREMARITAL COUNSELLING AMONG YOUTHS OF RURAL PUDUCHERRY	Dr. Angelin R. G
Efi_107_37_MENT	“Post-traumatic stress disorder among adolescent girls infected with COVID 19- A cross sectional study”	Dr.Anandu S

ORAL PRESENTATION

THEME: COMMUNICABLE DISEASE 1

HALL: B

SESSION DATE AND TIME:29th October 2021, 14:00pm to 15:00pm

CHAIRPERSON: Dr. Pratibha Gupta, Dr. Nitin Joshi

ABSTRACT ID	TITLE	PRESENTER
Efi_21_137_COM	"A hospital -based Case-Control Study on predictors of drug resistant TB"	Dr. Abhinav Pundir
Efi_21_137_COM	Dog bites the poor: Exposure of rabies in poverty prone areas in Kashmir an ecological study	Dr Kouser Sideeq Lone
Efi_21_137_COM	Detecting temporal clusters and seasonal variation of childhood diarrhea in Coastal Karnataka, for children under five years	Mackwin Kenwood Dmello
Efi_21_137_COM	Report of dengue outbreak investigation in Jothinagar Village, Thiruvallur District, Tamil Nadu, India, 2017: Epidemiological, entomological, and geospatial investigations.	Viral Rajesh Bajwala
Efi_21_137_COM	AN OUTBREAK OF SHIGELLOSIS IN KOZHIKODE DISTRICT OF KERALA DURING THE COVID 19 PANDEMIC	Dr. Swathi V Koramboor
Efi_21_137_COM	Measuring Catastrophic costs of Tuberculosis care in South-East Delhi: A mixed method study	Dr Tazean Zahoor Malik

ORAL PRESENTATION

THEME: COMMUNICABLE DISEASE 2 (15-16)

HALL: B

SESSION DATE AND TIME: 29THOctober, 15:00pm to 16:00pm

CHAIRPERSON: Dr. Seema Jain, Dr. Suman Saurabh

ABSTRACT ID	TITLE	PRESENTER
Efi_150_213_COM	ASSESSMENT OF INFECTION PREVENTION AND CONTROL PRACTICES AMONG MEDICAL STUDENTS OF A MEDICAL COLLEGE IN CHENGALPATTU DISTRICT, TAMIL NADU	Aarthy A
Efi_221_COM	Compliance assessment ofcigarette and other tobacco products act in public places and academic institution of Jodhpur city of Rajasthan.	Shubham rai
Efi_115_COM	Profile, outcomes and challenges in treatment of Tuberculosis in elderly patients in Jodhpur district–a mixed methods study	Premlata Meghwal
Efi_212_COM	Impact of restrictions during second wave of COVID– 19 on services for drug resistant tuberculosis patients at Jodhpur, India.	Mahewash Ansari
Efi_214_COM	Assessment of Physical activity, Screen time and Sleep status among School Children of Jodhpur, during the COVID-19 pandemic.	Chunnilal
Efi_222_COM	COVID-19 pandemic and perinatal outcomes in a tertiary care centre in Jodhpur, Rajasthan	Zeba Bano

ORAL PRESENTATION

THEME: MISCELLANEOUS

HALL: B

SESSION DATE AND TIME: 29TH October 2021, 16:00-17:30pm

CHAIRPERSON: Dr. Reeta Meena, Dr. Prasanna T

ABSTRACT ID	TITLE	PRESENTER
Efi_174_186_MISC	Quantifying Age heaping and age mis-reporting in a multicentric survey	Dr.(Major)Sumeet Singh
Efi_176_183_MISC	Quality of life and factors affecting quality of life of postmenopausal women in an urban Block of district Srinagar, Kashmir	Syed Najmul Ain
Efi_5_154_MISC	"Attitudinal change towards yoga after its introduction into new curriculum: A comparative study among medical students"	Dr Aparajita Mishra
Efi_29_129_MISC	Validation of self -reported smoking status of tuberculosis patients in a randomized controlled effectiveness trial on nicotine replacement therapy for smoking cessation	JAGANNATH PURUSHOTHAMA
Efi_58_98_MISC	A CROSS-SECTIONAL STUDY ON PREVALENCE OF GENDER STEREOTYPING AND SELF ESTEEM AMONG MEDICAL STUDENTS, PARAMEDICAL AND NURSING STUDENTS IN TERTIARY HEALTH CARE CENTRE IN NORTH KERALA	Dr Beeson Thomas
Efi_95_56_MISC	Solid organ donation after brain death among hospital admitted patients of Civil Hospital Ahmedabad- A Cross sectional study to promote organ donation	Yogesh Rameshbhai Mori
Efi_132_233_MISC	SWOT analysis of pneumoconiosis policy of Rajasthan state	Dr. Kajal Taluja

ORAL PRESENTATION

THEME: NON COMMUNICABLE DISEASE

HALL: A

SESSION DATE AND TIME: 30TH October 2021, 9:00-10:00 AM

CHAIRPERSON: Dr. Binod Patra, Dr. Surya Bal

ABSTRACT ID	TITLE	PRESENTER
Efi_47_110_NCD	Self-care behavior of type 2 Diabetes Mellitus patients at urban field practice area of MR Medical college, Kalaburagi.	Roopa R Mendagudali
Efi_4_157_NCD	Association between prolonged exposure to PM 2.5 and increased risk of Type2 Diabetes Mellitus	Dr Manasvee Chopra Saluja
Efi_14_144_NCD	Operationalization of interdisciplinary integration for enhancing satisfaction of cancer ovary patients: An example from PGI Chandigarh	Janavi Janavi
Efi_31_127_NCD	Cross sectional study to assess risk of type 2 diabetes mellitus using Indian diabetes risk score in an urban field practice area Rajapur Kalaburagi -Karnataka.	Dr Shivanand
Efi_72_83_NCD	Prediction of Type 2 Diabetes Mellitu s using Artificial Intelligence: Evidence from a developing country.	Limalemla Jamir
Efi_36_122_NCD	Cardiovascular risk assessment using updated WHO risk assessment chart among men residing in an urban slum.	NEERAJ PAWAR
Efi_120_245_NCD	A Randomized Cont rolled Trial to assess the effectiveness of group -based Diabetes Self -Management Education (DSME) program in improving the quality of life amongst type-2 diabetics.	Farishta Hannah D. Singh

ORAL PRESENTATION
THEME: NON COMMUNICABLE DISEASE
HALL: B
SESSION DATE AND TIME: 30TH October 26, 2021, 9:00-10:00 AM
CHAIRPERSON: Dr. S.M. Salim Khan

ABSTRACT ID	TITLE	PRESENTER
Efi_122_243_NCD	Community-based study of epidemiology of obstructive sleep apnea and its association with cardiovascular risk factors using STOP BANG questionnaire.	Vishal Kumar Singh
Efi_126_239_NCD	Assoc iation of pre -hospitalization factors in prediction of road traffic injury outcomes	Neeraj Sharma
Efi_159_202_NCD	Time to Switch to 'Rule of Three - Quarters' from 'Rule of Halves' in Hypertension? A Descriptive Study from Dakshina Kannada, South India	Dr Imaad Mohammed Ismail
Efi_179_179_NCD	Identification of factors influencing salt -intake behaviour using Stage of Change model: A qualitative study.	Raunaq Nagi
Efi_186_171_NCD	Prevalence of Hypertension and its associated risk factors among Police Perso nnel of Vijayapura.	Dr Laxmi Tellur
Efi_207 _NCD	Cardiovascular risk estimation among adults aged 30 -59 years using updated WHO -CVD risk charts in rural Haryana.	Dr. Ananda Selva Das
Efi_111 _NCD	EPIDEMIOLOGICAL STUDY OF POST COVID MUCORMYCOSIS CASES ADMITTED AT CIVIL HOSPITAL, AHMEDABAD DURING COVID-19 PANDEMIC.	Dr. Mayur Sayta

ORAL PRESENTATION

THEME: MATERNAL AND CHILD HEALTH

HALL: B

SESSION DATE AND TIME: 30TH OCTOBER 2021, 10:00-11:00 AM

CHAIRPERSON: Dr. Shaili Vyas, Dr. P.P. Sharma

ABSTRACT ID	TITLE	PRESENTER
Efi_112_MCH	A study to assess unmet need of family planning services in reproductive age group women in Rajasthan -A mixed method study	Neelam Kumari
Efi_113_MCH	Assessment of utilization of Janani Express (104 Ambulance) Programme in Jodhpur District, Rajasthan	Jinesh saini
Efi_127_238_MCH	Perception of health care providers towards Respectful Maternity Care in public health facilities of Jodhpur	Bindiya C Gowda
Efi_220_MCH	A study to assess the Patient Safety Culture among Healthcare Providers in a Tertiary Healthcare Facility in Western Rajasthan	Rupali Gupta

ORAL PRESENTATION
THEME: NATIONAL HEALTH PROGRAMME
HALL: B
SESSION DATE AND TIME: 30TH October 2021, 11:00am-12:00pm
CHAIRPERSON: Dr. Chandra M Pandey, Dr. Manisha Ruikar

ABSTRACT ID	TITLE	PRESENTER
Efi_2_159_NHP	A Study on Challenges Faced by Cancer Patients in Receiving Health Services During Covid -19 Pandemic in A Tertiary Care Hospital in Jodhpur	Dr.S. Sakthipriyan.
Efi_17_141_NHP	Change in haemoglobin concentration with increasing altitude among women aged 15 – 49 years in India: evidence from National Family Health Survey (NFHS-4), 2015 -16	Zahid Ali Khan
Efi_156_205_NHP	AWARENESS FOR NATIONAL DIGITAL HEALTH MISSION (NDHM) AMONG YOUNG DOCTORS OF DELHI, NCR.	Prateek kishor
Efi_225_NHP	Do patients on treatment for TB in Jodhpur know about and utilise NPY Cash Incentive as intended	Arathi P.
Efi_213_NHP	Complementary and alternative medicine (CAM) usage among type 2 di abetes mellitus patients in an urban area of Jodhpur: A cross -sectional study	Dr.Nishant Soni
Efi_223_2945_NHP	A PERSPECTIVE ON INDIA'S TOBACCO REVENUE AND ECONOMIC BURDEN OF TOBACCO RELATED DISEASES.	Dr. Megha Mohanan
Efi_218_NHP	A Study on Challenges F aced by Cancer Patients in Receiving Health Services During Covid -19 Pandemic in A Tertiary Care Hospital in Jodhpur	Prasannajeet Bal

ORAL PRESENTATION
THEME: MISCELLANEOUS 2
HALL B
SESSION DATE AND TIME: 30th October 12:00-13:00
CHAIRPERSON: Dr. VP Srivastava, Dr. Najam Khalique

ABSTRACT ID	TITLE	PRESENTER
Efi_134_231_MISC	Root Cause Analysis of Health Inequities in India	Dr. Swati Suman
Efi_142_223_MISC	A review of propensity score matching and their use in exclusive breastfeeding research	Aravind Dharmaraj
Efi_155_207_MISC	Attitude of undergraduate medical students towards learning communication skills in a medical college, Haryana	Dr. Jitesh Satija
Efi_31_127_MISC	COVID-19 lockdown and air quality in India: a scoping review	Dr. Anjali Agrawal
Efi_226_MISC	Understanding about Front of Package Labelling (FOPL) among medial fraternity	Dr Nandita Sharma
Efi_227_MISC	End line compliance for smoke free jurisdiction and reduction in tobacco consumption in 6 districts of Uttarakhand	Dr Dhanak Kanwar
Efi_215_MISC	Work-related musculoskeletal disorders among health care workers in a tertiary care hospital and its attached rural and urban health training centers	Dr. Diksha Mahajan

ORAL PRESENTATION
THEME: COVID-19 (1)
HALL: MAIN HALL
SESSION DATE AND TIME: 30th October, 2021, 13:00-14:00
CHAIRPERSON: Dr. Amir Khan Maroof, Dr. Arun Mahadeo Kokane

ABSTRACT ID	TITLE	PRESENTER
Efi_41_116_COV	A STUDY TO ASSESS IMPACT OF COVID-19 ON TRENDS OF TB PREVALENCE IN TUMKUR DISTRICT	Gopinath
Efi_45_112_COV	Perceptions of medical students towards online teaching during the COVID-19 pandemic from M.R Medical College, Kalaburagi.	Dr Della Raj
Efi_182_176_COV	Politics: Social Medicine on mass scale its impact on COVID-19 Pandemic Management	Aprajita Singla
Efi_195_161_COV	MUCORMYCOSIS: AN EPIDEMIC IN COVID-19 PANDEMIC IN APPARENTLY NON COVID-19 PATIENTS, CIVIL HOSPITAL AHMEDABAD.	Dr Archanaben Patel
Efi_201_COV	A Descriptive Epidemiological Study Of Mucormycosis Cases Presenting at a Tertiary Care Centre of Western India	Dr arun kumar
Efi_203_COV	Effect of modification in Mode of existence during COVID-19 among health care workers of a tertiary care rural hospital in Central Uttar Pradesh, India: A cross sectional study	Dr Pooja Pathak
Efi_206_COV	A Study of Clinical Profile, Sequelae of covid and Satisfaction of Inpatient Care at a government covid care hospital in Karnataka	Dr. Harshini Suresh

ORAL PRESENTATION
THEME: COVID-19 (2)
HALL A
SESSION DATE AND TIME:30th October 2021, 13:00-14:00pm
CHAIRPERSON: Dr. Arti Kapil, Dr. Akhil Goel

ABSTRACT ID	TITLE	PRESENTER
Efi_76_77_COV	Role of Personality traits in adherence to COVID-19 Precautions among general population in Delhi. A Cross-Sectional Study	Radhika Gupta
Efi_140_225_COV	People's Perspective Towards Covid -19 Vaccination in Puducherry District- A Cross Sectional Study	Dr.Sadhvika Kanagat
Efi_144_221_COV	Change in quality of life, exercise capacity and mental health among a cohort of COVID-19 survivors in Kashmir Valley: An observational follow -up study.	Asif Jeelani
Efi_149_214_COV	TELECONSULTATION DOING COVID PANDEMIC	Dr. SABIRA AALIA DKHAR.
Efi_152_210_COV	Post surgery Breast Cancer patients Immediate Quality of Life in Covid pandemic Times : an interim analysis presented using validated EORTC 30 and BR23 questionnaires: Data froma comprehensive tertiary care hospital in Bhubaneswar	Dr. VARSHA SRIVASTAVA
Efi_153_209_COV	Quality of life among healthcare professionals during COVID-19 Pandemic in a tertiary care hospital of Chengalpattu district - A Cross sectional study.	Dr. A. Suriya Deva
Efi_9_149_COV	A cross-sectional study to assess the knowledge, practice and fear of Covid-19 among security guards of Christian Medical College Vellore and the Stigma faced by them in a South Indian Community.	Dr.Mithula.T

ORAL PRESENTATION
THEME: COVID-19 (3)
HALL: B
SESSION DATE AND TIME: 30th October 2021,13:00-14:00pm
CHAIRPERSON: Dr. Abhiruchi Galhotra, Dr. Dinesh Walia

ABSTRACT ID	TITLE	PRESENTER
Efi_24_134_COV	A Cross-sectional survey on vaccination coverage at Urban Health Center of a district in Central Gujarat	Dr. Gopi Kalariya
Efi_82_71_COV	COVID-19 Preventive Behavior Based on Health Belief Model. A Cross-Sectional Study among Ayurveda Interns and Postgraduate Students.	karma galey
Efi_93_58_COV	Changes in tobacco consumption behaviour during COVID-19-related lockdown among Employees of Government Medical College, Gujarat	Dr Swati Misra
Efi_110_26_COV	EPIDEMIOLOGICAL STUDY OF POST COVID MUCORMYCOSIS CASES ADMITTED AT CIVIL HOSPITAL, AHMEDABAD DURING COVID-19 PANDEMIC	Dr. Mayur Sayta
Efi_112_24_COV	A comparative study of seroprevalence titer of Covid 19 IgG antibodies in symptomatic and asymptomatic individuals in South Andaman Islands.	Dr. Deepak kumar
Efi_211_COV	Challenges faced by Caregivers Visiting Pediatric Emergency at Tertiary Care Hospital in Western Rajasthan during COVID-19 pandemic	Uplabdhi Sahu
Efi_210_COV	Facilitators and Barriers in Implementation of Telemedicine Guidelines and level of Patient Satisfaction during COVID-19 pandemic at a Tertiary Care Hospital in Jodhpur	Nainsi Gupta

POSTER PRESENTATION
THEME: ADOLESCENT HEALTH

ABSTRACT ID	TITLE	PRESENTER
Efi_166_195_ADOL	Hygienic practices and Absenteeism from school during Menstruation among school going adolescent girls of Shri Saraswati Vidyalaya Inter College ,Hapur	Dr . Ridhi Mehra
Efi_189_168_ADOL	Association of psychosocial factors with aggression among school goin g rural adolescents in Haryana	Ramesh Verma
Efi_52_104_ADOL	ADOLESCENT MENTAL HEALTH	DR. AKANSHA SAINI

POSTER PRESENTATION
THEME: MENTAL HEALTH

ABSTRACT ID	TITLE	PRESENTER
Efi_105_42_MENT	Internet and Gaming Addiction, Hikikomori trait and Insomnia status among medical graduates of Ahmedabad city	Dr. Sahil Rajeshbhai Solanki
Efi_180_178_MENT	Effect of screen time on sleep pattern among undergraduate medical students at a medical university of Northern India	Mukesh Kumar Gola
Efi_202_MENT	To Explore Depression, Anxiety, Stress Levels, Job Satisfaction and Quality of Life among Police Personnel in Etawah district of Uttar Pradesh: A cross-sectional study	Mudit

POSTER PRESENTATION
THEME: NUTRITION

ABSTRACT ID	TITLE	PRESENTER
Efi_73_80_NUTR	Nutritional status of under-five children and its associated factors: A community based cross-sectional study	Dr. Manisha Sarkar
Efi_65_90_NUTR	Identifying signs and symptoms of patients with Vitamin B 12 deficiency and designing diagnostic algorithm of Vitamin B 12 deficiency- a case control study.	Dr. Latika Chugh
Efi_175_185_NUTR	IMPACT OF COVID 19 ON THE NUTRITIONAL STATUS OF THE CHILDREN RESIDING IN THE URBAN SLUMS OF BENGALURU	Dr Iswarya P

POSTER PRESENTATION
THEME: COMMUNICABLE DISEASES

ABSTRACT ID	TITLE	PRESENTER
Efi_11_147_COM	Quality of Life and Economic Burden among People Living with HIV Attending an Antiretroviral Treatment Centre in a Teaching Hospital of Jharkhand, India	Dr Mayank Raj
Efi_23_135_COM	Prevalence and predictors of visits for oral cavities examination in India among women aged 15-49: Findings from National Family Health Survey 2014-15	Absar
Efi_43_114_COM	Effect of introducing spatial technology training on undergraduate medical students for surveillance of mosquito-borne diseases (MBD): Qualitative assessment.	Dr. Kavita Thakur
Efi_88_64_COM	Aedes aegypti larval indices used as a proxy indicator to assess spread and control of a Dengue outbreak: Interim results from an annual survey in hot spots of Bhubaneswar city, Odisha.	Dr. Snigdha Singh
Efi_99_51_COM	Investigation of food-borne outbreak of gastroenteritis at Government Nursing College campus of Surat city.	HITA RANA
Efi_129_236_COM	Compliance to tuberculosis symptoms screening by healthcare providers among patients attending outpatient wards of a tertiary care teaching hospital in Puducherry, India	Dr. Divyabharathy R
Efi_130_235_COM	EPIDEMIOLOGY OF ACUTE ENCEPHALITIS SYNDROME CASES REPORTED TO A TERTIARY CARE CENTRE IN NORTH KERALA	Dr.Athira.T
Efi_69_86_COM	A comparative study on blood culture with widal test in the diagnosis of enteric fever in febrile patients	Vishwajith

POSTER PRESENTATION
THEME: COVID-19

ABSTRACT ID	TITLE	PRESENTER
Efi_7_151_COV	STUDY ON MASK USAGE: KNOWLEDGE AND PRACTICES FOR PROTECTION AGAINST COVID-19 AMONG INDIAN ADULTS	FAZEELAH TASLEEM
Efi_10_148_COV	Assessment of COVID-19 vaccine literacy and hesitancy among doctors: A cross-sectional study	Dr Elton Fernandes
Efi_15_143_COV	COVID-19 mortality and chronic morbidity in hospitalized patients of a tertiary care hospital of Kashmir Valley	Tazeen Khan
Efi_19_139_COV	Correlation between knowledge,risk perception to COVID-19 disease and perceived importance to COVID vaccination among people living in Cuddalore district,Tamilnadu-A cross sectional study	Dr.N.Rama Swathika
Efi_20_138_COV	Comparison of Epidemiological Characteristics of the first and second waves of coronavirus disease in Tertiary care hospital of Agra, India	GEETU SINGH
Efi_32_126_COV	UTILITY OF MOBILE PHONE IN BENEFICIARIES COMING FOR COVID-19 VACCINATION AT A TERTIARY CARE HOSPITAL, CENTRAL GUJARAT, INDIA	Dr Radhika Kuthari
Efi_57_99_COV	Adverse events following COVID VACCINATION	Keerthana A
Efi_59_97_COV	KNOWLEDGE, ATTITUDE ABOUT COVID VACCINES AND PRACTICES OF COVID APPROPRIATE BEHAVIOUR AMONG PATIENTS ATTENDING COVID SCREENING OPD OF A TERTIARY CARE HOSPITAL IN CENTRAL INDIA: A CROSS SECTIONAL STUDY	Dr. Manjeet Mohanty
Efi_60_95_COV	CT Severity Among Vaccinated and Non-Vaccinated COVID-19 Patients Admitted In A Designated COVID Hospital, Tamil Nadu.	Dr Nivetha
Efi_63_92_COV	Psychosocial impact of COVID 19 on nurses and ward technician- a reflection	Dr. Jaba Chauhan
Efi_74_79_COV	Role of Personality traits in adherence to COVID-19 Precautions among general population in Delhi. A Cross-Sectional Study	Radhika Gupta
Efi_75_78_COV	TO STUDY THE EFFECT OF INTERNET USAGE ON LIFESTYLE OF UNDERGRADUATE AND POSTGRADUATE STUDENTS OF HARYANA DURING COVID-19 PANDEMIC LOCKDOWN PERIOD.	Dr.Kapil Kumar

Efi_77_76_COV	Exposure Risk Assessment to COVID-19 among health care workers working in non COVID zones of a Tertiary Care Hospital, Tripura.	Dr Bithika Das
Efi_79_74_COV	A STUDY ON PERCEPTION OF HEALTHCARE PROVIDERS ABOUT THEIR PROFESSION IN POST COVID TIMES	DR ANIL AHUJA
Efi_80_73_COV	STUDY ON POST COVID- 19 SYPMTOM & TREATMENT AMONG RECOVERED PATIENT	DR.SOORVEER SINGH GURJAR
Efi_81_72_COV	Assessment of Covid-19 vaccination session sites in Tribal areas of UT of DNH & DD during Covid-19 pandemic.	Dr. Bhaveshbhai Bariya
Efi_84_69_COV	VACCINE HESITANCY AND RISK PERCEPTION AMONG HEALTH-CARE WORKERS IN A TERTIARY HOSPITAL IN NORTH-EAST INDIA	Dr. Bishwalata Rajkumari
Efi_90_62_COV	A cross-sectional study on the epidemiological determinants of impact of virtual learning on the life of medical students during the COVID-19 pandemic.	Dr. Shalini Singh
Efi_94_57_COV	Anxiety among pregnant women during COVID-19 in rural area of district Muzaffarnagar	Dr. Nidhi Nain
Efi_118_247_COV	The Perception of Medical Students in using technology to meet the challenges of medical education during COVID 19 outbreak	Dr Ipsa Mohapatra
Efi_121_244_COV	Covid vaccine hesitancy among pregnant women : A cross sectional study in rural area of Kashmir	Iqra Nisar Chowdri
Efi_123_242_COV	Assessment of Long Haul in asymptomatic and Mild Symptomatic covid 19 patients – A Community Based Study, in Northern India	Dr Sonia Puri
Efi_125_240_COV	Risk factors for mortality of COVID-19 patients admitted in a tertiary care hospital Mysore, Karnataka: A retrospective study	DR THULASI M
Efi_135_230_COV	Facilitators and barriers for Covid 19 contact tracing: evidence from Jodhpur (India)	Divya Gehlot
Efi_136_229_COV	Trend of COVID-19 pandemic in India during First wave: A methodical comparison with Italy, UK and US	Dr.Neha Mantri
Efi_137_228_COV	Testing guidelines and strategies by ICMR: A roadmap to handle COVID-19 pandemic in India	Dr.Neha Mantri
Efi_138_227_COV	SOCIODEMOGRAPHIC PROFILE OF PEDIATRIC COVID-19 CASES DURING FIRST AND SECOND COVID WAVE IN A	ARDRA MERIN GEORGE

	TERTIARY CARE CENTRE -A COMPARATIVE STUDY	
Efi_141_224_COV	People's Perspective Towards Covid-19 Vaccination in Puducherry District- A Cross Sectional Study	Dr.Sadhvika Kanagat
Efi_143_222_COV	Self reported adherence to personal protective measures against COVID-19 among social media users in a rural district of Northern India.	Dr. Mohsina Mukhtar
Efi_147_216_COV	Cab drivers post pandemic occupational health and safety: an assessment done in Institutional area of Bhubaneswar, Odisha	B LAKSHMI PRIYANKA
Efi_161_200_COV	ACCEPTANCE AND ATTITUDE TOWARDS COVID-19 VACCINATION AMONG HEALTH CARE WORKERS: AN OBSERVATIONAL STUDY IN A TEACHING INSTITUTE.	Dr. Mishuk Das
Efi_162_199_COV	Epidemiological study to assess the impact of Covid-19 pandemic on the occurrence of Monsoon-Related Diseases in the city of Mumbai	Dr. Vandana Kashyap
Efi_163_198_COV	CLINICO EPIDEMIOLOGICAL PROFILE OF DISCHARGED AND DEMISED COVID19 ICU PATIENTS IN TERITARY CARE HOSPITAL.	Mahesh kamal babu Tinnaluri
Efi_168_193_COV	KEY STAKEHOLDERS IN COVID-19 VACCINATION DRIVE: A COMMENTARY	Dr Ishani Chadha
Efi_170_191_COV	Knowledge Attitude and Practice Regarding COVID-19 Pandemic among Individuals living in Rural Part of Bihar: A Cross-Sectional Study	Dr. RITURAJ KOTOKI
Efi_173_188_COV	Perceived Stress and Quality of Sleep among Health- Care Staff Working in a Dedicated COVID Hospital	Dr Niharika Nagari
Efi_181_177_COV	SURVEY OF ADHERENCE WITH COVID-19 PREVENTION BEHAVIORS DURING PUBLIC GATHERING	Dr.S.Amarnath
Efi_193_163_COV	MANISH KUMAR JHA	MANISH KUMAR JHA
Efi_200	COMPARISON OF PATIENTS ADMITTED IN A TERTIARY CARE CENTER IN KERALA DURING THE FIRST AND SCOND WAVES OF COVID 19	Dr Meera Varghese2

POSTER PRESENTATION
THEME: MATERNAL AND CHILD HEALTH

ABSTRACT ID	TITLE	PRESENTER
Efi_3_158_MCH	Factors affecting Infant Mortality Rate (IMR) in India: A situational analysis	Dr. Mamta Patel
Efi_35_123_MCH	Breast Feeding Practices and Newborn Care in mothers of children who come to immunization clinic in GRMC Gwalior: A Cross -Sectional Study	Dr Pradeep Kumar Verma
Efi_61_94_MCH	Assessment of utilization of maternal health services in field practice area of rural health centres of AIIMS Rishikesh, Uttarakhand	Ankita Rahul
Efi_64_91_MCH	A study on perinatal mortality and its associated risk factors in a tertiary care hospital: secondary analysis using hospital records	Dr. Zarna Darji
Efi_67_88_MCH	Assessment of utilization of maternal health services in field practice area of rural health centres of AIIMS Rishikesh, Uttarakhand	Ankita Rahul
Efi_86_66_MCH	"PREVALENCE OF CONGE NITAL ANOMALIES A ONE-YEAR HOSPITAL BASED CROSS – SECTIONAL STUDY AT KLE DR. PRABHAKAR KORE HOSPITAL''	Dr. Sushmitha Mahantshetti
Efi_102_48_MCH	A Cross -Sectional Study to Assess Reproductive and Child health Profile of Working Women Residing In Rural Are a of Gwalior city (M.P.)	Dr. Anand Pratap singh
Efi_104_44_MCH	Infant feeding practices among mothers attending a tertiary care centre of Southern Rajasthan	Dr. Dhriti Bapna
Efi_106_41_MCH	Study Profile And Factors Associated With High - Risk Pregnancy Among Beneficiaries Of Pradhan Mantri Surakshit Matritva Abhiyan, In Block Barwala, District Hisar Of Haryana.	Amit Kumar
Efi_154_208_MCH	MATERNAL PROFILES AND PREVALANCE OF SAM AMONG CHILDREN	Dr. Ritu Pradhan
Efi_190_167_MCH	Status of iodine in rural pregnant women of	SUGANDHA JAUHARI

POSTER PRESENTATION
THEME: MISCELLANEOUS

ABSTRACT ID	TITLE	PRESENTER
Efi_6_153_MISC	Assessment of Health status and Impact of pollution from Thermal power plant on health of population & environment around the Plant in Udupi District, Karnataka	SHARVANAN UDAYAR
Efi_8_150_MISC	An Assessment of Empowerment and its Influence on Dietary Pattern & Nutrition, amongst Tribal women in Sunderbans	Subhrajeet Chakraborty
Efi_26_132_MISC	Household Out Of Pocket Expenditure On Health Care In Urban Field Practice Area Of Mysore Medical College – A Cross Sectional Study	RACHANA K NAIR
Efi_28_130_MISC	Epidemiology Of occupational health hazards among Agricultural workers of Southern District of Karnataka.	Dr Nayanabai Shabadi
Efi_33_125_MISC	Quality Of Infrastructure of Anganwadi Centres in Burla, Sambalpur, Odisha.	Dr Lily Bhoi
Efi_38_120_MISC	Health status Assessment & its association with occupational stress among ASHA Visiting Tertiary Care Setup	Dr Aruna Munda1
Efi_40_118	Air Pollution and its impact over Health	Dr. Swati Sharma
Efi_42_115_MISC	Health problems distribution and its effect on professional work, satisfaction among health care professionals working across Vadodara city- a cross-sectional study.	Dr Mital Bambhava
Efi_44_113_MISC	Use of modified Nordic questionnaire and Visual Analogue Scale of EQ 5D Quality of life indices to conduct a qualitative health assessment on construction workers in the City of Bhubaneswar, Odisha	Bidisa Sarkar
Efi_46_111_MISC	Health status Assessment & its association with occupational stress among with ASHA Visiting Tertiary Care Setup	Dr Aruna Munda1
Efi_49_108_MISC	Knowledge, Perceptions and Practices of Medical Students towards Climate Change and Global Warming: A cross sectional study	Gudelli Prashanth Reddy
Efi_54_102_MISC	Self-Medication Trend: Among Students Of Government Medical College In South Gujarat, India	Dr Teesta Gusain
Efi_56_100_MISC	Barriers for contraceptive practices among rural population: A community based cross-sectional study	Nallapu Sandeep
Efi_66_89_MISC	A study on injection practices among nursing students in tertiary care hospital, tirupathi.	Dr A V YASHODA LAKSHMI
Efi_68_87_MISC	Impact on kayakalp scores after undertaking of a PHC by Community Medicine dept. of a Medical college of J&K	Dr Sonika Sangra

Efi_78_75_MISC	A Study on Superficial Skin Infection and Their Risk Factors Among Urban Population of West Bengal	RAJKUMAR BHATTACHARYA
Efi_96_55_MISC	A Cross sectional study on knowledge attitude and blood donation practices among resident doctors in BJMC Civil Hospital Ahmedabad	Yogesh Rameshbhai Mori
Efi_98_52_MISC	Analysis Of Hearing Improvement By Various Ossiculoplasty Techniques (Autologous Versus Prostheses) In Chronic Otitis Media Patients Undergoing Ear Surgery In Ent Ot At Elmch	imran alam
Efi_103_45_MISC	To study knowledge and attitude regarding organ donation among medical and non-medical students	Nazuk Razdan
Efi_109_35_MISC	Understanding community participation in rural healthcare: A participatory learning and action approach	DR ABHISEK MISHRA
Efi_113_23_MISC	To study knowledge attitude and practice of universal precautions among healthcare workers in a tertiary care hospital during covid 19 pandemic	Dr NOWSHEEN ZAFFAR
Efi_115_20_MISC	"A cross sectional study -to study the patients satisfaction @ district hospital indore"	DR CHHAYA BOHARE
Efi_131_234_MISC	Root Cause Analysis of Health Inequities in India	Dr Swati Suman
Efi_133_232_MISC	Epidemiology of Leptospirosis cases admitted in a tertiary care hospital in North Kerala during Covid-19 pandemic	Milu Elizabeth Cyriac
Efi_145_220_MISC	Dynamics of determinants of health seeking behavior in geriatric population of Chandigarh, India	sonia puri
Efi_146_219_MISC	A cross-sectional study on the doctor patient communication among the post graduate students at a tertiary care teaching hospital in eastern India	Dr. Tanay Sinha
Efi_148_215_MISC	Knowledge,attitude and practice of medical ethics among the medical professionals.A web based survey.	Dr Muzamil Hassan Khan
Efi_151_212_MISC	Assessment of knowledge, attitude and practice regarding food safety and personal hygiene among food handlers working in the food establishments at tertiary healthcare facility of Northern India	Atul Kumar
Efi_160_201_MISC	Assessing Indian Public Health Standards for A Rural hospital in Maharashtra : A Case Study	Dr Dipali Chandrakant Puri
Efi_167_194_MISC	Perception Regarding Flipped Classroom Among Medical Students	Dr Ruqia Quansar
Efi_169_192_MISC	Gender Differences in Oral Carcinoma: Textual Synthesis Review	Dr. Tanvi Kaur Ahuja
Efi_171_190_MISC	An Exploratory Study On Doctor-Patient Communication Among Interns At Mgm Medical College And Lsk Hospital, Kishanganj, Bihar, India	Dr. Dharmendra Kumar

Efi_172_189_MISC	Body Weight Perception and Prevalence of Overweight\/Obesity among Medical and Paramedical Students at a Medical University of Northern India: A Comparative Cross Sectional Study	Lokesh Raheja
Efi_191_165_MISC	Prevalence, Frequency and Pattern of Fast Food consumption among students of a medical college in Western Maharashtra: A cross sectional study	Pundla Nagarjuna
Efi_194_162_MISC	"Health Screening Of First Year Nursing Students Of Government Nursing College, Civil Hospital Ahmedabad."	Dr. Ripal Nandlal Panchal

POSTER PRESENTATION
THEME: NON-COMMUNICABLE DISEASE

ABSTRACT ID	TITLE	PRESENTER
Efi_16_142_NCD	Aging with Hypertension, Pinpoint for a rethink in health care, treatment, and Control.	NARENDRA SINHA
Efi_22_136_NCD	A cross-sectional study of knowledge regarding rabies among attendees of anti-rabies clinic of Jaya-Arogya group of hospital, Gwalior (MP)	Dr. Divyani Aharwal
Efi_25_133_NCD	Correlation between food habits and appendicitis in Indian students study in China: A questionnaire based study.	Dr. SAHJID MUKHIDA
Efi_30_128_NCD	ross sectional study to assess risk of type 2 diabetes mellitus using Indian diabetes risk score in an urban field practice area Rajapur Kalaburagi-Karnataka.	Dr Shivanand
Efi_97_53_NCD	Recalibrating the Non-Communicable Diseases risk prediction tools for the rural population of Western India	Sridevi G
Efi_185_172_NCD	Breast Cancer Risk Assessment of women aged 30 years and above visiting theNon-communicable disease clinic, South Delhi	Dr Sunom M. Lepcha
Efi_70_85_NCD	Determinants Of Stroke - A Hospital Based Case-Control Study In Vadodara, Gujarat	ANITA MEENA
Efi_71_84_NCD	"Prevalence and determinants of obesity and hypertension among medical students- A cross sectional study."	Dr. Purushottam Kumar
Efi_108_36_NCD	Assessing the Knowledge, Attitude and Practice of Tobacco use among Employees of Jamnagar Medical College in order to quit tobacco.	Dr Swati Misra
Efi_139_226_NCD	Socioclinical profile of osteoarthritic patients residing in urban slums of Berhampur,Odisha - A Cross-Sectional Study	Dr Trupti Dash
Efi_184_173_NCD	A cross sectional study todetermine the sociodemographic profile and study prevalence of chronic noncommunicable diseases in an urban slum of mumbai.	Dr Priyanka Dnyanoba Chate

POSTER PRESENTATION
THEME: NATIONAL HEALTH PROGRAM

ABSTRACT ID	TITLE	PRESENTER
Efi_1_160_NHP	A study on domestic falls and associated factors among the elderly population in the rural field practice area of darbhanga medical college.	Dr. Sudhanshu Kumar

MINDBENDERS
QUIZ 2021

MINDBENDERS QUIZ 2021

National Quiz "**Mind Benders**" is a part of the **Annual National Conference EFICON 2021, AIIMS Jodhpur.** This quiz competition will provide the Postgraduate students with an opportunity to enhance their academic horizons and also to showcase their talent. Mind Benders Organizing Team consists of faculty from all across India who is working day & night to make this event successful and representing the epic teamwork amidst this pandemic situation.

Organizing Team Members:

1. Dr. Shaili Vyas
2. Dr. Abhishek De
3. Dr. Akhil Goel
4. Dr. Malatesh Undi
5. Dr. Rivu Basu
6. Dr. Neha Sharma
7. Dr. Sharon Baisil
8. Dr. Waseem Ansari

From all over the country 120 participants participated comprising of post-graduate students in Community Medicine, Family Medicine, MPH, MSc Epidemiology, and allied subjects. Preliminary round was conducted on 20th Oct 2021 through an online App, 40 questions in the form of MCQs were asked from the teams where in based on speed of replies and maximum no of correct responses, five teams made it to the finals.

Participants of Mind Benders Quiz across India

Quiz Finale Team Names:

Team Number	Team Name	Participants	College
Team 5	Team Doll & Hill	1. Dr. Suraj Kapoor 2. Dr. Mandeep	AFMC, Pune
Team 58	Team Chadwick	1. Dr. Manasvee Chopra 2. Dr. Ishani Chaddha	AIIMS, Jodhpur
Team 53	Team Joseph Bhore	1. Dr. P. Ananda Selva Das 2. Dr. Girish J	AIIMS, New Delhi
Team 12	Team James Lind	1. Dr. Angelin 2. Dr. Divyabharathy R	MGMCRI, Puducherry
Team 6	Team Sir Ronald Ross	1. Dr. Sandipta Chakraborty 2. Dr. Trina Sengupta	AIIH& PH, Kolkata

ABSTRACTS

THEME: ADOLOSCENT HEALTH

Abstract Id	Efi_27_131_ADOL
Title	**Determinants of Utilization of Reproductive and Sexual Health Services: A Study among Adolescents in a Rural Area of West Bengal**
Authors	Ankush Banerjee, All India Institute of Hygiene and Public Health

Introduction: Despite policy actions and strategic efforts being made for improving the reproductive and sexual health of adolescents by promoting uptake of ARSH services under RMNCH+A, its utilization rate has been found to be significantly poor, especially in rural areas. This study aimed to assess the utilization of these services by adolescents in a rural area of West Bengal and elicit its associated factors, if any.

Methods: This community based mixed-method study was conducted from May-August 2021 in Gosaba rural block of South 24 Parganas, West Bengal. Quantitative data was collected from 326 adolescents selected by multi-stage cluster sampling technique using pre-tested structured questionnaire. Qualitative data were collected via five focus group discussions among 30 adolescents and six in-depth interviews among healthcare workers. Quantitative data was analyzed using SPSS software while qualitative data were analyzed thematically.

Results: 96(29.4%) of the adolescents have ever utilized ARSH services at least once, while 55.8% of the participants were not aware of these services. Factors associated with non-utilization of these services were decreasing age [AOR=1.21, 95%CI=1.08-1.41], female gender [AOR=3.21, 95%CI=2.44-6.23], increasing reproductive health stigma [AOR=2.01, 95%CI=1.88-2.22] and decreasing parent-adolescent communication [AOR=1.84, 95%CI=1.66-1.98]. From the adolescents' perspectives, cognitive barriers of utilization included poor knowledge of sexual health, unawareness regarding the services while psychosocial barriers included fear of parents and cultural norms, perceived lack of privacy and confidentiality at the healthcare facilities. From the healthcare workers' perspective, lack of availability of certain services and disruption of services post Covid-19 pandemic acted as emerging barriers.

Conclusion: To improve utilization, a multi-component strategy is needed: promotion of adolescent friendly health clinics, life skills education in schools, community support interventions and motivating and counselling parents regarding importance of adolescent reproductive health. Necessary steps to correct the deficiencies at the facility level should also be given priority.

Keywords: adolescents, reproductive and sexual health, mixed-method, rural West Bengal, Covid-19 pandemic

Abstract Id	Efi_189_168_ADOL
Title	**Association of psychosocial factors with aggression among school going rural adolescents in Haryana**
Authors	Ramesh Verma, Gopal Kumar, Meenakshi Kalhan, Vinod Chayal, Ginni Agrawal, Aman Sachdeva, Jitesh Kumar, Pt B D Sharma PGIMS Rohtak

Introduction: Adolescents are being involved in aggressive activities now a day. Sometimes involvement in aggressive activities may be fatal for the victim as well as for the doer. It is a matter of great concern for all including parents, teachers, psychologists, social reformers and others. Momentary expression of anger sometimes may spoil the future life of the adolescents. Aim and

Objectives: To determine the prevalence of aggression and to identify the psychosocial risk factors associated with aggression among school going adolescents. Methodology: The study recruited 480 school going rural adolescents from 8 government senior secondary schools in rural block of Beri, district Jhajjar (Haryana.

Results: The mean age of the adolescents was 14.11 ± 1.12 years. 49.4% of the adolescents were found to be aggressive. After applying binary logistic regression, there is statistically significant relation between aggression and determinants like class, gender, occupation of father was observed.

Conclusion: The study concluded that determinants like age, class of students, gender of subject, occupation of father found significant association with aggression. To solve this current situation, parents must give love, attention to their children and must act in an appropriate way in front of them and be role models.

Keywords: Adolescents, Aggression, School, Gender

Abstract Id	Efi_166_195_ADOL
Title	**Hygienic practices and Absenteeism from school during Menstruation among school going adolescent girls of Shri Saraswati Vidyalaya Inter College, Hapur**
Authors	Dr. Ridhi Mehra

Introduction: Adolescence in girls signifies the transition from Girlhood to Womanhood .Onset of menstruation is one of the most important changes occurring during adolescence. Menstrual hygiene is most important ,and still neglected Area of Concern. The menstrual related problems have an adverse effect on their performance in academic and other activities of daily life which may lead to school absenteeism during menstrual days .This study was conducted to study the menstrual hygiene practices and absenteeism from school during menstruation among adolescent girls of Shri Saraswati Vidyalaya Inter College(S.S.V.I.C), Hapur.

Materials And Methods: School based cross-sectional study was undertaken among the adolescent school going girls of S.S.V Inter college , who were purposively selected. All girls of between the age group of 10- 19 years who have attained menarche were selected and the sample size came out to be 220. A verbal consent of the adolescent girls was taken before administering the questionnaires and assured of confidentiality.

Results: 48.6% girls used only sanitary pads as the absorbent material. 96 (43.63%) out of 220 girls who attained menarche used to remain absent from school during menstruation. It was concluded that there is significant association between the absorbent material used and the socio-economic status of the family.

Conclusion: There is need to educate Adolescent Girls about the safe and Hygienic practices regarding Menstruation to enable them to lead a healthy and reproductive life. There is also need to improve basic facilities at school to cut down Absenteeism .

Keywords: Menstrual hygiene ,Adolescent girls, Absenteeism

Abstract Id	Efi_164_197_ADOL
Title	**Knowledge, Attitude and Practices of Adolescent School Girls regarding Menstrual Hygiene in Lucknow District**
Authors	Dr. Shahzeb Ansari, Dr. Ruby Khatoon, Associate Professor, Department Of Community Medicine, Era's Lucknow Medical College & Hospital, Lucknow Dr. Beena Sachan, Associate Professor, Department Of Community Medicine, Dr. Ram Manohar Lohia Institute Of Medical Sciences, Lucknow Dr. Syed Abid Asghar, Assistant Professor, Department Of Community Medicine, Era's Lucknow Medical College & Hospital,lucknow Dr. Zeashan H. Zaidi, Lecturer, Department Of Community Medicine, Era's Lucknow Medical College & Hospital, Lucknow

Introduction: Adolescence in girls has been recognized as a special period which signifies the transition from girlhood to womanhood. Menstruation is generally considered as unclean in the Indian society. Isolation of the menstruating girls and restrictions being imposed on them in the family, have reinforced a negative attitude towards this phenomenon [1]. Several studies have reported restrictions during the daily activities. Apart from these, they believe in specified taboos at menarche and menstruation [2]. The issue of menstrual hygiene is inadequately acknowledged and has not received proper attention [3]. Good hygienic practices, such as use of sanitary pads and adequate washing of the genital areas, are essential during menstruation period. Women and girls of reproductive age need access to clean and soft absorbent sanitary products which in the long run protect their health from various infections [4]. Most of the school going and pre-university girls are not aware of the fundamental facts about menstruation and puberty and very little attention is paid to the reproductive health of those girls [5]. Menstruation is a natural phenomenon among matured females who experience shedding of blood for 1-7 days every month from the age of maturity until menopause [6]. Various aspects such as physiology, pathology and psychology of menstruation have been found to associate with health and wellbeing of women; hence it is an important issue concerning morbidity and mortality of female population. On the other hand, hygiene-related practices during menstruation are of considerable importance for reproductive health, poor practices increase vulnerability to reproductive tract infections [7].

Objective: 1. To assess knowledge and attitude about menstrual health among adolescent girls in rural and urban schools in Lucknow district. 2.To find out practices of menstrual hygiene among them

(b) Materials & Method: The present study was undertaken to assess knowledge and attitude about menstrual health among adolescent girls. It was a community based cross sectional study. A total of 410 adolescent school going girls residing in the urban and rural areas of Lucknow district constitute the study unit. Multi stage random sampling was used. A pre designed and pretested interview schedule was used to collect data. Participants were asked

about their practices of menstrual hygiene. Data was analyzed and tabulated using SPSS-20.0 version software. Appropriate statistical tests of significance will be applied to test and validate the findings of the study. Sample size of 410 was calculated as formulae: $4PQ\backslash/L^2$ As per prevalence for menstrual hygiene practices is 50.8% in study done at IMS, BHU, Varanasi, Uttar Pradesh. [8] After taking permission from the school authorities, the class teachers will be explained the purpose of the study. Verbal consents will be obtained from the girl students. The purpose of the study and the nature of the information which has to be furnished by the study subjects will be explained to them. The questionnaire will include topics related to the awareness about menstruation, the sources of information regarding menstruation, the hygienic practices during menstruation and the restricted activities practice during menstruation. The demographic information including family details, parent's education, occupation will be enquired. The chronological age and the age at menarche will also be elucidated. The menstrual hygiene questions will include queries about the type of absorbent used, its storage place, the use of clean or unclean napkins and the frequencies of changing and cleaning them. The information about personal hygiene will include washing and bathing during menses, etc.

Results: The study is conducted among 410 school going adolescent girls. Majority of the girls are in the age group of 17 to 19 years (52.8%). Only 12.4% of the girls were aware of menstruation before menarche. The major source of information about menstruation for them was found to be their mothers (42.4%). 41.6% of the girls in the study were not aware of the source of the bleeding. The sanitary pads were used by 48.6% of the selected girls. The practice of the use of old clothes was reported in 51.4% of the subjects. Satisfactory hygiene was maintained by 81.6% of the girls. Majority (62.6%) of the study girls experienced various restrictions during menstruation. The girls had various reactions to menarche like scared (33.6%), depressed (40.2%), and 21.4 % of the girls considered it as sin. 58.4% of the girls had anticipation and prediction of menstruation onset.

Conclusion: Low level of knowledge about menstruation, poor menstrual hygiene was found in our study. There is a different type of misconception, myths, restriction and lack of menstruation related knowledge. Education regarding menstruation reproductive health with more focus on menstrual hygiene should be made a part of school curriculum. Awareness regarding the need for information about healthy menstrual practices is very important. It is essential to design a mechanism to address and for the access of healthy menstrual knowledge.

Keywords: Menarche, Menstruation, Menstrual Hygiene, Practices, Adolescent Girls

Abstract Id	Efi_52_104_ADOL
Title	ADOLESCENT MENTAL HEALTH
Authors	Dr. Akansha Saini, Iihmr, Dr. Manish Priyadarshi (Associate Professor-IIHMR Delhi, Dr. Priya Singh - Student IIHMR Delhi

Introduction: Mental Health is a state of social, emotional, and psychological well-being. It just starts with a little bit of stress of any problem and later when we only think of it and don't share it with anyone making our own perceptions and fighting with our own thought, this little stress leads to big mental health issues such as anxiety, depression, etc. This study aims to know the mental health status of participants and segregate serious and non-serious participants and provide interventions to those who are serious and need help

Methodology: A descriptive study has been conducted in Northern India from 5 September 2021 to 12 September 2021 in which 142 adolescents of age 11-19 years participated through closed questionnaires (google forms). The sample was purposive selected (Inclusion criteria- age 11- 19 years of age). The survey included questions about their feelings, stress, and opinion about the conduct of mental health seminars in their institution

Result: Findings showed that out of the total,44 adolescents were in an anxious state most of the time while 13 feels sad most of the time. Out of the 57 anxious\/sad children, 34 had suicidal\/self-harming thoughts at some point in time. Out of 44 anxious 12 tried alcohol\/smoking to relieve their stress and all of them also had self-harming thoughts. 41 of the total students feel social media does not create any pressure\/mental stress while 51 agreed that social media create peer pressure\/mental stress. 53 out of total felt difficulty in sharing their feelings and are anxious\/sad most of the time. Out of these 53, 23 feel they have no one to rely upon. And the majority of the adolescent surveyed (72%) felt the need that mental health seminars should be conducted in educational institutions.

Conclusion: It can be concluded that most of the adolescent feels lonely and that is the reason feeling anxious and low and being not able to cope up with their problems makes them think negative things like using alcohol or self-harm.From the study we can suggest that there should be problem-solving interventions for adolescents should be put in place where mental health-related issues can be addressed. Schools should have a counselor where students can go and share his\/her feelings. Regular seminar on mental health should be conducted for parents and students both. To address it at the home level parents also should take care of behavioral changes in their child and seek the help of specialists if needed. They should also make sure to provide a comfort zone for their child where he\/she can share anything with them and try to spend aa quality time with their family at least once a week.

Keywords: Adolescents; mental health; anxiety; school health; behavioural change

Abstract Id	Efi_157_204_ADOL
Title	A Cross Sectional Study of Unintentional Injuries among Children up to 14 years of Age in an Urban Slum Area
Authors	Dattaprasad Avinash Sawant, Seth GS Medical College and KEM Hospital, Mumbai

Introduction: Every child around the world has a right to a safe environment and have protection from injury and violence. From the own house to surroundings including institutes, playgrounds and community, each child is being exposed to hazards and risk from multiple kinds of injuries. The effect of such incidences can range from mild acute trauma to the body to long term disabilities including both physical and mental. The term 'unintentional' is used to refer to injuries that were unplanned and the harmful outcome was not sought. Child injury is a major public health problem that requires immediate attention. Injury and violence kill around 950000 children below 18 years of age and approximately 90% of those injuries are unintentional. Most of the child injuries, and deaths from injuries, are preventable in all countries. Unintentional injuries are responsible for nearly 7.2% of all causes of deaths in India. This study aims to find out prevalence of unintentional injuries and its various types in an urban slum area with relation to educational status and first aid knowledge of parents of the children.

Methods: The study was conducted an urban slum area of a suburban of Mumbai. 373 Parents (including family members or care givers) of child of age up to 14 years were selected by stratified random sampling as study participants. Those parents, family members, care givers who didn't give consent for participation were excluded. After necessary approvals, structured interview sheets were prepared with help of proper literature review which included socio-demographic characteristics of parents, knowledge of parents about unintentional injuries, details of unintentional injuries occurred in the past one year, response of parents after injury. After administering written informed consent, interview of parents were taken by visiting their houses. Those children had unintentional injuries were classified under different headings namely, cut and wounds, fall and fracture, burn, animal bites, choking, drowning etc. and details of injury were noted. Collected data was analyzed with the help of Microsoft Excel (© 2012 Microsoft Corporation) and SPSS (© Copyright IBM Corporation).

Results: A total of 373 parents including family members or care givers of children were interviewed regarding unintentional injuries. Out of these, 339 (91%) were females and 34 (9%) were males. Age of parents or family member was ranging from 14 years to 65 years with mean age of 31 years. 47 parents were illiterate out of which 45 were females. Out of all females 319 were home makers. Considering relation with the child, maximum participants were mothers of the child (309, 83%) followed by father of the child (29, 7.8%). 83 children were living in 5 membered family followed by 83 children who were living in 4 membered family. 75% children were living in single room house. 163 children (43%) belonged to Lower Middle Class followed by 136 children (36%) who belonged to Upper Middle Class as per Kuppuswami Scale. Out of 373 children, 204 (55%) were boys and 168 (45%) were girls. Child age had range from 4 months to 14 years with mean age of 5.6 years. 159 (43%) children had some unintentional injuries in

the last one year, out of which 113 children had fall and fracture which accounts for 71% of total unintentional injuries, followed by cut and wounds (52, 33%); burns (10, 6%); animal bites (8, 5%) and blunt trauma (8, 5%). 65 (41%) children had injuries of head and face. 70% injuries occurred in and around home. 94% of injuries occurred during day time. Only three children were unconscious after the injury. 49% children got injuries at the home when family members were not there and 16% children got injuries in the presence of family member. 82 (52%) children encountered with injuries while playing. Only 114 (30.6%) parents or family members knew about first-aid out of which 108 parents got information from their friends and relatives. Remaining 258 parents or family members didn't heard anything about first aid. Only 37 (10%) parents knew the concept of unintentional injuries. 89 (56%) parents or family members went to either doctor or nearby hospital after occurrence of injury. In animal bites 100% parents went to health care system and availed anti-rabies vaccination for dog and cat bites. Occurrence of unintentional injury and first aid knowledge of parents or family members were statistically significant (P < 0.0001) with significant negative correlation (R = -0.195).

Conclusion: Urban slum are the high risk areas for all age group human beings. Children being more vulnerable to surrounding unsafe environment due to lack of fully developed reflexes and immature physical growth have high prevalence of unintentional injuries. Present study highlights the problem with 42.6% prevalence of unintentional injuries in slums of Mumbai. This is one of the least studied public health problem with respect to urban slums of Mumbai Metropolitan Region. Adults of urban slums have high percentage of illiteracy and lack of knowledge regarding unintentional injuries and first aid. This is one the major contributors in occurrence of child injuries. Apart from this home surroundings play a crucial role in safety of child. Majority of falls and fractures occur during playing and running. Urban slum has a huge proportion of houses built with tin and kachha roof. For instance 75% of families are living in zopadi either built with brick or tin. Majority of fall occur in the house itself from furniture or staircases. 47% of houses have unsafe staircases which is a major cause for child injury due to fall. 7 children in this study were involved in road traffic accidents. Hot silencer of a bike was the most common cause of burn injury. Such unsafe conditions are inevitable in the congested and overcrowded areas of urban slums. Lack of knowledge in parents make the challenge of child injury prevention more difficult. Awareness about injuries and there prevention with first aid knowledge is the key factor to tackle this problem. Minimizing risk factors of injury in house will be beneficial to reduce child injury. Proper city planning with policies for reduction in migration of people are national level prevention strategies which can make reduction in child injuries.

Keywords: animal bite, burn, child health, cut, fall, fracture, prevention

THEME: COMMUNICABLE DISEASES

Abstract Id	**Efi_21_137_COM**
Title	**"A hospital-based Case-Control Study on predictors of drug resistant TB**
Authors	Dr. Abhinav Pundir, Dr. Ruchi Juyal, Dr. DeepShikha, HIMS, SRHU

Introduction: Globally, TB is included in the top ten causes of mortality. It is a public health concern for developing and low-income countries including India. Although the overall mortality rate of TB is decreasing globally, this earlier curable disease is now becoming incurable because of resistance to Anti tubercular drugs. Emergence of DR-TB has added to the already existing economic and social burden of countries and thus is a major concern for global TB control efforts. The diagnosis and treatment of the drug resistant TB is a challenge because of the high cost of treatment and poor patient compliance associated with multiple drug therapy. In a country like India, it is difficult to measure the magnitude of the DR-TB because there are only limited laboratories available, which can conduct quality assured drug susceptibility testing (DST). This study will play an important part in evaluating the risk factors leading to development of drug resistance in tuberculosis patients and will provide newer dimensions for timely intervention and prevention.

Methods: The objective of this study was to assess the predictors of drug Resistance in tuberculosis patients. A hospital-based case control study was conducted in Himalayan Institute of Medical Sciences a part of Swami Rama Himalayan University Dehradun. The study was conducted for a period of one year. Cases and Controls (n=220) were selected from patients attending the TB unit of HIMS. After recruitment of a case, one matching control was selected. Face-to-face interviews were conducted to collect data from the study participants (cases and controls). Data analysis was done in SPSS to find the association between the predictors and DR-TB.

Results: Majority of respondents were found residing in joint families for both cases (55.5%) and controls (67.3%). Most of the cases were living in a family of 4-6 members i.e., 65.5% followed by <3 members (18.2%) and 16.3% were in family having more than 7 members. Similarly, majority of controls were also from family consisting of 4-6 members (74.5%). In the present study it was found that 21.8% of cases were residing in overcrowding as compared to 14.5% of controls. Majority of respondents were Non vegetarian among cases (80%) and controls (73.6%). Majority of respondents were found among cases having less than 2 meals (52.7%) as compared to controls (41.8%). Tobacco consumption was more common in cases as compared to controls (40% vs 35.5%). While smoking was found slightly more among cases (79.9%) as compared to controls (76.5%). Consumption of alcohol was a little more in cases (25.5%) as compared to control (24.5%). Majority of cases were found to be underweight (48.2%) as compared to controls (10.1%). Odds ratio was calculated by taking normal as reference category and it was found that underweight were at 2.09 times higher risk as compared to controls. This was also found to be statistically significant (p value <0.0001).

Conclusion: This Study revealed that majority of patients both cases and control were middle aged males. In the study it was seen that Hindu religion dominated the study population and a

large group of participants belonged to general caste category. Most of the respondents enrolled in the study both cases and controls were literate and were currently unemployed. Majority of the cases belonged to joint family. A major group of cases were observed to be residing in the family comprising more than 3 members as compared to controls. A significant association was seen among cases having underweight BMI status. It was seen that majority of cases consumed non vegetarian diet and took less than 2 mealsper day. Tobacco and alcohol consumption was found more among the controls as compared to controls.

Keywords: MDR TB, DR-TB, DST

Abstract Id	Efi_23_135_COM
Title	**Prevalence and predictors of visits for oral cavities examination in India among women aged 15-49: Findings from National Family Health Survey 2014-15**
Authors	Absar, Rashmi Lata; Career Post Graduate Institute of Dental Sciences and Hospital, Lucknow

Introduction: Oral health is an essential component of overall well-being but is often neglected. Dental caries is one of the most prevalent dental diseases among humans. Primary region-wise data in well-controlled surveys regarding the prevalence of dental caries across India are also not available. Hence, an attempt was made to study prevalence and factors influencing visits for oral cavities examination in India among women aged 15-49 using secondary data.

Methods: This study utilized the data from the fourth round of the National Family Health Survey (NFHS-4), conducted in 2015–2016. The NFHS-4 is a nationally representative sample survey of 699,686 women aged 15–49 years with a response rate of 97%.

Results: State-wise oral cavities examination among women aged 15-49 was higher among Kerala (50.3%) followed by Goa (49.6%), Punjab (36.3%), and Sikkim (31.9%). Bivariate analysis shows that age, marital status, residence, education, religion, caste, wealth index, food type, and working status were associated with examining the oral cavity. Logistic regression shows that vegetarians, rural, richest quantile, and Higher educated women are more likely to visit for oral cavity examination.

Conclusion: This study showed a predominance of oral cavities examination among vegetarians, rural, richest quantile, and Higher educated women. There is an urgent need for comprehensive oral health educational programs and accessible and affordable oral health services to the poor wealth quantile population.

Keywords: Oral cavities, Women, India

Abstract Id	Efi_129_236_COM
Title	**Compliance to tuberculosis symptoms screening by healthcare providers among patients attending outpatient wards of a tertiary care teaching hospital in Puducherry, India**
Authors	Dr. Divyabharathy R,

Introduction: Tuberculosis (TB) remains a major public health problem with high morbidity and mortality. Despite increase in TB notification rates in the recent years, several individuals with TB remain undetected contributing to tuberculosis transmission and mortality. As the National TB programme relies on passive case detection, the pre-requisite for detection is to screen the individuals attending the health facilities for symptoms suggestive of TB and referring them to designated microscopy centre for sputum microscopy examination. In this study, we aimed to assess the compliance to TB screening and diagnosis tertiary health care facility in Puducherry.

Objective: Among the individuals attending the tertiary health care facility of Puducherry, to determine the proportion screened for symptoms suggestive of TB, presumptive TB patients detected and referred to in-house DMC for sputum smear microscopy

Materials and Methods: A hospital based cross-sectional study was conducted among individuals who attended various outpatient departments of tertiary teaching hospital during October 2020 to January 2021. The sample size was estimated as 900, assuming that 10% of the study population symptoms related to TB. Systematic sampling method was employed to select participants for the hospital exit interviews. The data was collected using a pilot tested semi-structured questionnaire and analysed using SPSS 20 version.

Results: Out of 901 subjects, 486 (53.9%) were males and the mean (SD) age was 52 (19.7). Of the total, 705 (78.2%) were asked about symptoms suggestive of TB by healthcare providers. Of those screened of TB symptoms, 32 (15.2%) were found to have presumptive tuberculosis, of which, only 7 (21.8%) were referred to DMC for diagnosis.

Conclusion: Despite of efforts from the National TB programme to enhance the compliance of healthcare providers to TB case finding the health facilities, there is a substantial gap in case detection. There is urgent need for newer strategies to fix the existing gaps and improve case detection.

Key words: Tuberculosis screening, tuberculosis. TB diagnosis.

Abstract Id	Efi_129_236_COM
Title	**Epidemiology of Acute Encephalitis Syndrome Cases Reported To a Tertiary Care Centre In North Kerala**
Authors	Dr. Athira. T, Dr. Priya Chandran, Dr. Jayakrishnan. Thayyil, Dr. Biju George Govt. Medical College, Kozhikode

Introduction : Acute Encephalitis Syndrome (AES) cases are serious public health problem in India commonly affecting children and young adults resulting in significant morbidity and mortality. Japanese Encephalitis is the major cause of AES in India. HSV, Influenza A virus, West Nile virus, Scrub typus, Dengue virus ,Mumps and Measles are the major viral causes of AES. Recurrent epidemics of encephalitis of unknown aetiology have occurred in the country. During 2018, 10485 cases & 632 deaths of AES were reported to NVBDCP from 17 states with a case fatality rate of around 6%.An outbreak of AES due to Nipah virus was reported at North Kerala during the year 2018 which resulted in significant mortality. So this study was conducted to find out the burden of AES cases admitted in a tertiary care centre in North Kerala and to assess the clinico epidemiological profile of these AES cases.

Methods: A record based Descriptive study was conducted at Govt. Medical College ,Kozhikode from 5th September to 20th September 2021 among all confirmed cases of AES admitted in GMC, Kozhikode from January 2021 to June 2021.Data collected from records of RPEID Cell data using a semi structured questionnaire. Data on socio demographic details and clinical profile were collected. Data coded and entered in Ms Excel and analyzed using PASW 18 version.

Results: Total 45 cases of AES reported in the last 6 months. All the cases reported during this period were clinically diagnosed, among the cases 13.3% were viral encephalitis. Median age was 44 years(IQR-24-56 years). Majority of the cases were from Calicut district (42%) followed by Malappuram (33.3%) and Kannur (8.9 %).Majority were males (60%).The case fatality rate was found to be 31%.

Conclusion: A large number of undiagnosed AES cases were reported in North Kerala in the last 6 months. No clustering of cases noted. All the cases were clinically diagnosed. So improved laboratory surveillance for AES cases is required for early diagnosis and treatment.

Keywords: AES, Japanese Encephalitis, North Kerala, Nipah

Abstract Id	Efi_129_236_COM
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Authors	Dr. Divyabharathy R, Ms. Anushree R, Dr. Sridhar D

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Key words: Tuberculosis screening, tuberculosis. TB diagnosis.

Abstract Id	Efi_198_COM
Title	**Dog bites the poor: Exposure of rabies in poverty prone areas in Kashmir an ecological study**
Authors	Dr Kouser Sideeq Lone

Introduction: India annually has around 20000 rabies deaths (more than 1/3rd of global statistics). In Kashmir dog bite is the main exposure for rabies, annually around more than 6000 dog bites are reported to the only established anti Rabies clinic in Kashmir (SMHS hospital GMC Srinagar), but rabies not being a notifiable disease in India, official mortality statistics are not available but the recent numbers estimated is around 3 deaths since November 2020 due to rabies in Kashmir. Globally rabies outbreak is rampant among impoverished and vulnerable population. Our study wanted to test whether poverty is associated with the higher number of dog bite cases in Kashmir.

Methodology: An ecological study was designed. The data for the number cases of dog bite coming from 9 districts of Kashmir was accessed from the anti rabies clinic at Government Medical College Srinagar for the period of 8 years from 2013 to 2021. District Srinagar was not involved in the study, as Srinagar reports around 4 times the number of dog bite cases as compared to any other district to the anti rabies clinic as the clinic is in the same district which may lead to bias in the results. The statistics for people living below poverty line in each of these districts was obtained from the Economic survey J&K 2013-2014 report. These data sets where analyzed to find out the association between poverty and dog bite cases from each of these 9 districts. The social science statistical software was used to analyze the results with p value of <0.1 taken as statistically significant.

Result: A total of 14583 cases where reported in 8 years from the 9 districts of Kashmir with maximum number of cases from district Budgam followed by district Bandipora which are among the districts having highest percentage of the people living below poverty line ; Bandipora being on the second number after Kupwara. The Pearsons Coefficient was calculated for each year for poverty and number of dog bite cases .The relationship was significant for each year except for two years. From 2013 to 2021 the r values for each year were 0.6122, 0.5663, 0.6106, 0.5921, 0.5876, 0.6546, 0.5867, and 0.4919 respectively. The two years with non significant results were those when the situation was not in normal conditions in Kashmir one being 2014 when Kashmir was in floods and the other being 2020-21 (lockdown period).

Conclusion: Our study found significant association of poverty and number of dog bite cases in Kashmir, which points towards the need to address the preventive as social aspects of Rabies and animal bite cases in the impoverished areas of Kashmir.

Abstract Id	Efi_187_170_COMM
Title	**In-situ Evaluation of Plant-Products Fumigation on Air-borne Microbes**
Authors	Malik Itrat, Shaista Mahfooz, National Institute of Unani Medicine

Introduction: Purity of inspired air is essential for our health. One of the main factors influencing air quality is the presence of microbes. Fumigation of herbs has been recommended in Unani medicine to purify the air. Hence, the present study was aimed to evaluate the effect of traditional fumigation practice using plant products on air-borne microbes.

Methods: In this study, the effect of selected plant-products fumigation on air-borne microbes was assessed through differences in total microbial colonies in pre and post samples. Microbial load in the air was quantified using the passive open-air petri plate method. Moreover, the chloroform extract of the test formulation was prepared and antibacterial activity of the extract was studied against commonly found air-borne bacteriae (S. aureus, P. aeruginosa, Micrococcus lylae, Neomicrococcus lactis and Kocuria rosea) by disc diffusion and dilution methods.

Results: Significant reduction in aerial microbial colonies were observed with fumigation of test formulation at doses of 30 and 45 gms (P<0.05). The chloroform extract of the test formulation exhibited antimicrobial activity against all the tested bacteriae, with inhibition diameters ranging from 9 to 15mm. The minimum inhibitory concentration values ranged from 25 to 50µl\/ml and the minimum bactericidal concentration values ranged from 50 to75µl\/ml.

Conclusion: Present study concludes that test formulation had antibacterial potential against air-borne microbes both in the liquid and vapour phase. However, the effect of the test formulation on antibiotic-resistant bacterial strains was not evaluated in the present study, hence, should be addressed in subsequent studies.

Keywords: Unani Medicine; Fumigation; Chloroform extract; Air-borne microbes; Antimicrobial activity

Abstract Id	Efi_11_147_COM
Title	**Quality of Life and Economic Burden among People Living with HIV Attending an Antiretroviral Treatment Centre in a Teaching Hospital of Jharkhand, India**
Authors	Dr. Mayank Raj, Rajendra Institute of Medical Sciences, Ranchi

Introduction : HIV\/AIDS continues to be one of the major burdens of disease globally. An estimated 38 million people were living with human immunodeficiency virus across the globe by the end of 2019. The quality of life of HIV patients has also impaired due to societal issues like prejudice, humiliation, depression, poverty, substance abuse and social belief. The anxiety suffered in day to day life increases the risk of depression by three to five times in HIV patients. Hence, its is important to assess the quality of life and factors contributing to it in order to understand and document the burden of the disease .

Methodology : This hospital based cross sectional study was carried out in ART Centre of Rajendra Institute of Medical Sciences, Ranchi for a period of nine months. A pre tested semi structured questionnaire was used to interview the subjects after taking informed written consent and data was collected on socio-demographic factors and economic burden of patients. Study of Quality of Life was done using instruments like WHOQOL-100 and WHOQOL-HIV BREF. Systematic random sampling technique was adopted. Final sample size obtained was 216. Data collected was entered in MS Excel sheet and was analyzed using SPSS software, version 20 .

Result : Out of the total study participants, maximum (53%) were females and 47% were male. Majority (35.2%) belonged to the age group of 36-45 years, followed by people from 46-55 years of age (24.1%). The total QOL score was found to be 57.79±3.248. Mean scores were highest in the Environmental domain and lowest in the SRPB domain .

Conclusion : Majority of the study subjects belonged to the Socio-economic Class III (34.7 %) followed by Class I (33.3 %). The mean total medical costs were found to be INR 22, 942.13 ± 4261.613 and the mean total non-medical costs came out to be INR 5342.97± 382.367. Thus the mean total direct cost were INR 28,285.10± 4643.98. The average day lost were found to be 31.75 (±2.25)

Keywords : HIV, Quality of Life, Jharkhand

Abstract Id	Efi_83_70_ID
Title	**"A study regarding the demographic profile and the treatment compliance of patients attending Anti-rabies clinic by document analysis in a tertiary care hospital, Gwalior"**
Authors	Rani Verma, Dr. ranjana tiwari, Dr. Sumit Singh Bhadoriya, G.R. Medical College, Gwalior

Introduction : The word "Rabies" has been derived from the Sanskrit word "RABHAS" which means "to do violence". Rabies is an acute infectious highly fatal viral disease of the central nervous system caused by Lyassa virus type-1leading to encephalomyelitis. It is primarily a zoonotic disease of warm blooded animals, particularly carnivorous such as dogs, cats, jackals and wolves. It is mainly transmitted by animal bites, mostly dogs in the Indian context. Although Rabies is 100% fatal disease, it is also 100% preventable. In spite of being a vaccine preventable disease, rabies still poses a significant public health problem in many countries in Asia and Africa . Worldwide, rabies occurs in more than 150 countries and territories. Although a number of carnivorous and bat species serves as natural reservoir, rabies in dogs is the source of 99 percent of human infection, and poses a potential threat to more than 3.3 billion people. In India alone, 20000 deaths (i.e. about 2 per lakh population at risk) estimated to occur annually . The economic cost of rabies has been estimated to be 8.6 billion USD annually, Asia constitutes 96.5% of the economic burden of the disease in developing countries, which costs it 6.8 billion USD annually Post Exposure Prophylaxis (PEP) is considered of monumental importance in prevention of rabies . PEP consists of thorough wound washing with soap and water, Anti-rabies vaccination (ARV) and timely administration of Rabies immunoglobulin (RIG) for category III bites . In India, Updated Thai Red Cross regimen of Intradermal vaccination (2-2-2-0-2) is adopted . Timely and complete PEP for these animal bite victims is necessary to prevent rabies. Therefore, the attending anti-rabies clinic (ARC) physician must provide appropriate PEP and it is also essential for the bite victims to complete the full course of vaccination as recommended However, the importance of completion of the schedule is often ill conceived and neglected probably because rabies not being included in the list of notifiable diseases And many a times people do not take the complete course of vaccination. In order to prevent rabies deaths, the Global Alliance for Rabies Control (GARC) have put forward the global strategic plan "Zero by 2030" to reduce the human deaths from rabies to zero by the year 2030. India is also trying to take steps in achieving this goal of zero-rabies mission through National Rabies Control Programme under the Ministry of Health and Family welfare. Considering all the aspects and viewing them the present study would be undertaken. Post Exposure Prophylaxis (PEP) is considered of monumental importance in prevention of rabies . PEP consists of thorough wound washing with soap and water, Anti-rabies vaccination (ARV) and timely administration of Rabies immunoglobulin (RIG) for category III bites . In India, Updated Thai Red Cross regimen of Intradermal vaccination (2-2-2-0-2) is adopted . Timely and complete PEP for these animal bite victims is necessary to prevent rabies. Therefore, the attending anti-rabies clinic (ARC) physician must provide appropriate PEP and it is also essential

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Methods : The present study would be a Hospital based document analysis carried out for the duration of 3 months i.e. from July 2021 to September 2021 and would be done at the Anti rabies clinic of Madhav Dispensary of JA Group of Hospitals. In the Anti rabies OPD run by the Department of Community Medicine there is documentation of various details of the patient day wise which includes name, age, gender, address, date of bite, site of bite, category of bite, category of animal, information regarding various treatment given like injection Tetanus toxoid, Anti rabies vaccine all 4 doses and depending on the severity rabies immunoglobulins is maintained in the register. This data would be entered in Microsoft excel and would be analyzed. The type of sampling procedure adopted would be purposive sampling method. Throughout the study anonymity of all patients would be maintained and privacy as well as confidentiality of the data would be assured.

Type of study: Hospital based cross sectional study

Time period: The study is planned for a duration of 3 months from July 2021 to September 2021. Place of study: Anti rabies clinic of Department of Community Medicine of J.A. Group of Hospitals of G.R. Medical College, Gwalior.

Sample size: All patients visiting the OPD during the study period. Inclusion criteria: All animal bite patients reporting to anti rabies clinic. Exclusion criteria: Any incomplete entries regarding treatment and compliance of various doses of ARV would be excluded

RESULTS The study is under process & the results are awaited

Conclusion : This study is expected to reveal the Age and Sex distribution of patient Attending the ARV clinic. The hot spots for animal bite would be identified & most importantly the compliance of the patient for complete dose of ARV would be known Since rabies is a communicable disease which has 100% mortality but if the patient takes timely post exposure prophylaxis and are counseled properly for getting completed the all 4 doses of ARV and if required also immunoglobulins then the life of the patient could be saved.This study would help to assess the compliance of the patients and other important details regarding the patients visiting the OPD so that appropriate recommendations can be made and strategies could be planned for the betterment of the patient and the community.

Keywords: Rabies, Vaccination, Animal Bite

Abstract Id	Efi_88_64_COM
Title	**Aedes aegypti larval indices used as a proxy indicator to assess spread and control of a Dengue outbreak: Interim results from an annual survey in hot spots of Bhubaneswar city, Odisha.**
Authors	Dr. Snigdha Singh, 1. Dr. Sonali Kar, Kalinga Institute of Medical Sciences, Bhubaneswar 2. Dr. Dipti Pattnaik, Kalinga Institute of Medical Sciences, Bhubaneswa 3. Dr. Subhashish Mohanty, Malaria State Officer, NHM, Odisha 4. Dr. Ansuman Kar, Kalinga Institute of Medical Sciences, Bhubaneswa 5. Dr. Roshni Dandapat, Kalinga Institute of Medical Sciences, Bhubaneswar

Background : Bhubaneswar city, capital of Odisha has been facing the twin problems of COVID-19 and Dengue since the rainy season of year 2021, which began in June 2021. The two diseases had a common symptom of fever with severe body ache and poised challenge to the health care system. Health services in the state responded with dengue isolation wards in every hospital and surveillance for active case finding in the city through Rapid Testing kits for Dengue. Vulnerable hot spots were identified, which were primary areas of the city with rich foliage and slums. Three such hot spots, Niladri Vihar (urban catchment area of the medical college), Prashanti Vihar and KIIT road were selected for the study, which was merged with the routine activities of the Department of Community Medicine, KIMS, Bhubaneswar.

Objective: 1.To correlate the larval indices with the case load in the 3 areas 2.To follow up the larval indices post rainy season on a monthly basis and match with the incidence of cases 3.To establish ROC curve for Aedes aegypti larval indices and decide the index which supports best as the predictor of an outbreak.

Methods : 3 routine indices for House index(HI), Container Index (CI) and Breteau Index (BI) were surveyed in 15 consecutive houses of the any 1 case reported in the households of the 3 chosen hot spots. It was done in collaboration with the NVDCP program officers, who assisted in the survey and calculation of indices. From each house all possible water residual containers were inspected like overhead tanks, discarded plastic in and around house, water cooler, bottles, coconut shells, buckets, earthen pots, tyres, drains or collection ponds just outside the house. The indices were calculated as per standards and active case search was done. It was followed by IEC and insecticidal drive in the area. The same exercise was repeated in 15 days (4 times every 15 day) to see the correlation between indices and cases. Accessory information regarding the inhabitants of the households were also taken to corroborate findings with disease enabling conditions ex: use of cut sleeves, open drains, inadequate water drains that permit collection of rain water in the selected households.

Results: At the time of abstract HI was 10%, CI 5% and BI 17% and the results for subsequent visits will be presented at the time of conference. This is planned for 12 months to be able to see if the indices, if done routinely can be predictors of the disease outbreak in endemic areas.

Conclusion: The Aedes aegypti larval indices could be used as proxy indicator to assess the spread of dengue and control an outbreak at the earliest.

Keywords: Dengue, Aedes aegypti, larval indices, endemic

Abstract Id	Efi_130_235_COM
Title	**Epidemiology of acute encephalitis syndrome cases reported to a tertiary care centre in North Kerala**
Authors	Dr. Athira.T,

Introduction : Acute Encephalitis Syndrome (AES) cases are serious public health problem in India commonly affecting children and young adults resulting in significant morbidity and mortality. Japanese Encephalitis is the major cause of AES in India. HSV, Influenza A virus, West Nile virus, Scrub typus, Dengue virus ,Mumps and Measles are the major viral causes of AES. Recurrent epidemics of encephalitis of unknown aetiology have occurred in the country. During 2018, 10485 cases & 632 deaths of AES were reported to NVBDCP from 17 states with a case fatality rate of around 6%.An outbreak of AES due to Nipah virus was reported at North Kerala during the year 2018 which resulted in significant mortality. So this study was conducted to find out the burden of AES cases admitted in a tertiary care centre in North Kerala and to assess the clinico epidemiological profile of these AES cases.

Methods: A record based Descriptive study was conducted at Govt. Medical College, Kozhikode from 5th September to 20th September 2021 among all confirmed cases of AES admitted in GMC, Kozhikode from January 2021 to June 2021.Data collected from records of RPEID Cell data using a semi structured questionnaire. Data on socio demographic details and clinical profile were collected. Data coded and entered in Ms Excel and analyzed using PASW 18 version.

Results: Total 45 cases of AES reported in the last 6 months. All the cases reported during this period were clinically diagnosed, among the cases 13.3% were viral encephalitis. Median age was 44 years(IQR-24-56 years). Majority of the cases were from Calicut district (42%) followed by Malappuram (33.3%) and Kannur (8.9 %).Majority were males (60%).The case fatality rate was found to be 31%.

Conclusion: A large number of undiagnosed AES cases were reported in North Kerala in the last 6 months. No clustering of cases noted. All the cases were clinically diagnosed. So improved laboratory surveillance for AES cases is required for early diagnosis and treatment.

Keywords: AES, Japanese Encephalitis, North Kerala, Nipah

Abstract Id	Efi_150_213_COM
Title	Assessment Of Infection Prevention And Control Practices Among Medical Students Of A Medical College In Chengalpattu District, Tamil Nadu
Authors	Aarthy A, Dr. Vinoth Gnana Chellaiyan, Chettinad Hospital and Research Institute

Introduction: The occurrence and undesirable complications from health care–associated infections (HCAIs) have been well recognized in the literature for the last several decades. CDC estimates that on any given day, 1 in 31 hospital patients and 1 in 43 nursing home residents has an hospital acquired infection. These HCAIs can be prevented if doctors and other health-care professionals follow proper infection prevention and control measures whose learning start from their undergraduate days.

Objective: To assess the knowledge and practice of infection prevention and control measures among medical students .

Materials And Methods: This cross-sectional study was conducted among 146 medical students doing 2nd, 3rd and 4th year of their M.B.B.S in a private medical college, Chengalpattu, Tamil Nadu. Based on the study by Sandheep Sugathan et al, 66.7% of the students have good knowledge on Infection and control measures. Considering it as the prevalence with 95% confidence interval, allowable error of 8% and non-response rate as 10% the sample size was obtained to be 146. After enlisting the 2nd, 3rd and final year MBBS students in the college, 146 students were selected through Simple random sampling. Selected students were asked to fill a pretested semi- structured questionnaire comprising of questions related to their Socio-demographic details; knowledge and practice about standard precautions and hand hygiene, respiratory hygiene and cough etiquette, and use of personal protective equipment. The collected information was analyzed using SPSS software version 21.0. Qualitative variables will be expressed in proportions and Quantitative variables in Mean(SD) \/ Median (IQR). Chi-square test was applied .

Results: 42(28.8%) second MBBS, 54(37%) third MBBS and 50(34.2%) fourth MBBS students took part in the study. 134(92%) of the students have adequate Knowledge about Standard Precautions and Hand hygiene, 143(98%) of the students have adequate Knowledge on Respiratory hygiene and Cough etiquette and 115(79%) of the students have adequate Knowledge about use of Personal protective equipment. Only 21(14.4%) of the students follow all 8 steps hand washing always, 19(13%) of the students only get vaccinated against Influenza every year and 46(31.5%) of the students follow proper donning & doffing instructions. Female students has been found to have adequate knowledge on precautions and hand hygiene (p=0.046). Healthy practice of respiratory hygiene and cough etiquette was found among female students (p=0.012) .

Conclusion: It is clear from the study that students knowledge about Infection prevention and control measures are adequate but their practice is not satisfactory. Most of the Infection prevention and control measures class are theoretical, giving less importance to the practical aspect. By increasing the number of practical classes and workshops healthy practice can be achieved by the future health care workers and with healthy practice we bring down health care associated infections.

Keywords: Infection prevention and control

Abstract Id	Efi_55_101_COM
Title	**Case Investigation and contacts' investigation of Chickenpox in Hepatology High Dependency Unit of a tertiary care hospital in North India**
Authors	Garima, KCGMC, Karnal Dr. PVM Lakshmi, PGIMER, Chandigarh

Introduction : Chickenpox is distributed throughout the world with a higher prevalence in temperate climates. It occurs year-round with most cases happening in winter and early spring. Chickenpox is transmitted by direct person-to-person contact from infected respiratory tract secretions or by direct contact or inhalation of aerosols from vesicular fluid or skin lesions of acute varicella or zoster. Infection largely confers long-term immunity. However, viral infection remains latent and disease may recur years later as herpes zoster in older adults and occasionally in children. A case Investigation and contacts investigation of a case of Chickenpox was carried out in Hepatology High Dependency Unit of a tertiary care hospital in North India to prevent the occurrence of an outbreak and manage case and contacts accordingly.

Methodology : Case investigation and contacts investigation of chicken pox was carried out among (Hepatology High Dependency Unit) HHDU patients and staff including nursing officers and hospital attendants. The index case was identified and contact tracing was carried out as per protocol developed. All the patient contacts of index case, admitted in HHDU, discharged from HHDU and staff were contacted telephonically to know about their past history of chickenpox, history of vaccination, whether currently suffering from chickenpox and presence of similar rashes in their contacts. Probable date of exposure of each of the contacts as well as date till which follow up is required was ascertained considering the incubation period and period of communicability of Chickenpox. The Incubation period of chickenpox was taken to be 10 to 21 days and period of communicability as 1 to 2 days before onset of rash till all lesions have crusted, which is usually 5 days. Contacts were advised on the precautions to be taken and also on reporting to the physician in case rash appears. This was to identify, at the earliest, any case occurring up till the maximum incubation period among population at risk. In case of chickenpox infection, contacts of contacts were also traced and are followed up until required as per the maximum incubation period and period of communicability of chickenpox.

Results: Two contacts of the index case who were admitted in the same ward developed Chickenpox within one incubation period of the disease in Index case. Also seven staff members including five nursing officers and two hospital attendants developed chickenpox within one incubation period of the disease in Index case. One family contact of index case also developed chickenpox. Among contacts of contacts none developed chickenpox. Epidemiological link with one of the cases could not be established. Epidemiological contact tracing sheet was developed and line lists were made. Secondary attack rate of 32.14% was calculated among HHDU staff and HHDU patients.

Discussion : Early case investigation and contact tracing was started to initiate control and prevention measures to prevent spread of disease. Telephonic conversations were made with the probable contacts and information about the disease, complications and ways to prevent transmission was provided. Follow-up with case and contacts was carried out to assure compliance with work and\/or school restrictions.

Keywords: chickenpox, contact investigation, case investigation

Abstract Id	Efi_COM
Title	**Profile Outcomes and Challenges in treatment of Tuberculosis in Elderly patients in Jodhpur District – A Mixed Methods Study**
Authors	Premlata Meghwal , Srikanth Srinivasan, AIIMS Jodhpur

Background: Tuberculosis in the elderly is becoming a big problem not only because of the non-specific clinical presentation of TB but also because of the high mortality rate in this age group. TB is difficult to diagnose and treat in the elderly due to deterioration in immunity and the presence of malnutrition.

Objectives: To know the outcomes and profile of tuberculosis in elderly patients. To indentify the challenges encountered by elderly patients, primary caregiver and healthcare provider in management of tuberculosis.

Methodology: A mixed-methods cross-sectional study was conducted in Jodhpur district. In qualitative study 20 in-depth interviews were administered to know the challenges encountered by elderly patients, primary caregivers and health care providers. In quantitative component National Tuberculosis Elimination Program (NTEP) portal data (from January 2019 to March 2021) was analysed to know the profile and treatment outcomes of elderly TB patients. For qualitative data analysis, categories, codes and themes were analysed manually. In quantitative data analysis, descriptive and inferential statistics were applied.

Result: Qualitative analysis identified a mixed attitude of family members, financial problems, adverse drug reactions, lack of knowledge, fear of getting disease, stigma, long duration of treatment, negative attitude of elderly patients, late in diagnosis and the lack of nutrition are the challenges in the management of elderly TB patients. In quantitative analysis of 2109 elderly patients, the mean age of elderly TB patients was 66.8 years (SD = 6.36) with a range of 66 to 69 years. About 81% patients were male. The median weight of the patient was 49 kg. About 11% of patients were underweight. About 0.6 % of patients were HIV reactive. About 5% of patients were diabetic. There is a significant difference in mortality between elderly and younger patients with a p-value less than 0.05. Treatment failure was found in about 1.5 % of elderly TB patients.

Conclusion: The elderly people with TB represent a vulnerable group, with a high death rate and challenges in diagnosis and treatment. Special strategies like tolerable drugs, improved side effect management, innovative cost-reduction measures are required to manage elderly patients. Counseling for families of elderly TB Patients should be done to overcome challenges faced by these patients.

Keyword: Elderly TB patients, Tuberculosis, Primary caregivers, Health care providers

Abstract Id	Efi_221_COM
Title	**A study to assess the patient safety culture among healthcare providers in a tertiary healthcare facility in Western Rajasthan**
Authors	Shubham rai, AIIMS, Jodhpur

Introduction : Cigarettes and Other Tobacco Products Act 2003 (COTPA) is the principal law governing tobacco control in India. Government of Rajasthan in one of its landmark decisions also banned manufacturing, sale and distribution of gutka and pan masala since July 2019 and it became third sate after Maharashtra and Bihar to do so. Among the many provisions within COTPA, the present study seeks to assess compliance to implementation and enforcement of 6 particularly near educational institutions of COTPA including compliance to gutka and pan masala ban in Jodhpur, Rajasthan, India. The aims of the study were to assess knowledge and attitudes about various provisions of COTPA Act among stakeholders of major academic institution of Jodhpur, measure compliance with the provisions of Section 6 of Indian tobacco control legislation (COTPA, 2003) at institutional places and identify potential enablers and explore barriers in implementation of the act.

Methodology : Ten educational institutes (EI) within the Jodhpur metropolitan region were selected in convenient sampling to include two senior secondary schools each from Jodhpur North, south, east and west and central city of Jodhpur metropolis. All ten schools/educational institutions for observing the compliance of Section 6(a) and 6(b) of COTPA, and data were recorded through direct observation. Area around each EI was manually mapped and all the tobacco products selling outlets with in the 100 yards distance were listed by observer. The vendors/shop owners manning these outlets were also interviewed for their personal sociodemographic details, self-tobacco use, awareness and perception about ill-effects of tobacco and existing tobacco control legislation in the country.

Results : Out of the total participants, more than half (55%) were females and 45% were males. 50% of the total were principals and 50% were teachers. Only 45% of the total participants interviewed knew about the Section-6 of COTPA Act (regarding restriction of sale to minors and appropriate distance from educational institutions). Majority (60%) of the principals reported sale of tobacco near schools, in contrast to only 30% of the teachers reporting the same. Out of the 10 schools included in the study, 5 had tobacco stalls within 100 yards. Most of the participants (70%) interviewed did not know about the penalties stated under violation of Section-6 of COTPA Act. Only 30% of the teachers and 30% of the principals reported any knowledge about the penalties.

Conclusion : This study showed that COTPA 2003 (Sections 6 a and 6b) is poorly implemented in many states in India. A coordinated effort from all stakeholders, especially from the police, educational institutions, and the community, is required to improve this situation. There is a need for creating greater public awareness about the harmful effects of tobacco so that there is more voluntary compliance with the regulations. Complying to the guidelines on Tobacco-Free Educational Institutions can provide a holistic approach to tobacco control and improve the implementation of COTPA in and around educational institutions.

Keywords: COTPA, Section 6a and 6b of COTPA, educational institutions, violations of COTPA.

Abstract Id	Efi_43_114_COM
Title	**Effect of introducing spatial technology training on undergraduate medical students for surveillance of mosquito-borne diseases (MBD): Qualitative assessment**
Authors	Dr. Kavita Thakur, Khedkar D T (Dr. D.Y. Patil Medical College, Pune) 2. Deepu P (Dr. D.Y. Patil Medical College, Pune) 3. Jadhav S L (Dr. D.Y. Patil Medical College, Pune) 4. Banerjee A (Dr. D.Y. Patil Medical College, Pune)

Introduction: Innovative teaching has been the topic of research with variable learning outcomes. With an objective to assess the effect of introducing spatial technology training on undergraduate medical students for surveillance of vectors of malaria and other mosquito borne diseases.

Methods: 80 undergraduate medical students were given training on mosquito borne diseases and they were then divided into two groups for larval survey using conventional method and GIS. Qualitative feedback was collected using 4 open-ended questions. The feedbacks were analysed using thematic analysis and participants observation, NVivo 12 software and Epi Info 7.

Results: Non-response rate was 33% in conventional group compared to GIS group 15%. Training Content (n=63): 44% found it educational, informative. Field exercise (n=57): education, informative (54.3%). Overall experience (n=57): 40% found it to be informative and educational, hands on learning experience. What was liked most (n=56): 51.7% liked field activity and 35.7 % liked presentation and field activity.

Conclusion: The findings suggest that introduction of new technology acted as an engaging factor and increased the interest in the topic. Participants were more willing to get hands on experience of GIS. Innovative teaching with hands on experience of the topics could be an effective way of teaching.

Keywords: Mosquito , Education, Learning, Medical , Geographic Information Systems

Abstract Id	Efi_178_181_COM
Title	**An Outbreak Of Shigellosis In Kozhikode District Of Kerala During The Covid 19 Pandemic**
Authors	Dr. Swathi V Koramboor, Department of Community Medicine, Government Medical College, Kozhikode

Introduction: Acute diarrheal disease (ADD) incidence occurs every year in Kerala. Shigella is one of the most pathogenic causative agents of ADD which cause occasional outbreaks. Both water-borne and food-borne transmission of Shigella are possible. Shigella is responsible for 5-15D cases reported in children in developing countries. The disease is highly contagious because of a low infection dose. This investigation is done during an acute diarrheal disease outbreak which occurred in Kozhikode district of Kerala during the pandemic times of COVID 19 in order to find out the source and contain the outbreak. Following the death of index case who was a child, large number of cases were reported from the same area. The objectives of the study are 1) to study the profile of symptomatic ADD cases in the outbreak 2) to find out the probable source of infection and attack rate during the outbreak

Methods: This study was conducted from December15- 21, 2020 by a team from the department of Community Medicine, GMCH Kozhikode in the outbreak area of Kottamparamb, Kozhikode. About 100 people who were relatives in contact with index case during the course of illness or neighbours or those who attended the funeral of the index case were interviewed by house to house visits and telephone calls with a semi structured questionnaire and field investigations for environmental assessment was done. Analysis of water samples was also done. An epidemic curve was plotted to describe the distribution of cases over time and attack rate was calculated

Results: Among the 54 people identified as symptomatic, 16 got admitted in the hospital out of which Shigella sonnei could be confirmed in 7 cases. 44 % of cases were children and adolescents. The median age of cases was 25.20(IQR=9.75-40) and 70% were females. Majority developed symptoms within 4 days after probable day of contact which was a funeral ceremony of index case conducted in the household. Attack rate was calculated as 36% (54 out of 150). The primary case was found to be a female child relative who had close contact with the index case. The death of index case was probably due to Shigella. All the affected cases had either close contact with the index case or had attended funeral ceremony of the index case which suggest probable source of infection from index case or refreshments served in funeral.

Conclusion: The outbreak was a point source outbreak by Shigella sonnei linked to a funeral ceremony. All the affected people had acquired the infection either directly from the index case or direct contact with contaminated articles or consumption of contaminated water. The source of infection was probably fomite transmission for household members and through contaminated water served as refreshments in the funeral ceremony. Contamination of well water from the septic tank and drainages of the neighbouring house was revealed in the field investigation which might be the source of infection for primary and index case.

Keywords: ADD, shigella, outbreak investigation, environmental assessment

Abstract Id	Efi_48_109_COM
Title	**Detecting temporal clusters and seasonal variation of childhood diarrhoea in Coastal Karnataka, for children under five years**
Authors	Mackwin Kenwood Dmello, Dr. Sanjeev Badiger, Department of Community Medicine, A J Institute of Medical Science and Research Centre Dr. Sudeep Kumar, Senior State Consultant, UNICEF, India

Introduction: Globally, the annual mortality due to diarrhoea among under-5 years is 525,000, accounting for 2195 deaths every day, representing 8% of all deaths among under-five. In India, the prevalence of diarrhoea has increased from 9% to 9.2% from 2016 to 2020. In 2018-2019, there was an increase in diarrheal incidence among under-five children in the taluk compared to the district.

Objectives: A retrospective study was planned in the year 2020 to understand seasonal variation in the occurrence of childhood diarrhoea and spatiotemporal clusters in Karkala taluk, India.

Methods : The spatial distribution of diarrheal cases among under-five children from 2015-2019 was studied and analyzed. The study used spatial analysis software QGIS (Version 3.20) and SaTScan Software to identify spatiotemporal clusters and seasonal variation.

Results : There was an increase in the incidence of diarrhoea among under-five children in the taluk from 2015 to 2019. The overall mean incidence of diarrhoea among under-five children is 123.6 per 1000 population. The diarrheal incidence among under-five children showed a bimodal distribution each year with a low and high peak. The higher rise was seen in April and July of each year, with the highest in 2019 and a lower peak in January and February. All villages witnessed one most likely cluster from April 1, 2017, to March 3, 2019 (LLR= 73.89, p<0.001). The overall RR within the cluster was 1.49 (p<0.0001), with an observed number of 1661 and 1296.4 expected cases. There were no secondary clusters identified.

Conclusion : There was a seasonal trend in diarrhoeal diseases reported in children under five years in the Karkala taluk. Most diarrhoeal cases occurred from April to August, with lower levels recorded mainly in the winter seasons. The clustering of cases was found in the Northern villages of the taluk. Hence interventions should be strategized during the dry seasons by the concerned health department.

Keywords: Spatial Analysis, GIS, Childhood Diarrhoea

Abstract Id	Efi_187_170_COMM
Title	**In-situ Evaluation of Plant-Products Fumigation on Air-borne Microbes**
Authors	Malik Itrat, Shaista Mahfooz, National Institute of Unani Medicine

Introduction: Purity of inspired air is essential for our health. One of the main factors influencing air quality is the presence of microbes. Fumigation of herbs has been recommended in Unani medicine to purify the air. Hence, the present study was aimed to evaluate the effect of traditional fumigation practice using plant products on air-borne microbes.

Methods: In this study, the effect of selected plant-products fumigation on air-borne microbes was assessed through differences in total microbial colonies in pre and post samples. Microbial load in the air was quantified using the passive open-air petri plate method. Moreover, the chloroform extract of the test formulation was prepared and antibacterial activity of the extract was studied against commonly found air-borne bacteriae (S. aureus, P. aeruginosa, Micrococcus lylae, Neomicrococcus lactis and Kocuria rosea) by disc diffusion and dilution methods.

Results: Significant reduction in aerial microbial colonies were observed with fumigation of test formulation at doses of 30 and 45 gms (P<0.05). The chloroform extract of the test formulation exhibited antimicrobial activity against all the tested bacteriae, with inhibition diameters ranging from 9 to 15mm. The minimum inhibitory concentration values ranged from 25 to 50µl\/ml and the minimum bactericidal concentration values ranged from 50 to75µl\/ml

Conclusion: Present study concludes that test formulation had antibacterial potential against air-borne microbes both in the liquid and vapour phase. However, the effect of the test formulation on antibiotic-resistant bacterial strains was not evaluated in the present study, hence, should be addressed in subsequent studies.

Keywords: Unani Medicine; Fumigation; Chloroform extract; Air-borne microbes; Antimicrobial activity

Abstract Id	Efi_158_203_COM
Title	**A KAP Study on Food Hygiene among Food Handlers working at Food Establishments around ELMCH, Lucknow**
Authors	Dr. Shadma Anwar, Dr. Ruby Khatoon, Era's Lucknow Medical College & Hospital, Lucknow, Uttar Pradesh, India, Dr. Beena Sachan, Associate Professor, Department of Community Medicine, Dr. Ram Manohar Lohia Institute of Medical Sciences, Gomti nagar, Lucknow, Dr. Zeashan H. Zaidi, Lecturer, Deptt of Community Medicine, Era's Lucknow Medical College & Hospital

Introduction: The high incidence of food borne illnesses has led to an increase in global concern about food safety1 Diarrhoeal diseases, mostly caused by food borne microbial pathogens, are leading causes of illness and deaths in the developing countries, killing an estimated 1.9 million people annually at the global level2. Food contamination may occur at any point during its journey through production, processing, distribution, and preparation3. The risk of food getting contaminated depends largely on the health status of the food handlers, their personal hygiene, knowledge and practice of food hygiene4 Objective: The study aims to find out the Knowledge, Attitude and Practices among food handlers regarding food hygiene.

Materials & Method: The present study is a community based Cross-sectional study among Food handlers working at food establishments in and around ELMCH, Lucknow. All Food Handlers working in these establishments were taken as study unit. The study was carried out amongst food handlers working in 20-30 food establishments located in the study area. Sample size is calculated 220 on the basis of least proportion of various knowledge componenets about food hygiene using the formula, Where p = 46.3% least proportion of various knowledge componenets about food hygiene (Ref. Santos et al.)5 n=d z2αpq\/L2 Predesigned, pretested questionnaire was used to collect the demographic details of the food handlers; information related to personal hygiene, personal habits, history of illness; and registration of food establishments. An observational checklist was used to assess environmental hygiene, cleanliness of food, and food handling practices. All questions were scored on a five-point scale (0 to 4). The main outcome was to assess the KAP among these food handlers and associated factors has been identified. Data was analyzed and summarized using Descriptive statistics for each question of the knowledge, attitude, practice and the overall KAP mean percentage score. Descriptive summary using frequencies, proportions and cross tabs were used to present study results. P values have been calculated to test for statistical significance at the 5% level.

Results: The study is conducted among 220 food handlers working around the institution in which 185 were male and 35 female. Majority (35.9%) of the workers are from the age group of 24-49 years followed by (34.1%) 18-24 years age group. 45.6% workers are doing the job of cooking food, 32.5% are helpers and 21.9% people are working as waiters for serving food at these places. Maximum (48.2%) people have experience of more than 2 years in this working

field. 23.5% of food handlers working in these establishments had no or less than 1 year experience. On observational assessment of personal hygiene 53.6% people use to wear aprons but their clothes weren't clean as 57.2% food handlers was wearing dirty uniforms. Majority (77.2%) people are not suffering from any disease. Majority of the food handlers answered correctly about food hygiene knowledge. 72.5% food handlers gave right answer about pathogens. 69.5% knows that unhygienic food practices could be a source of food poisoning. 85.6% workers had knowledge that keeping the food inside refrigerator helps in preventing food poisoning. Only 34.2% food handlers didn't know that usage of plastic cups is harmful. In case of food hygiene practices 50% people use gloves while handling food and 50% don't. 204 (92.8%) people use to wash hands with soap and water before preparing food. 72.6% people said the use to wash their hands after using bathroom. 72% people wash the fruits and vegetables before use and 69.2% people do not leave food items outside for more than 6 hours.

Conclusion and Suggestions: Food handlers knowledge level in this study can be categorized as moderate. Respondents showed positive attitudes in both categories of questions, i.e. food safety and hygiene, prevention and control of foodborne diseases. Majority of the respondents exhibited average practices in handling of foods, 92.8% in hand washing; 62.9% in personnel hygiene; 72% in raw materials management; and 50% in gloves usage. The hygiene and the cleanliness practiced by the food handlers were satisfactory. However there is need to increase the hygiene level of food handlers and environmental premises.

Keyword: Food handlers, personal hygiene, food hygiene, Lucknow district

Abstract Id	Efi_69_86_ID
Title	**A comparative study of blood culture with Widal test in the diagnosis of enteric fever in febrile patients**
Authors	Vishwajith, Santhoshini V, Rajarajeswari Medical College

Introduction : Enteric\/Typhoid fever is a major health problem in developing countries like India and its diagnosis only on clinical basis is difficult. All cases of enteric fever and pyrexia for more than one week is screened by widal test along with other blood investigation routinely. Typhoid fever has been estimated to cause about 26 million (typhoid) and five million (paratyphoid A) illnesses, with 190,000 enteric fever deaths per year globally . The incidence of the disease is as high as 2\/1000 population\/year under five yr of age and 5.1\/1000 population\/year under 10 yr of age. It is a systemic infection caused by organism Salmonella serovar S. typhi, S. Paratyphi A, S. Paratyphi B, & S. Paratyphi C . Rising titre in Widal test is the commonly used test for diagnosis of enteric fever. Hence, we are comparing widal test & blood culture for correlation of the results.

The main aim of this study was to compare the result of Widal test and blood culture in the diagnosis of typhoid fever in febrile patients.

Methods: Blood samples were collected from 548 febrile patients with clinical symptoms of enteric fever from October 2019 to March 2020. Blood culture was done to isolate S.typhi and S. paratyphi. Slide agglutination test and tube agglutination tests were done for the determination of antibody titre. An antibody titre of anti TO ≥1:80 and anti TH ≥1:160 were taken as a cut of value to indicate recent infection of typhoid fever.

Results : A total of 84 culture isolates were isolated from blood culture. Among which S. typhi isolates were 45(53.5%),18(21.4 %) Coagulation negative staphylococcus aureus, 12 (9.7%) klebsiella species, 7 (8.3%) E.coli, 2 (2.3%) Pseudomonas species. 171(31.2%) Widal test positive for the O and H antigens of S. typhi.

Conclusion: Since culture is the gold standard and most reliable diagnostic method. As culture facilities are not available in all the health care set up and diagnosis will be usually based on the clinical findings with widal test can be used as an aid for cost effective & early diagnosis. Widal test is a good alternative to blood culture if it performed within 2nd week of infection. Clinician should diagnose and treat enteric fever to minimize its resistance to antibiotics. General measures - Sanitation and educating hygiene play a major role in reducing the burden of enteric diseases as well.

Key Words : Enteric fever, Salmonella typhi, Salmonella paratyphi, Widal test.

Abstract Id	Efi_117_249_COM
Title	**Measuring Catastrophic costs of Tuberculosis care in South-East Delhi: A mixed method study**
Authors	Dr Tazean Zahoor Malik, GMC Srinagar

Introduction: The cost of tuberculosis care often results in a financial burden on the patient, causing the patient to fall in a "poverty medical trap". Poverty plays the role of a double-edged sword in case of TB; on one hand, the poor patients are more vulnerable to developing TB infection and disease while on the other hand, the patients experience financial instability. One of the targets of the World Health Organization's (WHO) End TB Strategy (2016-2035) is that no Tuberculosis-affected household should suffer catastrophic costs due to Tuberculosis. The thresh-hold for "catastrophic costs" has been kept as health expenditure in TB patients exceeding ≥20% of their household income. This target is in line with the Universal Health Coverage (UHC) and Financing and thus aims at progressive attainment of both universal health coverage and social protection through financial risk protection.

Methodology: A mixed method study (quantitative plus qualitative) was conducted among TB patients registered under RNTCP in ten randomly selected DOTS centres in South-East Delhi during January 2019-March 2020. The sample size was calculated using the prevalence of catastrophic costs in TB affected households as 32.4% as seen in a study conducted in South India in 2018. The final sample size was 400. 439 patients were approached serially, of which 416 patients participated in the study. The quantitative data was collected using the pre-validated 'Tool to Estimate Patients' Costs' questionnaire. Six Focus Group Discussions (FGDs) were conducted among study participants to corroborate findings from quantitative data.

Results: Of the 416 participants, 62.2% were males. The mean age was 40.9±16.33 years. Out of the total participants, 17.1% were unemployed. 41.1% belonged to the upper lower socioeconomic class of the modified Kuppuswamy scale 2020. Of the total participants, 57.7% had pulmonary TB (PTB) and 61.7% were Category I (new) cases. The mean (±SD) total cost of diagnosis of Tuberculosis for a patient in the study was Rs. 5923±1243.2 and the median cost was Rs. 6250. The proportion of households experiencing catastrophic costs was 24.27%. These costs were significantly associated with age and sex of the participants, the type of TB, the category of TB, and the health facility first visited by the participants. The thematic analysis of the FGDs revealed that borrowing money from friends/relatives was the most common coping strategy of the patients.

Conclusion: About one-fourth of the study participants experienced catastrophic costs in the present study. This indicates that free TB diagnosis and treatment are not enough and there is a need for more robust mechanisms to reduce this proportion to achieve the target of "Zero Catastrophic Costs" set by the "End TB Strategy".

Keywords: Tuberculosis, Catastrophic costs', End TB strategy

Abstract Id	Efi_116_19_COM
Title	**Report of dengue outbreak investigation in Jothinagar Village, Thiruvallur District, Tamil Nadu, India, 2017: Epidemiological, entomological, and geospatial investigations.**
Authors	Viral Rajesh Bajwala, National Institute of Epidemiology (ICMR), Chennai

Background: During July-August 2017, five cases of laboratory-confirmed dengue cases were reported from Jothinagar village, Tamil Nadu, India. The episode was investigated to confirm the existence of an outbreak, describe its epidemiological and entomological characteristics, and recommend appropriate control measures.

Methods: The monthly occurrence of dengue cases from 2014 to 2016 was compared with 2017 to confirm the outbreak. Blood specimens from 22 patients were sent for NS1 and ELISA IgM testing at the National Institute of Epidemiology, Chennai. In addition to active house to house and eco-entomological survey based on WHO guidelines, we also carried out geo-mapping and analysis of cases and Aedes breeding spots. Probable and confirmed cases were defined based on Integrated Disease Surveillance Program guidelines. We calculated attack rates and plotted epi-curve.

Results: The occurrence of 36 cases of dengue in the village, previously free from the disease for the past 3.5 years, confirmed the outbreak. Twelve were laboratory-confirmed while the remaining 24 were probable cases. The attack rate was highest amongst females in the age group 11-15 years (10.8\/100 population). No case fatality was observed. Epicurve was a typical step ladder pattern. The house index, Breteau index, container index (CI) and pupal index was 37.7% (23\/61), 54.1% (33\/61), 16.7% (33\/198) and 32.8% (20\/61) respectively. Tyres were key productive containers (CI=28.36%). Geo-analysis suggested clustering of cases (Ripley's K-test) within 70m of the Aedes breeding spots particularly within the central part of the village (Kernel Density Estimation).

Conclusion : An intensive vector elimination campaign along with special focus on managing tyres as potential source of breeding was recommended for immediate containment. Health system can incorporate geo-mapping of dengue cases and positive breeding spots in surveillance to identify clusters and targeted control measures.

Keywords: Dengue, outbreak, India, Ripley K test, Kernel density, pupal index

Abstract Id	Efi_99_51_COM
Title	**Investigation of food-borne outbreak of gastroenteritis at Government Nursing College campus of Surat city.**
Authors	HITA RANA

Introduction: Diarrheal diseases represent a major health problem in developing countries. Conservative estimates place the global death toll from diarrheal diseases at about two million deaths per year (1.7 - 2.5 million deaths), ranking third among all cases of infectious disease death worldwide.

Method: A questionnaire was developed and interview of all the affected students was conducted. The questionnaire had information regarding demographic data and source of drinking water as well as history food intake and sign and symptoms. A line list of cases was developed. Stool sample and water sample were collected and sent to Department of Microbiology, Government Medical College, Surat for further laboratory investigation. On spot OTT to measure residual chorine in water was done.

Result: Total number of residency in nursing college were 182 including staff members among them 28 were affected which includes 4 faculty members, 3 NPM students, 21 female students and 2 male students so the Attack rate was 16.8%. Most Common symptoms among cases were vomiting 60.71%, Diarrhea 35.71% and abdominal pain 28.57%. As per microbiology report Vibrio cholera found in the water and >18 MPN Count (coliform count\/100 ml) which indicate bacterial contamination of water, which comes in class 4 level and grading is 'Unsatisfactory' for drinking purpose.

Conclusion: As per the water culture reports of different inlets and outlets of NCHS, spot OTT test of storage and drinking water favor that it was a water source outbreak but self-limiting in most of the cases and neither deaths nor fatal complications were reported. In the outbreak, 86% of people not affected but had access to the polluted water did not end up getting sick. This could be due to the host-related immunity factors.

Keywords: gastroenteritis, food-borne outbreak, diarrheal disease

Abstract Id	Efi_208_COM
Title	**The Effect of Interventions to Improve the Overall Performance among the Health Personnels in various domains of Tuberculosis Care and Management- A Systematic Review**
Authors	Dr. Suseendar S

Introduction: There are gaps in Tuberculosis Care and management across various domains which leads to treatment failure among patients. Lack of proper training for the health personnel is one of the main reasons for this.

Objective: To review the prospects of providing training to the health personnel in improving their performance across various domains in Tuberculosis care and management.

Methods: RCTs from the PubMed database were systematically searched until July 2021 using PRISMA guidelines to assess for improvements in the performance of Tuberculosis health personnel due to training. A data extraction sheet was prepared for study characteristics.

Results: Of the initial 394 articles retrieved from using the search strategy, 10 RCTs are included for quantitative synthesis. They study a variety of interventions in different domains of TB care and management like tuberculosis case detection, reading x rays, quality of care, knowledge among health personnel, successful tuberculosis cure, and treatment. Among all, a study conducted in China by Wu et al showed a maximum improvement of around 50% in the knowledge domain among the health personnel after training.

Conclusion: Though there are different outcome measures in assessing the training of health personnel in Tuberculosis care and management, all studies proved that training for health personnel is imperative in improving their performance across various domains of TB care and management.

Keywords: Tuberculosis, training, health personnel

THEME: COVID 19 AND RELATED ISSUES

Abstract Id	**Efi_205_COV**
Title	**Comorbidities and Vaccination status of COVID -19 All Cause Mortality at a Tertiary Care Centre of Western India.**
Authors	Manoj Verma

Introduction: COVID-19 Vaccines have been found to be efficacious for preventing severe disease, yet breath through infections and deaths have occurred in a small proportion of vaccinated individuals. This study aimed to describe the vaccination status and comorbidites of COVID 19 all cause deaths.

Material and methods: This Descriptive observational study was conducted at department tertiary care centre of Western India. A total of 310, RT-PCR positive COVID deaths, aged 45 years and above irrespective of cause of death (all cause mortality), were included in the study. Data was assessed from the Control room established for COVID reporting. Vaccination details were obtained by contacting the relatives telephonically. Death after Breakthrough infection was defined as death in patient with disease onset after 14 days of 2nd dose of vaccine.

Results: Diabetes was the most common comorbidity found in 17.1% death, followed by hypertension. Cardiovascular disease and renal disease were other common comorbidities seen in 8.7% deaths each. Other less common comorbidities include neurological disorders, HIV, autoimmune disorders etc. Out of these 310 deaths, 21.4% of patients developed disease within 14 days of 1st dose (21.4%). Death after true breakthrough infection (after 14 days of both dose) was seen in only 2 patients (0.6%) One of these two patients was aged 60 years and had diabetes, while the other was aged 72 years and had history of smoking.

Conclusion: Diabetes and hypertension were the most common comorbidities, indicating higher risk of mortality among comorbid patients. Only a small proportion of deaths (0.6%) occurred after breakthrough infection beyond 14 days of 2 doses. COVID vaccines have shown promising efficacy against severe disease, thus high vaccination coverage needs to be achieved to prevent morbidity and mortality.

Abstract Id	Efi_206_COV
Title	**A Study of Clinical Profile, Sequelae of covid and Satisfaction of Inpatient Care at a government covid care hospital in Karnataka**
Authors	Dr. Harshini S

Abstract: Coronavirus disease 2019 (COVID-19) is caused by SARS-CoV-2 virus has increased the morbidity and mortality across the world. The most common symptoms are fever, dry cough, tiredness, and the least common symptoms are aches and pains, sore throat, diarrhoea, conjunctivitis, headache and loss of taste or smell. In this current pandemic, the number of COVID-19 survivors being discharged from the hospital is increasing day by day and the long-term effect among the survivors is also increasing. Fatigue and dyspnea were the most reported Post COVID symptoms. The presence of these symptoms is also known as “Long COVID”. COVID-19 disease has not only affected the physical health but also the mental health of the patients which also had led to decrease in their quality of life.

Material & Methods: A retrospective cross-sectional study was conducted among 35 patients who were admitted in District hospital in Mysuru during the month of October 2020. Purposive Sampling was adopted for selecting the patients. Data was collected through telephone after their discharge. Data were entered in Microsoft Excel sheet and analysed using SPSS trial version 23. Descriptive statistics such as percentages and proportions were calculated. To see the association between the variables, Chi-square test, Fischer's exact test was used. $P < 0.05$ was taken as statistically significant. Results: The mean age of the study participants was 49.1 years. Majority of them had fever (68.6%) followed by Myalgia (65.7%), cough (60%), fatigue (42.9%), headache (37.1%) Majority of the patients had no symptoms after discharge (65.7%). After being discharged from the hospital, 22.9% of patients had difficulty in sleeping, 17.1% had loss of taste/smell and fatigue, 8.6% of them had breathlessness and 5.7% of the patients had a change in voice and loss of appetite.

Conclusion: With the increasing number of cases across the world, we will most likely face an ongoing wave of COVID-19 sequelae. To Prevent this, an extensive rehabilitation program is necessary for patients during hospitalization and after discharge.

Keywords: COVID-19, Sequelae, Clinical Profile

Abstract Id	Efi_214_COM
Title	**Assessment of Physical activity, Screen time and Sleep status among School Children of Jodhpur, during the COVID-19 pandemic.**
Authors	Chunnilal, Dr. Kuldeep Singh AIIMS, Jodhpur

Introduction: COVID-19 is a disease caused by the corona virus of the severe acute respiratory syndrome (SARS-CoV-2). The virus was originally discovered in Wuhan, Hubei Province, China, in December 20191. The COVID-19 outbreak began on March 6, 2021, and has since spread throughout the planet. All schools and playgrounds were shuttered during the lockdown, and children were ordered to stay at home. The introduction of school activities via an online platform would have had an impact on this age group's screen time (10-15years). Due to social separation, schoolchildren's seated activities and usage of digital media may increase; this may exacerbate the widespread use of digital platforms among schoolchildren.

Objectives: To analyse the physical activity, digital media use, and sleep patterns of Jodhpur schoolchildren during the COVID-19 pandemic lockdown.

Methodology: This is a descriptive cross-sectional study. Physical activity, digital media use, and sleep patterns of middle school (class 6th to 8th) pupils in Jodhpur district were assessed during the COVID-19 epidemic. The school administrators gained consent. A google form was created, disseminated, and emailed to school officials, who then forwarded it to parent whatsapp groups. There were 12 questions on this form, including consent and personal identification information. SPSS was used to analyse the data, which was placed into an excel sheet.

Result: Over the course of six months, parents of 356 children (aged 10 to 15 years) in Jodhpur's 6th to 8th grades were questioned. There were 234 men (65.73 percent) and 122 women (34.27 percent) among the participants. The majority of parents (52.3 percent) of children said that their children engaged in physical activity for up to 30 minutes every day. Gender differences in physical activity were significant (p-value=24.023, 2 =0.0001). The majority of males reported moderate physical activity, while the majority of females reported mild activity. The use of digital media for online research was (69.1%). The majority of parents (58.2%) said their children spent more than two hours per day on digital media.

Conclusion: This paper illustrates how the COVID-19 pandemic resulted in decline in physical activity and an increase in digital media use among school children, which could have negative impact on their health.

Keywords: Lockdown, screen exposure, sleep pattern, digital-media, physical activity

Abstract Id	Efi_136_229_COV
Title	**Trend of COVID-19 pandemic in India during First wave: A methodical comparison with Italy, UK and US**
Authors	Dr. Neha Mantri, Dr. Manoj Kumar Gupta, Pankaj Bhardwaj, AIIMS Jodhpur

Introduction: Each country has tried a different approach to handle the COVID-19 pandemic. Considering these wide variations, it was felt interesting to see that how the curves of epidemiological indicators panned out due to differing preventive strategies. Therefore, this study was planned with the objectives to statistically compare the trends of epidemiological indicators of COVID-19 in India with that of Italy, the UK, and the US.

Methodology: In this descriptive analysis, epidemiological indicators were calculated and their trends were plotted and compared statistically. Regression analysis was done to predict the fatalities. All the available raw datasets of India, Italy, the UK, and the US till 5th July 2020 were retrieved, which were having day-wise numbers of cases, deaths, recoveries, and tests conducted. To avoid the extreme variations due to spikes in cases on particular days all raw data was converted into a seven-day moving average before calculating the epidemiological indicators.

Results: The trends of total and active cases per million populations are rising in India and the US, while Italy has achieved the plateau in the total cases per million populations, and active cases have been sharply declining with time. The UK is about to achieve the same. India has remained far behind the other three countries in the number of tests per million populations (p<0.05). In the initial phase, the test positivity rate of India was quite lower but has overtaken Italy and UK. India has always reported a higher recovery rate than the US and lower than Italy. CFRs have achieved a plateau in Italy and UK, in the US it is declining, while it remained almost constant in India throughout the pandemic. Testing was a significant covariate in predicting the fatalities.

Conclusion: India was able to manage the initial phase of this pandemic due to early and strict government interventions and strong public health responses.

Keywords: COVID-19, Pandemic, Disease Outbreak, CFR, Recovery Rate

Abstract Id	Efi_135_230_COV
Title	**Facilitators and barriers for Covid 19 contact tracing: evidence from Jodhpur (India)**
Authors	Divya Gehlot, School of Public Health AIIMS Jodhpur

Introduction: The world has been affected by the deadliest pandemic Covid 19 for the past two years. In the absence of vaccination and prompt treatment among various methods adoption of contract tracing as per WHO recommendations for identification and containment of infection in the community proved to be one of the useful tools in controlling the spread of covid19.This study was carried out to generate evidence about the potential facilitators and barriers for conducting COVID 19 contact tracing in Jodhpur

Method: 15 healthcare workers were interviewed who did COVID 19 contact tracing of 600 patients. 600 Covid 19 patients were contacted via telephonic medium during one month (16-04-2021 to 16-05-2021 for contract tracing. The data obtained were then analysed to document the facilitators and barriers while doing COVID-19 contract tracing and what improvisations are required.

Result: The 15-healthcare interviewed revealed, out of 600 patients, 475 attended the call at once, and the rest 125 were contacted again out of which 40 attended the call second and 30 third times. Out of 55 patients, 20 patients' numbers were incorrect and 35 didn't receive the call at all. The list of these patients was communicated to the local health authority for further investigation. Out of 475 patients, 300 were cooperative in providing details. 125 were hesitant about sharing personal information. Rest 50 patients contacted were reported dead.

Therefore, shared responsibility and cooperative behaviour from patients, technical learning, data handling, and communication skills for healthcare workers, and preventive strategy for further spread of disease were the core facilitators observed during contact tracing. On the other hand, privacy concerns, circumspection, fear of stigmatization and patients' unease from patients, timing issues, telecommunication errors for healthcare workers, were the core roadblocks observed during the contact tracing

Conclusion: Thereby keeping into consideration all the above-mentioned observations, contract tracing proves to be a useful tool in halting the spread of COVID-19 and any other communicable disease.

Keywords: COVID-19, contact tracing, healthcare workers

Abstract Id	Efi_77_76_COV
Title	**Exposure Risk Assessment to COVID-19 among health care workers working in non COVID zones of a Tertiary Care Hospital, Tripura.**
Authors	Dr Bithika Das, Agartala Govt. Medical College

Introduction: The health care personnel working in COVID hospitals are at increased risk of acquiring the COVID-19 disease, if there is a breach in the personal protection while managing patients. Consequently, a large number of health personnel working in non COVID zones in tertiary hospitals of India are getting infected with COVID-19, during outpatient or inpatient management in routine health care practice; being unaware of the COVID status of the patients. Understanding how HCW exposure to COVID 19 virus translates into risk of infection is critical for informing infection prevention and control recommendations. Understanding the pattern of exposure may be beneficial to identify Infection Prevention and Control breaches and defines policies that will mitigate HCW exposure and nosocomial infection.

Objective: 1.To estimate the pattern of risk exposure to confirmed cases of COVID-19 among health care workers working in non COVID zones of a tertiary care hospital, North-East India.

2. To determine the association between pattern of exposure with their COVID-19 status.

Materials And Method: This was a hospital based cross-sectional study conducted among all HCWs who had occupational exposure to laboratory confirmed COVID 19 cases, between July-September 2020, in Non COVID zones of the major tertiary care hospital in Tripura. Risk assessment was based on MOHFW guidelines. The study included all 215 health care workers, who had occupational exposure to laboratory confirmed COVID 19 cases. After taking written informs consent from the HCWs, information was collected by using a questionnaire adapted from 'COVID-19 Virus risk assessment form for health care workers' developed by ICMR and recommended by MOHFW. The exposure risk categorisation was based on “SOP to be followed in case HCW reports exposure\/breach of PPE” given under “Advisory for managing Health care workers working in COVID and Non-COVID areas of the hospital”2. The exposure risk was categorised as follows: High risk exposure: a). HCW or other person providing care to a COVID-19 case or lab worker handling respiratory specimens from COVID-19 cases without recommended PPE or with possible breach of PPE. b). Performed aerosol generating procedures without appropriate PPE. c. HCWs without mask\/face-shield\/goggles\/having face to face contact with COVID-19 case within 1 metre for more than 15 minutes \/ having accidental exposure to body fluids. Low risk exposure: Contacts who do not meet criteria of high risk exposure. COVID status was determined using RTPCR test or Rapid Antigen test following 5th day of exposure. A Health Care Worker was defined as a person serving in a healthcare setting who had the potential for direct or indirect exposure to patients or their infectious secretions and materials, including, for example, doctors, nurses, laboratory workers, housekeeping staffs etc. Data analysis: Data analysis was done in SPSS version 25.0 and expressed in frequency and percentage. Statistical analysis was done using chi square test\/ Fisher's exact test and P value of < 0.05 was considered as statistically significant.

Ethical consideration: The study was approved by Institutional Ethics Committee of Agartala Govt. Medical College.

Results: The present study showed that 215 HCWs were exposed to confirmed cases of COVID-19 while working in Non COVID zones of the hospital. Among the exposed, 39.5% HCWs had high risk exposure and 8.8% HCWs were detected as COVID-19 positive. Majority of the study subjects had exposure in the hospital wards (66.0%), in Surgical departments (19.5%), had close contact (15 minutes (51.2%). The COVID status of the exposed HCWs was significantly associated with no source control (P=0.016), close contact with COVID-19 positive cases (P=0.026), more duration of exposure (P<0.05), use of any PPE (p=0.000). The COVID status was also significantly associated with the High risk exposure of the participants (p=0.000). Conclusion: Strict enforcement of the infection control measures like Universal precautions should be practiced HCWs to prevent hospital-acquired infections.

Conclusion: The exposure rate to COVID cases was found similar among males and females and gender had no association with the COVID status of the HCWs. The present study showed that exposed HCWs had high risk exposure to COVID-19 cases. All levels of doctors were getting exposure to COVID-19 cases during their routine work in NON-COVID zones. Regarding the pattern of exposure, the major place of exposure was in the hospital wards during daily rounds, sample collection following admission, or while doing life saving procedures in patients who were either initially asymptomatic For COVID or awaiting RT-PCR report. This followed by exposure in other places like departmental rooms from their colleagues. Hospital-acquired infections were a result of contact with another infected colleague, particularly during 'break' times, as the HCWs were not compliant with social distancing and universal masking when eating. This suggests that patients alone were not only sources of exposure for health care workers. In fact, HCWs who turned positive following exposure to a COVID-19 patient poses a serious threat to other health care workers working with them and sharing common environment. The majority of exposure is occurring during handling of emergency cases of surgery, fracture, Road traffic accidents and of Casualty. The present study revealed that HCWs are at a high risk of acquiring COVID-19 even while working in Non-COVID zones of hospitals during routine practice. Regarding the pattern of exposure, the major place of exposure was in the hospital wards followed by departmental rooms and in surgical departments, emergency and trauma care Centre. No source control, close contact or prolonged duration of contact and use of PPE were significantly affecting the COVID status. Strict enforcement of the infection control measures for COVID-19 like Universal precautions should be applied meticulously in the hospital among HCWs to prevent hospital-acquired infections.

Keywords: COVID-19, Risk assessment, non COVID zones.

Abstract Id	Efi_75_78_COV
Title	**To study the effect of internet usage on lifestyle of undergraduate and postgraduate students of Haryana during covid-19 pandemic lockdown period.**
Authors	Dr. Kapil Kumar, MMIMSR, Mullana

Introduction- Since 1990, internet usage is increasing day by day and availability of smart mobile phones and electronic gazettes like tab, laptop etc. has given it an exponential rise. During covid-19 lockdown period, internet usage pattern have changed a lot as per behavior of students studying in schools, colleges, educational and coaching institutes etc. They are totally dependent upon internet media for their study as well as for other entertainment purposes. Aim of the study is to analyze the effect of internet usage on lifestyle of undergraduate and postgraduate student of Haryana during covid-19 pandemic lockdown period.

Method- 1100 students, of various educational streams in various colleges of Haryana state were included in the study and data was collected by self-designed questionnaire and young's internet addiction test questionnaire was used to assess its effect on life style.

Result- It is found that in 1100 students, comprising of 67% female and 33% male found that internet usage of 68% students who are doing undergraduate and postgraduate study is increased, while internet usage of 14% students is decreased whereas 18% students reported no change in their internet usage during covid 19 pandemic lockdown period.

Conclusions- Excessive internet usage during covid-19 pandemic lockdown may lead to various abnormal behavior changes which causes negative effect on various aspects of students like emotional, hyperactivity, depression, sleeping disorder etc. To avoid these negative consequences, we should supervise them to use internet only for the limited purposes which will be beneficial for them.

Keywords: covid-19 pandemic, internet use, smart phones, social media

Abstract Id	Efi_94_57_COV
Title	**Anxiety among pregnant women during COVID-19 in rural area of district Muzaffarnagar**
Authors	Dr. Nidhi Nain

Introduction: This study aims to evaluate the anxiety i.e., psychological impact of COVID-19 on pregnant women in rural area of district Muzaffarnagar. Anxiety symptoms during pregnancy have emerged as an independent risk factor for adverse obstetric and developmental outcomes.

Methods: A cross sectional study of 130 pregnant women from the families registered in RHTC of Muzaffarnagar, was done in the month of July, 2021. A questionnaire based on PRAQ was asked from each of them. Some questions related to COVID-19 and anxiety were also asked. All confirmed pregnancies were included in the study and unsupportive and non- pregnant females were excluded from the study.

Results: A total of 130 pregnant women were included in the study. The mean age of the participants was 27 years. The participants were predominantly multiparous (62.3%). 48% women feared that baby will suffer from physical defect while 21% women were afraid of mental defects in the baby due to COVID-19. 36% were worried about their weight gain. The fear of physical defects and mental defects in the baby was more in primigravida women (67%). Underweight women were more anxious about the delivery (85%). Other variables did not show any considerable difference in the findings.

Conclusion: COVID-19 pandemic has resulted in more anxiety among pregnant women mainly primigravidae. The questionnaire has helped in identifying the anxious pregnant women and those who are at higher risk. It also allows to take necessary steps to solve this issue of anxiety among pregnant women.

Keyword- COVID-19

Abstract Id	Efi_94_57_COV
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Authors	Dr. Nidhi Nain, Muzaffarnagar Medical College & Hospital, Muzaffarnagar.

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Key Word : COVID-19

Abstract Id	Efi_74_79_COV
Title	**Role of Personality traits in adherence to COVID-19 Precautions among general population in Delhi. A Cross-Sectional Study**
Authors	Dr. Radhika Gupta, Maulana Azad Institute of Dental Sciences

Introduction- Due to the high transmissibility of COVID-19, Government have implemented certain precautionary measures aimed to flattening the infection curve and limit the spread of disease. Individual Personality trait has been found one of the main determinants that affect the COVID-19 precautions adherence.

Aim- To assess the role of personality traits in adherence to COVID-19 Precautions among general population in Delhi.

Methodology- A questionnaire survey was conducted among 400 participants aged 15-70 years attending outpatient department of tertiary care Dental hospital in Delhi. Data was collected over 2-month period by a validated self-administered questionnaire which recorded demographic variable, COVID-19 related status, Personality traits [20-item Mini-International Personality Item Pool (IPIP)] and COVID-19 precautions adherence.

Results- Of 400 participants 193 were males and 207 females. Subjects belonging to 20-34 years age group (44.3%), high-income, (51.3%) and professionals-semi-professional's occupation (9%) were more adherent to COVID-19 precautions. A significant association was found between personality traits with Education status (Agreeableness, P=0.017; Imaginative, P=0.007), Gender (Neuroticism, P=0.03), and Socioeconomic status (Agreeableness, P=0.07). A statistically significant association was found between Conscientiousness and COVID-19 Precautions adherence (P< 0.05).

Conclusion - This study concluded that Conscientiousness personality and certain demographic variables are directly associated with COVID-19 precautions adherence.

Keywords - COVID-19, Mini-IPIP, Personality traits, sociodemographic, Precautions, Adherence

Abstract Id	Efi_93_58_COV
Title	**Changes in tobacco consumption behaviour during COVID-19 related lockdown among Employees of Government Medical College, Gujarat**
Authors	Dr. Swati Misra Shri MP Shah Government Medical College Jamnagar Gujarat

Introduction: Tobacco use is one of the major preventable causes of death and disability worldwide. Tobacco use is detrimental at any time. However, it is proving to be more dangerous during the COVID-19 pandemic. Tobacco use may increase the risk of being infected, increases the chances of complications, and also increases the probability of its spread. We assessed the awareness about this association and the impact of the lockdown on tobacco use among current tobacco users of Government Medical College, Gujarat. Working in a Medical College can be demanding and exceedingly stressful. As the consumption of tobacco and other substances is often used in dysfunctional strategy to cope with such feelings and also these restrictions and non-availability might change the tobacco consumption behaviour.

Aims and Objectives: Our aims and objective of the study is to assess the awareness about the association and the impact of the lockdown on tobacco use among current tobacco users (employees) of Government Medical College, Gujarat

Methodology: A study was conducted among 173 tobacco users (Class 3 & Class4) of Government Medical College, Gujarat using simple random sampling technique. They were under active follow-up in their course of the 10-month counselling program from January 2020 to November 2020.The data were collected using pre-tested close-ended questionnaire. The analysis was done using the SPSS 12.0 statistical package (SPSS Inc., Chicago, IL, USA). Ethical approval was taken from the Institute Ethical Committee. Written informed consent was taken from all the respondents. An appropriate statistical test was used.

Result: Two-thirds (68%) of tobacco users were unaware of the association between tobacco and COVID-19. Only 33% of the users felt that the current situation had affected their tobacco use, the commonest impacts being unavailability and increased prices of tobacco products. While this was seen as an opportunity to quit by some users, approx. 11% reported increased tobacco use due to increased anxiety and panic situation. Out of the 173 current tobacco users, 49 tobacco users quit tobacco during the lockdown period; out of which 51% quit because of the unavailability and increased prices of tobacco products and rest because of lockdown and their concern over COVID-19. Abstinence among those who were aware of the association between the coronavirus and tobacco was twice that among those who were not aware.

Conclusion: The extent of awareness about the association of tobacco and COVID-19 influenced the tobacco users to stop tobacco use. Awareness activities about the harmful effects of tobacco during the pandemic have to be prioritised and further strengthened.

Key Word- COVID-19, Lockdown, Counselling, Tobacco Cessation, Employees

Abstract Id	Efi_222_COM
Title	**COVID-19 pandemic and perinatal outcomes in a tertiary care center in Jodhpur, Rajasthan**
Authors	Zeba Bano, Arun Kr. Singh AIIMS, Jodhpur

Introduction : The impact of COVID-19 on pregnant women and newborns has been little known. This study was conducted to compare the number and type of deliveries between two epochs, pre-COVID-19 and during COVID-19 and to assess the perinatal outcomes and challenges faced by pregnant women infected by COVID-19.

Methods : A mixed-method study design was used. For the quantitative study, records of all pregnant women from 21st March 2019 to 20th March 2021 were retrieved retrospectively.

For the qualitative study, 22 COVID-19 positive pregnant women were contacted for in-depth interviews to know about the challenges they faced during their pregnancy.

Results : During the COVID-19 period, there was a substantial reduction in the number of deliveries, particularly in March, when the COVID-19 lockdown was imposed. The number of institutional births decreased by 31.87 %. Vaginal, instrumental, and caesarean deliveries decreased by 43.54 %, 56.25 %, and 25.2 %, respectively. Preterm and LBW births were reduced by 34.12% and 27.41%. It was observed that the rate of vaginal deliveries decreased (p value=0.013) whereas the rate of caesarean deliveries increased (p value=0.007). Multiparity (p value=0.041), increased mean birth weight (p value=0.038), and APGAR score <6 at 1 minute (p value=0.027) were all more common in COVID-19 period.

To assess perinatal outcomes, 44 COVID-19 positive and 176 COVID-19 negative pregnant women were compared. It was observed that the COVID-19 positive group had a higher rate of caesarean births (p value=0.021), hypothyroidism (p value=0.001), pregnancy-induced hypertension (p value=0.031), and gestational diabetes mellitus (p value=0.001) and a lower rate of anaemia (p value=0.006).

COVID-19 positive pregnant women encountered mostly psychosocial issues as a result of their separation from family and fear of isolation and transmission.

Conclusion : Our study concluded that the COVID-19 pandemic led to a decrease in number and increase in the incidence of caesarean deliveries. It emphasizes improving the positive state of physical, psychological, and mental health of women during pregnancy for better perinatal outcomes.

Keywords : COVID-19, perinatal, outcomes, pregnancy, lockdown, pandemic

Abstract Id	Efi_203_COV
Title	**Effect of modification in Mode of existence during COVID-19 among health care workers of a tertiary care rural hospital in Central Uttar Pradesh, India:**
Authors	**A cross sectional study**

Background : Because of the worldwide spread of a novel coronavirus disease (COVID-19) on January 30, 2020, The World Health Organization (WHO) declared COVID-19 as a global pandemic. One of the measures that have been adopted by the governments from different countries worldwide. Lockdown can clearly impact the lifestyle of the population, especially in terms of diet and physical activity.

Aim: To study the effect of modifications in mode of existence during COVID-19 among health care workers of a tertiary care rural hospital

Objectives:

1. To study the changes in physical activity during this pandemic
2. To study the changes in personal hygiene and dietary behaviour
3. To study the psychological and mental changes during this pandemic
4. To study the changes in day-to-day activities during this pandemic

Material and Methods: A cross-sectional study will be conducted in 1 month of duration in August 2021. All the Medical Professionals of tertiary care hospital of central Uttar Pradesh were included in the study except those who do not want to participate or have not submitted the filled questionnaire. Data were collected with the help of pre-designed questionnaire and will be entered in excel sheet and analysis of the same will be done.

Study Setting: UPUMS, Saifai.

Study Design: cross sectional Study

Results: Awaited

Keywords: Medical Professionals, COVID-19, Mode of Existence

Abstract Id	Efi_195_161_COV
Title	MUCORMYCOSIS: AN EPIDEMIC IN COVID-19 PANDEMIC IN APPARENTLY NON COVID-19 PATIENTS, CIVIL HOSPITAL AHMEDABAD.
Authors	Dr Archanaben Patel

Introduction: In Gujarat, during second wave of pandemic, epidemic of mucormycosis was also seen. Immunosuppression caused due to covid-19 infection also increase the risk of secondary infection like mucormycosis. But during this pandemic not only covid positive patients were infected with mucormycosis, there were some apparently non-covid patients also who were infected with mucormycosis. So, we evaluated clinical features, predisposing factor, and underlying medical condition of mucormycosis among patients who were apparently not having history of covid-19 infection in past.

Method: A cross-sectional, observational study including 143 patients who were apparently non-covid admitted in civil hospital Ahmedabad between 1st may to 15th June,2021 with biopsy proven, or whose CT\/MRI finding were suggesting of mucormycosis was done. Details regarding demography, underlying medical condition, covid-19 illness in past, preventive steps taken for covid-19 disease during pandemic and vaccination status were collected. Clinical features, imaging suggesting of site of infection were recorded. Data was analyzed in Microsoft excel-2019.

Results: During study period there were 143 patients who had mucormycosis with no history of covid-19 infection in the past. Mean age was 52.4 ± 13.9 years and median age was 52 years (range,4-90 years). Males (n=100,69.9%) were more affected than females (n=43,30.0%). Majority of patients suffered from diabetes (n=102,71.3%). 80.4 % patients were non vaccinated for covid-19. Headache (56.6%) was most common clinical feature (as among 53.9% paranasal sinus site was most commonly affected) followed by facial pain (53.2%) and eye swelling (43.4%).

Conclusion : Diabetes was the most common cause of mucormycosis among patients who had no history of covid-19 infection in past. As Gujarat is considered as diabetic capital of India, regular blood sugar monitoring must ensure among diabetic patients.

Keywords: Mucormycosis, Covid-19, Diabetes, Epidemic

Abstract Id	Efi_125_240_COV
Title	**Risk factors for mortality of COVID-19 patients admitted in a tertiary care hospital Mysore, Karnataka: A retrospective study**
Authors	Dr Thulasi M, Dr Mudassir Azeez Khan Mysore Medical College and Research institute, Mysore, Karnataka.

Introduction : In December 2019, coronavirus disease-2019 (COVID-19) was caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) outbreak in Wuhan, Hubei Province, China. During this pandemic there is high degree of prediction that healthcare system can be overwhelmed by hospitalization and intensive care unit (ICU) admission rates. This can be avoided by prioritizing hospital treatment for patients at high risk of deterioration and death, and treating low-risk patients in ambulatory environments, or by home-based self-quarantine. For this purpose predicting risk factors for mortality and severity of disease should be studied. Early identification of patients at high risk for progression to severe COVID-19 will help in efficient utilization of healthcare resources via patient prioritization to reduce the mortality rate.

In this study we aim to study the socio-demographic factors, clinical features, and laboratory findings associated with mortality and severity of the COVID 19 infection and compare the same with a group of people survived the disease.

Methods : All adult patients (≥18 years) admitted in our hospital during the last two months (May and June 2021) are included in the study. 50 survivors and 50 non survivors selected by simple random sampling. All clinical information, socio-demographic factors, medical history, comorbidities, laboratory findings, treatment, and complications, of COVID-19 patients who had been discharged from or had died at the hospital were extracted from medical records. Data analysed using SPSS trial version. Descriptive statistics used. Chi square test and independent t test used to find out the association between the two groups.

Results : Increased age , low income, decreased haemoglobin level, uncontrolled blood sugar were significantly associated with mortality in COVID 19 patients (p<0.05). Further results awaited.

Key words: Risk factors, Mortality assessment, COVID 19, severity factors

Abstract Id	Efi_173_188_MISC
Title	**Perceived Stress and Quality of Sleep among Health-Care Staff Working in a Dedicated COVID Hospital**
Authors	Dr Niharika Nagari, Armed Forces Medical Sciences

Introduction: Right from the onset of the COVID-19 pandemic, healthcare workers (HCWs) have been at the forefront in combating this deadly disease. The sudden emergence of COVID-19 and its continued persistence has led to unprecedented psychological stress among HCWs. To assess the level of stress and its effects on the sleep quality of HCWs caring for COVID-19 patients, the present study was conducted among staff working in a dedicated COVID hospital

Methodology: The cross-sectional study was conducted among HCWs at a dedicated COVID hospital in northern India from September to October 20. To assess the levels of stress and quality of sleep, the participants were administered the Perceived Stress Scale and Pittsburgh Sleep Quality Index (PSQI)

Results: One hundred and forty-two HCWs out of 162 responded completely. The mean age of the participants was 31.6 ± 6 years. Ninety-one (64.1%) were doctors and the rest 51 (35.1%) were the paramedical staff. The mean PSQI global score was 6.9 ± 3.19. More than 50% of participants across all age categories reported moderate-to-high stress and poor sleep quality

Conclusion: This study shows that a high proportion of HCWs working in dedicated COVID hospitals suffer from stress and its varied deleterious effect, especially on sleep. Therefore, it is prudent for all stakeholders and decision-makers to take adequate steps for the provision of psychological support for stress mitigation and implement measures for prevention and early identification of stress-related symptoms among HCWs working in COVID hospitals.

Keywords: COVID hospital, health-care workers, perceived stress, quality of sleep

Abstract Id	Efi_193_163_COV
Title	**Study on Knowledge, Attitude, and Practices of Donning and Doffing of Personal Protective Equipment among health care worker in tertiary institute during COVID-19**
Authors	MANISH KUMAR JHA

Introduction: Severe acute respiratory syndrome corona virus 2 (SARS-CoV-2) is a highly infectious disease with a potential for healthcare workers (HCWs) getting infected due to inadequate protection while attending to patients. Personal protective equipment (PPE) is used by health-care workers during this COVID-19 pandemic to protect them from bacterial, viral, or other hazards.

Aims: To evaluate how adequate knowledge, attitude, and practices (KAP) of health-care worker toward the appropriate use of PPE.\r\nMethodology: A hospital based descriptive cross sectional study was conducted in Darbhanga medical college and hospital during the COVID-19 pandemic in a span of approximately 2 months. A pre-designed, pre-validated, semi structured questionnaire-based survey was done in 120 health-care providers posted in the COVID-19 area. Data was entered in MS Excel and analyzed. Statistical test was done to calculate significance.

Results: Among the 120 health-care workers (HCWs), nursing staff contributes 56.66% , doctors 34.16% and technicians 9.16% participated in the survey where 69% has knowledge about Donning and Doffing of PPE whereas attitude was seen in only 52% and practices among 63%.

Conclusion: There were major gaps in KAP at institutional level among the health-care providers with regard to donning and doffing of PPE during this pandemic.

Keywords: personal protective equipment, health-care worker, COVID-19,

Abstract Id	Efi_200
Title	COMPARISON OF PATIENTS ADMITTED IN A TERTIARY CARE CENTER IN KERALA DURING THE FIRST AND SCOND WAVES OF COVID 19
Authors	Dr Meera Varghese

Introductions : ARS-CoV-2, emerged in Wuhan, China at the end of 2019 a public health emergency of international concern (PHEIC) on Jan. 30, 2020 (1). This is the 6th time WHO has declared a PHEIC since the International Health Regulations (IHR) came into effect in 2005.On January 30 th 2020,first covid 19 case were reported in Kerala, after that the state was in high alert. Kerala is a state that faced a huge rise in the number of COVID 19 cases Throughout the progression of Covid 19 pandemic its unclear about the degree of severity of symptoms ,demographic characteristics which play a very important role in viral transmission. In order to control the pandemic effectively there is a need to identify the risk population in both first and second waves of Covid 19 pandemic.

Aim- To compare the first and second waves of COVID 19 in a tertiary care hospital, Kerala

Methodology- A cross sectional study among Covid 19 admitted patients in a tertiary care hospital, Kerala. First wave is taken from October to November 2020,Second wave from April-MAY 2021.Sociodemographic details of patients admitted in ward was collected using a questionnaire Digital record of COVID 19 deaths of first & second wave were used for analysis

Result- 1 st wave= most common age group affected were 51-60 yrs, mostly males 34.6%,most of the in patients were not working -39.6%, from 67 patients in ICU 29 patients died(43.2%).Among death patients most common age group were 61-70 yrs.(34.5%),males65.5%most common co morbidity were DM- 89%,HTN- 82.7%.In second wave most common age group affected were 51-60 yrs- 24.2%,males-54.6%,not working -46.3%, Among 198 patients admitted in ICU- 45 patients died(22.7%).among died, most common age group were 61-70 yrs(25%),males- 63.6%,most common co morbidity were DM-57.7%,HTN-51%(more analysis pending)

Conclusion- in both waves ,most common hospitalised age group were 51-60 yrs among not working males ,APL. Death were more in first wave than second wave, most common age group were 61-70 yrs, predisposing co morbidity were DM,HTN

Abstract Id	Efi_80_73_COV
Title	**Study on post covid- 19 sypmtom & treatment among recovered patient**
Authors	Dr. Soorveer Singh Gurjar, Department of Community Medicine

Introduction: COVID-19 is the most important public health problem of the recent time and resulting in mortality and morbidity worldwide. Most of the people who have COVID -19 recover completely but some people continue to have symptoms after initial recovery and develop Post COVID-19 symptoms presenting till weeks or months

Method: The aim of this study is to find out the Post COVID-19 symptoms develop after COVID-19 illness recovery and to assess the requirement of treatment for Post COVID care. The study is cross-sectional descriptive in nature and is done among patients who were recovered from COVID-19 illness (n=100). Recovered patients from COVID-19 were included in this study and information was collected through predesigned questionnaires and is organized in socio-demographic profile, information about both Post COVID symptoms and their treatment

Results: Out of total respondents 80% developed one or more symptoms. The most common symptoms reported to be weakness 50% followed by body ache 23%, neuropsychiatric symptoms such as difficulty in concentration and difficulty in sleep 20%. and some develop other symptoms. There was a relationship between the presence of other comorbidities and severity of the illness. Only 42% of the symptomatic patients have taken some treatment for these symptoms.

Conclusion: COVID-19 is a new illness with post-covid symptoms yet to be researched and it has become major health issue worldwide. Proper clinical evaluation will help to identify the etiology and to provide treatment for COVID recovered patients.

Keywords: COVID-19 ILLNESS, POST COVID SYMPTOM, POST-COVIDTREATMENT

Abstract Id	Efi_197
Title	**Antimicrobial use among children age 0 – 5 years of North Kashmir.**
Authors	Dr. Sheema Samreen

Introduction : India is the largest consumer of antibiotics worldwide and the global capital of Antimicrobial Resistance. Children under five are at high risk of mortality due to infectious diseases and as such use of antibiotics continue to be prescribed or sold for diarrheal diseases and upper respiratory infections for which they have limited value. It has been estimated that 58,000 neonatal deaths are attributable to sepsis caused by drug-resistance to first-line antibiotics each year in India. The easy availability of antibiotics make it easy for caregivers to buy and use them without knowing the danger it holds in future There is limited data available on use of antimicrobials among children in Kashmir .This study was done with objectives to determine the use of antimicrobials in children 0- 5 years visiting pediatric OPD at Sub District Hospital.

Methods: It was a cross-sectional study done from May 2021 to August 2021.All children attending pediatric OPD less than 5 years of age were included in the study. The parent/caregiver of child was explained the objective of study and after getting informed consent was asked about the use of medications for current illness of child and for illness in past two months. Simultaneously the health records whenever available were also checked for the prescribed medications.

Results: A total of 543 children aged less than 5 years were included in the study. About 57% were male, 23% were of 2 – 3 years group, and 24% were from low SE class. About 85% of children were self-medicated, 93 %of children with fever were given antimicrobials for present illness while as 94% children had already received antimicrobial in past three months. Furthermore, 39% of children had not received full course of antibiotics.

Conclusion: The practice of antimicrobials among children is very dangerous and needs to be taken seriously. The PR actioners as well as caregivers need to be counseled about indiscriminate use of antimicrobials.

Abstract Id	Efi_182_176_COV
Title	**Politics: Social Medicine on mass scale its impact on COVID-19 Pandemic Management**
Authors	Aprajita Singla, Consultant Training, IDSP Haryana ,Diksha Walia

Introduction: COVID-19 has wreaked havoc on health system and the economy. Politicians are major stake holder and influencer of the society, their positive or negative statements produce a major impact on the psyche of population. It is the time for public health researchers and political scientists to begin understanding how and why governments responded the way they did, to investigate how effective these responses appear to be, and to draw lessons about effective public health policymaking. We contend that without a thorough understanding of policy and politics, it will be impossible to comprehend the many responses to COVID-19 and their consequences. To better understand the causes of COVID-19 responses, we propose four key focuses: social policies for crisis management and recovery, regime type (democracy or autocracy), formal political institutions (federalism, presidentialism), and state capacity (control over health care systems and public administration).

Objective: To assess the effect and compare the political ideologies on the public health response for COVID-19 pandemic.

Methods: Review was done through various search engine like Google, Pubmed, Google Scholar etc regarding various political ideologies and statements of politicians across various countries, while different phases of COVID pandemic and their Public health response towards the COVID-19 pandemic.

Results: Preliminary results are showing that countries following strict lockdowns and rigid regulations had better response and implementation of COVID appropriate behavior was better as compared to countries with flexible rules and regulations. It was further investigated that countries having autocratic system, flattened the epidemic curve better and control spread more effectively as compared to democratic countries.

Conclusion: Study shows that politicians played a major role towards response to COVID-19 pandemic, they act as both positive and negative influencer in the society.

Keywords: Politics , ideologies, COVID-19 Pandemic

Abstract Id	Efi_63_92_COV
Title	**Psychosocial impact of COVID 19 on nurses and ward technician- a reflection**
Authors	Dr. Jaba Chauhan, Dr. Swathy Moorthy, Sri Ramachandra Institute of Higher Education and Research, Chennai

Introduction : The COVID 19 pandemic has caused significant burdens globally. Detrimental effects include high rates of infection and death, financial hardships faced by individuals, stress related to known and particularly unknown, incomplete information, and fear of the uncertainty regarding continued global impact. Healthcare workers (HCWs), at the heart of the unparalleled crisis of the pandemic, have been facing challenges treating patients with COVID-19: reducing the spread of infection; developing suitable short-term strategies; and formulating long-term planss. The psychological, physical and financial burden and overall wellness of HCWs has taken a toll due to change in working hours and patterns, loss of jobs and physical and emotional burnouts.

Method : This is a questionnaire based study that was being carried out in a tertiary care hospital in Chennai, India among the nursing fraternity and hospital ward technicians. The questions were asked in the local language and response recorded by the PI.

Results : This is a pilot study through which it was concluded that the nursing staff in a tertiary care hospital in Chennai underwent major physical and emotional stress during the COVID 19 pandemic, along with financial constrains which impacted them as well as their family members.

Conclusion : Through this study we wanted to examine the effect of COVID 19 pandemic on financial and emotional wellbeing of healthcare workers, especially nursing staff, as they have prolonged exposure while caring for the patients. It is important to understand the financial burden caused by the pandemic as healthcare workers must also continue to successfully treat non-COVID patients and maintain personal responsibilities, including taking care of their families and themselves.

Key Words : COVID 19, Nurses, financial impact

Abstract Id	Efi_181_177_COV
Title	SURVEY OF ADHERENCE WITH COVID-19 PREVENTION BEHAVIORS DURING PUBLIC GATHERING
Authors	Dr. S. Amarnath, Dr. K. Srinivas

Introduction: Prevention behaviors represent important public health tools to limit spread of covid 19 CDC guideline includes recommendation to prevent transmission to gathering with non household members .At any type gathering all attendees were encourage to wear mask, observe social distancing guidelines, wash their hands often and gather outdoor if possible

Objective : To assess the adherence with recommend public health prevention behavior during gatherings.

Methodology: A cross-sectional study was conducted and Participants were recruited through snowball sampling. Participants provided informed consent through online consenting system. An electronic survey using questions based on public health preventive behavior via messaging applications. Prevalence of specified behavior (pre gathering COVID-19 testing, frequent hand hygiene, social distancing, masking, gathering outdoors)

Result: Data from 364 participants were analyzed it shows that prior to gatherings, No one underwent testing for COVID-19. 62.8. % reported washing hands or using sanitizers. 36.5 % avoided contact with others within 6 feet. 71.7 % indicated that they wore a mask or face covering. 13 % of participants reported that gathering was held outside. Poor adherence was shown to be related with five variables: a lower educational level, living with other people at home, being unemployed or a student, living with a spouse, and not working in the healthcare industry.

Limitations: Participants are restricted geographically Survey is based on self reported data Survey limited to Smartphone users

Conclusion: Despite compulsory restrictions imposed by the government, only about half of the respondents adhered to COVID-19 preventive measures in the DRC and Study result highlight the need for more effective ways to promote all recommend safe COVID-19 behavior in future.

Keywords: Covid 19, Adherence survey, Preventive measure

Abstract Id	Efi_COV
Title	**Impact of restrictions during second wave of COVID – 19 on services for drug resistant tuberculosis patients at Jodhpur, India.**
Authors	Mahewash Ansari, Suman Saurabh, AIIMS JODHPUR

Background: In India the COVID-19 pandemic caused tremendous disruptions and strain on the healthcare system. Even after the impacts have been tried to be mitigated or contained, there will be medium- and longer-term consequences for high burden disease like tuberculosis (TB) and its response. The pandemic threatens to reverse the progress made towards global TB targets under the WHO End TB strategy by 2035 (under SDGs #goal 3).

Objectives: The objectives of this study are to assess the impact of COVID-19 restrictions on DR-TB patients for availability of drugs, transportation to DR-TB centres, laboratory and diagnostic services and functioning of services including home-visits and telephonic monitoring of adverse events.

Method: A mixed method cross-sectional study conducted among notified DR-TB patients in Jodhpur. Primary data was collected from the notified DR-TB patients via telephonic calls using semi-structured questionnaire, and the interview was conducted in Hindi. Average time for the interview was 8-10 minutes per patient. Open comments and their suggestions were also recorded for qualitative analysis.

Results: Out of total 346 notified patients 269 patients were successfully contacted and were interviewed. Availability of the drugs and injectables of DR-TB regimen, transportation to centres, consultation services for managing AEs, laboratory services and availability of nutrition were found to be significantly affected due to restrictions particularly in vulnerable groups of older people (above 60 years), low education level and female DR-TB patients. Documentation processes at TB centres, home visits by HW and monitoring via calls were not affected due to restrictions of COVID-19. After manual qualitative analysis of the open comments and suggestions the facilitators and barriers for accessing the services were identified and coded in themes.

Conclusion: As compared to the restrictions during last year (2020) there was much more flexibility in terms of movement and containment criteria, but still the disruption in healthcare services is seen. The disorientation of regular services under NTEP among the DR-TB patients is alarming because timely diagnosis and early treatment is key to successful prognostic outcomes.

Keywords: Impact, MDR-TB, COVID-19, Availability of drugs, Injectables, Nutrition, Health workers, Home visits, Monitoring of AEs.

Abstract Id	Efi_210_COV
Title	**Facilitators And Barriers In Implementation Of Telemedicine Guidelines And Level of Patient Satisfaction during Covid-19 Pandemic at a Tertiary care Hospital in Jodhpur**
Authors	Nainsi Gupta, Manoj Gupta, AIIMS JODHPUR

Introduction: Telemedicine, a term coined in the 1970s, which means “healing at a distance”, signifies the use of Information and Communication Technology (ICT) to improve patient outcomes by increasing access to care and medical information.

The World Health Organization has adopted the following broad description for Telemedicine: “The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for the diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities".

Four elements apply to telemedicine:

1. Its purpose is to provide clinical support.

2. It is intended to overcome geographical barriers, connecting users who are not in the same physical location.

3. It involves the use of various types of ICT.

4. Its goal is to improve health outcomes.

Telemedicine holds great potential for reducing the variability of diagnoses as well as improving clinical management and delivery of health care services worldwide by enhancing access, quality, efficiency, and cost-effectiveness.

As in the Covid-19 pandemic, telemedicine becomes an important tool. Telehealth reduces the spread of infection while allowing the patient to continue his diagnostic-therapeutic process. Medical examination remains the cornerstone of practice, but telemedicine decreases the number of patient attendances as consultations take place on the telephone, video calls, exchange of photographic documentation, mobile phone messages, e-mail, or other support applications for computers or mobile phones. Telemedicine may significantly reduce general practitioner visits and a dedicated platform would allow patients to have e-prescription for drugs or specialist examination; it could also be used for rapid communication.

Telemedicine will be needed to streamline outpatient visits, reduce overcrowding and the costs of healthcare which would make them more affordable and thus more sustainable.

Patient satisfaction is an important and commonly used indicator for measuring the quality of health care. Patient satisfaction affects clinical outcomes, patient retention, and medical malpractice claims. It affects the timely, efficient, and patient-centered delivery of quality health care. Patient satisfaction is thus a proxy but a very effective indicator to measure the success of doctors and hospitals.

Objectives: This study was conducted to assess the facilitators and barriers in the implementation of Telemedicine guidelines in a Tertiary Care Hospital in Jodhpur and to find out the challenges faced by Health Care Workers during Telemedicine consultation and to assess the level of patient satisfaction regarding receiving the services through Tele-consultation.

Methodology: A Cross-sectional study was conducted from June 1st to July 31st. The duration of the study was 2 months. The study site was AIIMS Jodhpur. The study population included Doctors who were providing the Tele-consultation services and Patients who were receiving Tele-consultation services from each department of AIIMS Jodhpur. Doctors and Patients were interviewed.

Result: In this study it was found that a majority of the health care workers considered telemedicine a quite useful and feasible platform to deliver health services and were satisfied with it. Majority of the patients were also satisfied with services and were ready to take telemedicine services further.

Conclusion: It was concluded in this study that Telemedicine services is quite feasible for Health care workers and an efficient platform to receive health care services for the patients.

As per the findings of the study some of the challenges like miscommunication and difficulty in physical evaluation and network connectivity need to be improved.

Key-words: Telemedicine, Health Care Worker, Patient, Level of Satisfaction

Abstract Id	Efi_149_214_COV
Title	TELECONSULTATION DOING COVID PANDEMIC
Authors	Dr. Sabira Aalia Dkhar, Dr. Ruqia, Dr. Tazean Zahoor Malik ,GMC, Srinagar

Introduction : Teleconsultation is an essential tool for used by different countries during pandemic. Teleconsultation, sometimes referred to as remote consultation or telehealth, refers to interactions that happen between a clinician and a patient for the purpose of providing diagnostic or therapeutic advice through electronic means. Teleconsultation are a safe and effective way to assess suspected cases and guide the patient's diagnosis and treatment, minimizing the risk of disease transmission.

Methods: Study design: cross-sectional analytical study design. Sample size: taking 50% as population proportion and 5% margin of error with 95% confidence interval the sample size comes to 385. We had 386 participants Study tool: the study data collected was done using an online questionnaire which was pretested in a pilot study on 30 final year MBBS students and interns and necessary changes in style, response and language were done. Study population: students from different medical colleges of India - like Chandigarh, Delhi, Kerala, Srinagar, Sikkim. Statistical test: all analysis was done in excel for descriptive results and associations were done using SPSS version 26.0.

Results: In our study we found that 25.4% of the students were part of teleconsultation, most of them were more than equal to 23 years of age (79%). There were 68.9% of final year students and 31.1% were interns. Around 57.3% were hostellers. 24.4% of the students said that their studies were affected. Around 12.2% of the students\/ interns felt that the patients were satisfied. 33.4% felt that they were of some kind of help to the patients. 37.6% students said that their overall work experience during COVID 19 Pandemic was bad. 1.3% students said that they received stipend during this time. Out of the 98 people who were part of teleconsultation, 58 had received training and 56 were under supervision. The overall work experience was significantly associated with gender, age, studies, designation, help to patients and those who received training and were working under supervision.

Conclusion : Teleconsultations bring multiple potentials and promises in the case of pandemic, where authorities may request or impose lockdown, closing of borders, limitation on the means of transportation, and so on. Use of teleconsultation among medical professionals should be given more importance and newer approach to improve teleconsultation should be explored.

Keywords: Tele-consultation, MBBS, Interns

Abstract Id	Efi_153_209_COV
Title	**Quality of life among healthcare professionals during COVID-19 Pandemic in a tertiary care hospital of Chengalpattu district - A Cross sectional study.**
Authors	Dr. A. Suriya Deva, Dr. M. Buvnesh Kumar,Chettinad Hospital and Research Institute , Chettinad Academy of Research and Education , Kelambakkam

Introduction: During Coronavirus disease 2019 (COVID-19) pandemic healthcare professionals are most affected as they are in close contact with the patients leading to stress full circumstances with increased patient load, unexpected disturbances to normal life and high risk of exposure which might affect the quality of life in them so the present study is aimed at assessing the quality of life among Healthcare professionals.

Study Methodology: A cross sectional survey on quality of life among healthcare professionals was conducted in a tertiary care hospital using semi structured validated questionnaire (WHOQOL – BREF) from September 2020 to May 2021.After getting approval from IHEC , a face-face survey-interview was conducted among 227 participants who were selected through simple random sampling method. Data analysis was done using SPSS v21.0

Results: The mean total score of the Quality of life (QoL) scale was 63.84. Based on the physical health domain score 61 % had good QoL, 50% had good psychological QoL, 56% had good social QoL and 58% had good environmental QoL. 60% of the participants had an overall good QoL. Healthcare professionals who are young , married and attending COVID-19 patients directly were having poor QoL.

Conclusion: As the mental health domain is affected mainly in this study it needs to be addressed with interventions like proper counselling, adequate rest between duties, spending enough time with their families and friends which can protect the mental health of HCPs are urgently needed in their fight against COVID-19 pandemic.

Keywords: quality of life, healthcare professionals ,COVID-19, pandemic, mental health

Abstract Id	Efi_211_COV
Title	**Challenges faced by Caregivers Visiting Pediatric Emergency at Tertiary Care Hospital in Western Rajasthan during COVID-19 pandemic**
Authors	Uplabdhi Sahu , Jagdish Goyal, Bharat Choudhary, AIIMS JODHPUR

Introduction : COVID -19 has adversely affected the routine preventive and curative services especially for people with chronic conditions and disabilities, due to a limited global movement. The disruption in the healthcare systems is expected to threaten healthcare delivery to the most vulnerable patient population—the children. This study was planned to explore the Pre- hospitalization challenges encountered by the caregivers during emergency visits in the COVID-19 pandemic.

Methodology : This was a cross-sectional descriptive study, conducted to identify the challenges encountered by Caregivers during the visits to the Pediatric Emergency Department of a Tertiary Health Care Facilities. A Pre-Structured questionnaire was created to take the interview of the caregivers which includes demographic features, clinical profile of the patients, and what challenges they had encountered during the visit to the hospital in this pandemic. The variables of participants were analyzed using SPSS v.23 and descriptive statistics like Mean, Proportion, etc. were applied.

Result : In this study total of 110 participants were interviewed, majorities were between the age group 0-5years (55%). The mean age of the participants was 6.91 (±5.25). The most frequent reason for visiting the PED was digestive system disease 21(18.9%). As many as 33(30.6%) participants accepted that they had to face some difficulty in accessing the health care facilities. 28(25.2%). Participants responded that they faced transportation problems to a great extent during the emergency visit. Participants accepted that they experienced some financial difficulty due to the pandemic. In this study, mostly caregivers 43(38.7%) agreed that they faced a delay in seeking health care for the child, due to covid-19.

Conclusion : The finding of our study showed caregivers encountered several challenges during this COVID-19 pandemic situation such as difficulty accessing healthcare facilities, fear of getting an infection, unavailability of transport, an increased fare of a private vehicle, the extra fare of private hospitals for proving health care services.

Key Words: Pediatric Emergency Department, Covid-19, Caregivers, Pandemic, Health Seeking Behaviour

Abstract Id	Efi_152_210_COV
Title	**Post surgery Breast Cancer patients Immediate Quality of Life in Covid pandemic Times : an interim analysis presented using validated EORTC 30 and BR23 questionnaires: Data from a comprehensive tertiary care hospital in Bhubaneswar**
Authors	Dr. Varsha Srivastava, Prof(Dr) Sonali Kar, Dr.S. Parida, Dr.S. Sahoo, KIMS

Introduction: Breast Cancer continues to be a stressful and stigmatized disease, inspite of a very high survival rate and very good management strategies. The improved survival rates, awareness about the disease and lowered age of incidence has ushered in a need to do a quality of life (QOL) assessment for such female patients. The European Organization for Research and Treatment of Cancer (EORTC) module QLQ-C30 and the breast cancer-specific module BR-23 have been validated to assess QOL in western women with breast cancer. These questionnaires were designed keeping in mind the lifestyle of western women. The reliability and validity of the questionnaire has thereafter been tested and found to be highly consistent across different language and cultural groups in English-speaking countries, and northern and southern Europe and in the last decade have been found to be equally reliable in Indian languages and in our cultural milieu. QOL assessment is an important surrogate end-point in various clinical trials testing a treatment intervention, in addition to the actuarial improvement in disease-free survival or overall survival. While a proportional reduction in the odds of recurrence or death is observed irrespective of nodal status, the absolute benefit from systemic therapy is clearly more among those with a higher risk of recurrence. The current study is a part of a detailed dessertation of single point assessment of QOL among operated breast cancer patients between May 2020 till date and compare it with published literature to detect an effect of COVID pandemic on the QOL means.

Methods: After ethics approval, QLQ-C30 and BR-23 modules served for the first time (visit 1) within 2–4 weeks of surgery for breast Cancer, irrespective of the grade and the operative procedure. The breast care nurse served the questionnaire but the patient herself, unassisted by the nurse or any other individual, completed the questionnaire. Thus, only those women who could comprehend the questions asked were included in the study. Hence out of 54 women only 40 could answer the questionnaire with a nonresponse rate of over 20%. Scoring of the QLQ-C30 and BR-23 was done according to the scoring procedures described in the EORTC scoring manuals. A range of analyses was conducted to establish scale reliability and to evaluate the validity of the questionnaire. Reliability or internal consistency of the multi-item questionnaire scales for the entire sample was assessed by Cronbach alpha coefficient. A magnitude of >0.70 was sought. Non-parametric tests were used because of non-normal distribution of scores. The Mann–Whitney U test was used to compare scores between the two groups at each visit and the Friedman test to test for changes over time. The global QOL score (q29, q30 in QLQ-C30) had a normal distribution.

Results: 40 women with mean age 40.2 years (range 24–72 years); 62% of women were premenopausal and 38% postmenopausal. Chemotherapy significantly affected the global

QOL with poor scores during treatment (p=0.016). The results also showed lower functional scales especially with respect to sexual function (p=0.02) after chemotherapy, which could be assesed for only 12 out of 40 subjects. Mean score for EORTC above 70 points indicated good quality of life and those with arm symptoms were badly affected with the mean scores dipping to below 30. As compared to previous studies the scores in covid were at least 9 to 11 points less for all domains of EORTC30 as reported in 2 other Indian studies. Emotional domain was worst documented and main stressor was inability to meet physician and lack of ease to visit hospital. But telemedicine services offered by our institute worked in 25 cases to resolve these issues in time.

Conclusion: Complete healing of cancer survivors can be considered only if QOL scores are above 75 to 80 as reported in other studies. Hence a role of Public health specialist in cancer management is highlighted to offer holistic care to breast cancer patients and our tertiary care center aims to achieve that.

Keywords: QOL, BREAST CARCINOMA,EORTC,BR23

Abstract Id	Efi_112_24_COV
Title	**A comparative study of seroprevalence titer of Covid 19 IgG antibodies in symptomatic and asymptomatic individuals in South Andaman Islands.**
Authors	Dr. Deepak kumar, ANIIMS Port Blair.

Introduction: Sero-surveillance studies are essential to assess the extent of the spread of Covid 19. The comparison of seropositivity among symptomatic and asymptomatic cases can add value to the scientific knowledge & help in formulating valid predictions regarding immunity status in the post-covid period. Hence the present study was aimed to compare seroprevalence titer of Covid 19 antibodies in symptomatic and asymptomatic individuals in South Andaman.

Methodology: A population-based sero-surveillance study covering more than 4000 samples was carried out in the South Andaman district. The multistage cluster sampling was used for the selection of participants. The venous blood samples were tested for IgG Covid antibodies by Erba Lisa Elisa kit. The data were analyzed by applying appropriate statistical tests like Chi-Square\/Fisher exact test.

Results: The Covid antibodies were present in 39.7% (1624) of the population. 94.7% (3871) of the participants were asymptomatic. There was no significant difference in antibodies level between symptomatic and asymptomatic persons. (p value=0.06) as most of the symptomatic patients had milder symptoms (98.2%). Most of the previously diagnosed Covid persons were seropositive (71.5%). The previously diagnosed Covid persons had significantly higher antibodies as compared to persons who were previously diagnosed as Covid negative (p-value 0.0001).

Conclusion: The current study signifies that viral exposure has to lead to predominantly asymptomatic infection. The antibodies level between symptomatic and asymptotic persons was similar as most symptomatic patients had symptoms of mild covid infection. The previously infected persons had higher antibodies in comparison to persons who were not infected previously.

Keywords: Andaman, Covid 19, SARS-CoV-2, Serosurvey, Symptoms

Abstract Id	Efi_118_247_COV
Title	**The Perception of Medical Students in using technology to meet the challenges of medical education during COVID 19 outbreak**
Authors	Dr Ipsa Mohapatra, Kalinga Institute of Medical Sciences

Introduction: The prevailing COVID19 pandemic, exposed the students to a new platform of virtual online teaching. The study was planned to find the "Perception of Medical Students in using technology to meet the challenges of medical education".

Methods: the study was conducted in May 2020, after one month of starting online classes; using a cross-sectional study design, the students of 2019 admitted batch were given a researcher-made google questionnaire with sections on i. Challenges of Medical Education, ii. Educational Advantages of Technology, iii.medical apps used, iv.advantages and disadvantages of using technology in medical education.

Results: 119 of 150 medical students responded, equating to a response rate 79.33%. 73.9% believed that technology should be to support learning and is not a replacement for face-to-face learning. Among advantages reasons cited were, helped keep in touch with studies, cover syllabus, studying from the comfort of their home. Disadvantages cited were, they couldn't connect with the teachers as classroom teaching, technical problems, sometimes lack of synchronization.

Conclusion: The study helped identify the students' perception of technology in medical education, which will help policy makers in identifying a role of appropriate need-based inclusion in the medical curriculum. This feedback gave a students' perspective of the challenges faced in use of technology in Medical Education.

Keywords: Perception, online class, medical education

Abstract Id	Efi_110_26_COV
Title	EPIDEMIOLOGICAL STUDY OF POST COVID MUCORMYCOSIS CASES ADMITTED AT CIVIL HOSPITAL, AHMEDABAD DURING COVID-19 PANDEMIC
Authors	Dr. Mayur Sayta, Dr. R.G. Mahajan,BJMC, Ahmedabad.

Introduction : Mucormycosis is an angioinvasive fungal infection caused by a group of molds called mucormycetes. Corticosteroids are commonly used to treat serious form of COVID-19 disease but unfortunately, corticosteroids are also immunosuppressive and increase blood sugar. Both of these effects are now believed to contribute to mucormycosis.There are very few studies done on epidemiology of mucormycosis during covid-19 pandemic. Henceforth, aim of this study is to know the epidemiology of Post Covid mucormycosis during covid-19 pandemic.b)

Methodology : A Cross-sectional study was carried out at Civil Hospital, Ahmedabad from 1st June-2021 to 22-June 2021. A total of 607 patients were enrolled in the study who were admitted with biopsy proven, or whose CT\/MRI findings were suggestive of Mucormycosis and previous history of Covid Positive at Civil Hospital, Ahmedabad from 15th May-2021 to 21st June-2021.A Pre-designed, Pre tested questionnaire was used to collect data. Informed verbal consent was obtained from all study Participants.

Results : Study reported that Males (66.23 %) were more affected than Females (33.77 %). The mean age was 52.1±12.3 years and the median age was 55 years (range,18-84 years)Headache (59.31 %) was most common clinical manifestation of Mucormycosis followed by Facial Pain (47.61 %), Eye swelling (43.82 %) and least common was Toothache (0.16 %).The most common site involved in Mucormycosis was Para-nasal sinus (57.83 %) followed by eye (50.58 %), oral cavity (20.59 %). A total of 481 patients were having co morbidities amongst which only diabetes was present in 49.09 %, only Hypertension in 6.43 %, while both Diabetes and Hypertension was present in 23.72 %. Among infected patients 18.29 % were Partially vaccinated and 3.29 % were Fully vaccinated.History of Steroid therapy (70.02 %) was present followed by Remdesivir treatment (50.41%). No significant difference found between gender and Risk factors.

Conclusion : Mucor were prominently seen in the patients who had h\/o covid-19 infection and concurrent use of steroid mostly in diabetic patients.

Keywords: Mucormycosis, Covid19, Steroid, Diabetes

Abstract Id	Efi_135_230_COV
Title	**Facilitators and barriers for Covid 19 contact tracing: evidence from Jodhpur (India)**
Authors	Divya Gehlot, Dr Pankaj Bhardwaj, Dr Nitin Joshi School of Public Health AIIMS Jodhpur

Introduction : The world has been affected by the deadliest pandemic Covid 19 for the past two years. In the absence of vaccination and prompt treatment among various methods adoption of contract tracing as per WHO recommendations for identification and containment of infection in the community proved to be one of the useful tools in controlling the spread of covid19.This study was carried out to generate evidence about the potential facilitators and barriers for conducting COVID 19 contact tracing in Jodhpur

Method : 15 healthcare workers were interviewed who did COVID 19 contact tracing of 600 patients. 600 Covid 19 patients were contacted via telephonic medium during one month (16-04-2021 to 16-05-2021 for contract tracing. The data obtained were then analyzed to document the facilitators and barriers while doing COVID-19 contract tracing and what improvisations are required.

Result : The 15-healthcare interviewed revealed, out of 600 patients, 475 attended the call at once, and the rest 125 were contacted again out of which 40 attended the call second and 30 third times. Out of 55 patients, 20 patients' numbers were incorrect and 35 didn't receive the call at all. The list of these patients was communicated to the local health authority for further investigation. Out of 475 patients, 300 were cooperative in providing details. 125 were hesitant about sharing personal information. Rest 50 patients contacted were reported dead.

Therefore, shared responsibility and cooperative behavior from patients, technical learning, data handling, and communication skills for healthcare workers, and preventive strategy for further spread of disease were the core facilitators observed during contact tracing.On the other hand, privacy concerns, circumspection, fear of stigmatization and patients' unease from patients, timing issues, telecommunication errors for healthcare workers, were the core roadblocks observed during the contact tracing

Conclusion: Thereby keeping into consideration all the above-mentioned observations, contract tracing proves to be a useful tool in halting the spread of COVID-19 and any other communicable disease.

Keywords: COVID-19, contact tracing, healthcare workers

Abstract Id	Efi_136_229_COV
Title	**Trend of COVID-19 pandemic in India during First wave: A methodical comparison with Italy, UK and US**
Authors	Dr. Neha Mantri, Dr. Manoj Kumar Gupta, Dr. Pankaj Bhardwaj, Dr. Akhil Dhanesh Goel, Dr. Suman Saurabh, Dr. Sanjeev Misra, AIIMS, Jodhpur, India

Introduction : Each country has tried a different approach to handle the COVID-19 pandemic. Considering these wide variations, it was felt interesting to see that how the curves of epidemiological indicators panned out due to differing preventive strategies. Therefore, this study was planned with the objectives to statistically compare the trends of epidemiological indicators of COVID-19 in India with that of Italy, the UK, and the US.

Methodology : In this descriptive analysis, epidemiological indicators were calculated and their trends were plotted and compared statistically. Regression analysis was done to predict the fatalities. All the available raw datasets of India, Italy, the UK, and the US till 5th July 2020 were retrieved, which were having day-wise numbers of cases, deaths, recoveries, and tests conducted. To avoid the extreme variations due to spikes in cases on particular days all raw data was converted into a seven-day moving average before calculating the epidemiological indicators.

Results : The trends of total and active cases per million populations are rising in India and the US, while Italy has achieved the plateau in the total cases per million populations, and active cases have been sharply declining with time. The UK is about to achieve the same. India has remained far behind the other three countries in the number of tests per million populations (p<0.05). In the initial phase, the test positivity rate of India was quite lower but has overtaken Italy and UK. India has always reported a higher recovery rate than the US and lower than Italy. CFRs have achieved a plateau in Italy and UK, in the US it is declining, while it remained almost constant in India throughout the pandemic. Testing was a significant covariate in predicting the fatalities.

Conclusion : India was able to manage the initial phase of this pandemic due to early and strict government interventions and strong public health responses.

Keywords: COVID-19, Pandemic, Disease Outbreak, CFR, Recovery Rate

Abstract Id	Efi_137_228_COV
Title	**Testing guidelines and strategies by ICMR: A roadmap to handle COVID-19 pandemic in India**
Authors	Dr. Neha Mantri, Dr. Manoj Kumar Gupta, Dr. Pankaj Bhardwaj, Dr. Akhil Dhanesh Goel, Dr. Suman Saurabh, Dr. Sanjeev Misra, AIIMS, Jodhpur, India

Introduction : Since the inception of the COVID-19 pandemic, the cases are continuously increasing in India. Though this growth of the cases was relatively slower during the initial phase of the pandemic, now the cases are increasing rapidly and positioned the country at third place in the world in the COVID-19 tally. This study was done to review all the guidelines and strategies released by the ICMR and MoH&FW, GoI, in regard to the testing of COVID-19 in the country and to compile them with timelines.

Methodology : All the available raw data till 30th July 2020 was retrieved from the crowdsourced database (https:\/\/www.covid19india.org), which includes the reporting from state and central government agencies in India. Cumulative and per day test positivity rates were calculated and their trends were plotted with the trend of the testing capacity of the country.

Results : A sharp rise in the test positivity rate was observed until the first week of April, which declined slightly during the next month. After that, the test positive rate is found to be continuously increasing. At the same time, the testing capacity of the country has also increased from about 250 tests per day at the beginning of March to 6.42 lac per day by the end of July. ICMR put a lot of effort into the expansion of the laboratory network to ramp up the COVID-19 testing capacity in the country.

Conclusion : Without having any delay, dynamic guidelines, and strategies for testing with a lot of innovations were developed and implemented maintaining all the quality and safety parameters. ICMR worked tirelessly on the forefront to devise a roadmap to handle the COVID-19 pandemic in India through the development of testing strategies and guidelines.

Keywords: COVID-19, Laboratory, Pandemic, Testing.

Abstract Id	Efi_138_227_COV
Title	SOCIODEMOGRAPHIC PROFILE OF PEDIATRIC COVID-19 CASES DURING FIRST AND SECOND COVID WAVE IN A TERTIARY CARE CENTRE -A COMPARATIVE STUDY
Authors	Ardra Merin George, Dr.Priya Chandran Dr.Jayakrishnan Thayyil , Dr. Thomas Bina , ,Government Medical College ,Kozhikode

Introduction : Covid -19 has become a global threat affecting millions of people world wide .3.33Cr people in India were affected with Covid -19 in which 13.1% were reported from Kerala. 13.7% of the active cases are admitted either in hospital\/Field hospitals. This study has been done to find out the sociodemographic profile of Covid -19 cases of paediatric population (≤12 years) admitted at a Tertiary Care Centre in Northern Kerala from the beginning of Covid Pandemic

Methodology : Retrospective record based study done by reviewing Regional PEID cell data of Government Medical College ,Kozhikode from March 2020-August 2021 . Data on sociodemographic details and outcome of disease were collected and analyzed using PASW 18.

Results: Pediatric cases constitute 4.7% of total Covid cases in our institution. Out of total 871 case reported during the study period ,57.8% of cases were reported during the 1st wave(march 2020 to January 2021) . Majority were males(55.2%) and the median age was 1year .42.1% of cases were admitted in the second wave (February 2021-August 2021).Most of them were 52.9% and the median age was 4 months. CFR among the study group was 2.5% .Majority of deaths were reported during the second wave (77%) and among younger children (median age -5 months)

Conclusion: There is a decrease of cases from first to second wave. Younger children were more affected during the second wave .CFR were more in second wave .CFR-case fatality ratio

Keywords: Covid -19 ,Pediatric cases ,case fatality rate, first wave, second wave

Abstract Id	Efi_140_225_COV
Title	People's Perspective Towards Covid-19 Vaccination in Puducherry District- A Cross Sectional Study
Authors	Dr. Sadhvika Kanagat

Dr.Abhijit V. Boratne Mahatma Gandhi Medical College & Research Institute

Introduction: In Puducherry district till date a total of 1,22,880 people have been affected and 1801 people have died due to COVID-19 infection. The COVID 19 Vaccination offers an effective way to transition out of this phase of the pandemic by preventing hospitalization and deaths.

Objectives: To assess the willingness to get vaccinated and explore the reasons behind vaccine hesitancy of COVID 19 vaccination among people in Puducherry district.

Methodology: The study was a community based cross sectional study, which was done among the people residing in the Urban health training centre (UHTC) field practice areas of Mahatma Gandhi medical college and Research institute, Puducherry. It was done between march to may 2021 in 1,298 households using web based google forms. Universal sampling was used wherein households belonging to the UHTC field practice areas of Mahatma Gandhi medical college and Research institute, Puducherry were included in the study. People who did not respond and those who were not available were excluded from the study.

Results: 71% of people residing in these areas were willing to take the vaccination. Only 59% of the people were willing to travel more than 30 minutes to get vaccinated. Among various types of healthcare facilities in Puducherry 79% of the people preferred visiting government healthcare facilities. Among the various reasons behind vaccine hesitancy that were documented, 77.4% of the people had fear of adverse effects which prevented them from getting vaccinated.

Conclusion: Majority of the people were willing to take the vaccination in government-based healthcare facilities. People were willing to take the vaccine if it was administered close to their residence. e) Recommendations: Improvement in vaccine availability should be done in government-based healthcare facilities. A government and private partnership in vaccine logistics, supply and manpower needs should be introduced for a more efficient vaccination drive.

Keywords: COVID-19 vaccination, Vaccine hesitancy, healthcare facilities

Abstract Id	Efi_143_222_COV
Title	**Self reported adherence to personal protective measures against COVID-19 among social media users in a rural district of Northern India.**
Authors	Dr. Mohsina Mukhtar Dr. Suhail Nazir, Government Medical College, Srinagar

Background: COVID-19 has led to an unprecedented global health crisis across world infecting millions of people and causing scores of deaths. Hence most effective way to curb this disease still is to strictly adopt and follow various preventive measures against COVID-19.

Methodology: A web-based cross-sectional study was conducted in District Anantnag, Kashmir including active social media users who are 18 years and above of age, residing in different parts of District.

Results: A total of 483 subjects were included. More than 3\/4th (87.0%) knew about mode of spread of virus. More than 90% reported to use a face mask. Only 43.9% reported to sanitize\/ wash their hands with soap after touching public installations. Most of them reported to avoid social gatherings and crowed places. More than half of them perceived COVID-19 a moderate risk. Regarding effectiveness of measures against COVID-19, more than 95% of subjects thought that wearing a face mask and following social distancing are effective for preventing COVID-19.

Conclusion: Overall the knowledge about COVID-19 was satisfactory but the perception of effectiveness of the measures against COVID-19 yielded a mixed response. Though the cases have decreased, the adherence to COVID appropriate behaviour is still the need of the hour.

Keyword: COIVD-19, India, J&K

Abstract Id	Efi_144_221_COV
Title	**Change in quality of life, exercise capacity and mental health among a cohort of COVID-19 survivors in Kashmir Valley: An observational follow-up study**
Authors	Asif Jeelani, Dr SM Salim Khan, GMC Srinagar

Introduction: With an ever-increasing pool of recovered COVID-19 patients, and studies suggesting that a large proportion of patients have persistent chronic symptoms, health systems must be prepared to deal with long-term sequelae of COVID-19. The present study was conducted to estimate the quality of life, exercise capacity, and post-traumatic stress disorder among recovered COVID-19 patients in the early convalescence phase.

Methodology: A cross-sectional study using EQ-5D-5L, 6 Minute walk test (6MWT), MMRC Scale, and primary-care PTSD screen were done during January 2021. Subjects who had recovered 6 weeks before data collection were included in the sampling frame and selected by stratified random sampling with stratification done based on hospitalization. Selected subjects submitted EQ-5D-5L for both pre-COVID-19 and current status. 6MWT and PTSD screen was submitted only for current status and compared with values for the healthy population. The sample size was calculated using the formula for prevalence studies. Subjects who had any limitation in exercise capacity prior to COVID-19 were excluded. A P-value of less than 0.05 was considered significant.

Results: A total of 112 subjects of whom 13 had been hospitalized were included. The mean age of subjects was 46.4 years and 56% of subjects were male. The mean index score on EQ-5L-5D decreased from 0.86 to 0.71. Mean Visual Analog Score was 68. The mean distance on 6MWT was 416m that was significantly less than non-COVID-19 subjects. 62% of subjects were positive on the PTSD screen. On multivariate analysis, symptomatic COVID-19 increased age, and hospitalization was associated with a decrease in quality of life and exercise capacity. The highest decrease was found in dimensions related to usual activities, pain\/discomfort, and anxiety domains

Conclusion: COVID-19 is associated with a persistent decrease in overall quality of life particularly for symptomatic subjects and older subjects. There is a need for post-acute rehabilitation for COVID-19 survivors.

Keywords: EQ-5D-5L, Long COVID-19, Exercise capacity.

Abstract Id	Efi_7_151_COV
Title	STUDY ON MASK USAGE: KNOWLEDGE AND PRACTICES FOR PROTECTION AGAINST COVID-19 AMONG INDIAN ADULTS
Authors	Fazeelah Tasleem, Asma Aftab, Asra Saqib, Jubair Shamsi Jawahar Lal Nehru Medical College

Introduction: Mask usage among adults is one of the best ways to prevent person-to-person transmission of COVID-19, as it spreads mainly by droplet transmission. It has proven to protect oneself as well as others around from infection. But it highly depends on its proper usage. Assessing the prevalent practices in the general masses is important to identify the existing lacunae and to address the issues. Access to knowledge and proper practices of mask usage are the basics to achieve a good outcome. So, this study was conducted, just after India was hit by second wave to assess knowledge and practices regarding mask usage among Indian masses.

Methods: This cross-sectional study has been carried out in the individuals 18 years and above, in the months of June and July, 2021 to assess mask usage knowledge and practices regarding the same, among Indian adults. Inclusion criteria was age more than 18 years and giving consent to participate. An online questionnaire was prepared using google forms and posted on various social media platforms, inviting people from diverse backgrounds to participate in it. Questionnaire was kept anonymous. A total of 230 people participated in the study out of which 5 responses were found to be incomplete and were not included in data analysis.

Results: Questionnaires filled by 225 participants were complete and were analysed. Majority participants were from age group 18-29. 36.9% males and 63.1% females participated. Majority resided in urban areas and were graduates or above. 62.2% participants were students while 20.4% were health careworkers. 35% of the study population was from first responder group. The estimated prevalence of regular mask usage was found to be 88%. Only 41.7% used N-95masks, 27.1% used surgical masks and 10.5% used fabric masks. 20.1% population did double masking. 9.2% population never\/rarely used masks and stated that they did not feel comfortable wearing it as the major reason. 20.8% reported that they changed masks each time after use,32.4% population said they changed masks once a day while 21.3% changed it once a week.55% of the study population had the habit of washing their hands before\/after wearing the mask. 34% of the participants accepted that they pulled down their mask down while speaking. 59.2% said that for removing they untieFor disposing of 67.5% had a separate bin at home\/office.

Conclusion: The study noted that a larger proportion of the population is in the habit of using masks, however better IEC practices are required in order to educate the masses regarding proper usage and handling of the same. Only with better practices, efficiency of mask usage for protection against COVID-19 pandemic can be achieved.

Keywords: MASK, KNOWLEDGE, PRACTICES

Abstract Id	Efi_9_149_COV
Title	**A cross-sectional study to assess the knowledge, practice and fear of Covid-19 among security guards of Christian Medical College Vellore and the Stigma faced by them in a South Indian Community**
Authors	Dr. Mithula.T, Dr. Jackwin sam paul - Dr.Stephen Philip Jagadeesan, Dr.Nalam Middleton,D.Chris Sneha - Dr.Namitha Varghese- Dr.Ilamprabhu

Introduction: The emergence of the COVID - 19 pandemic has exacerbated fears worldwide leading to stigma in most cases. There has been disproportionate allocation of resources which has led to the most vulnerable population to reduce their health seeking behaviour while certain sections of the society have been stigmatized due to fear of spread of the COVID 19 virus.

Objectives: To assess the knowledge, practice and fear of COVID - 19 among the security guards of Christian Medical College Vellore and the stigma faced by them in the community.

Methods: In a cross-sectional study conducted among 150 security guards of a tertiary hospital, information regarding socio-demography details, knowledge, practice and fear of COVID-19 was recorded. Univariate analysis followed by bivariate analysis was carried out. The effect of socio-demographic and working environment on knowledge, practice, fear and stigma of COVID-19 was analysed using chi square tests.

Results: Among the 150 security guards only 53% (95%C.I.:44.85%-61.15%) individuals had poor knowledge but almost all of them had appropriate infection prevention practices. Only 5 % (95%C.I.:1.4%-8.6%) had fear of COVID 19 and 35% (95%C.I.: 27.2%-42.8%) of them felt they were stigmatized. It was found that married security guards were 30% less likely to have less fear of COVID-19.

Conclusion: This study shows that there is a high prevalence of poor knowledge among security guards of Christian Medical College, Vellore which require intervention. It also shows that the individuals who are highly vulnerable of COVID 19 infection need to take appropriate protective measures to prevent disease and stigma associated with it.

Keywords: covid-stigma, covid-fear, covid-vulnerable population

Abstract Id	Efi_10_148_COV
Title	**Assessment of COVID-19 vaccine literacy and hesitancy among doctors: A cross-sectional study**
Authors	Dr Elton Fernandes, Dr Snigdha Thakur, Dr Lalit SankheDr Chhaya Rajguru, Grant Government Medical College And Sir JJ Group Of Hospitals

Introduction- Coronavirus disease 2019 (COVID-19) pandemic has affected more than 200 countries, causing loss of life and livelihood. The accelerated development of the COVID- 19 vaccine is vital, and early data suggests that it is both safe and productive. Vaccine hesitancy remains a barrier to complete population inoculation against highly infectious diseases.

Methods- This is a web-based cross-sectional observational study. The study aimed to assess the literacy and hesitancy regarding Covid- 19 vaccines among doctors.

Results- A total of 114 responses were collected. 66.67% of the population belonged to the 21-40 age group. Almost two-thirds 68.57% of the participants were willing to take the vaccine. 73.33 % were willing to take the vaccine even if it is charged.36 (50 %) participants were updated with the latest information on the Covid-19 vaccine, whereas 33 (45.83 %) felt that benefit of taking the vaccine is more than the risk. Also, they had trust in the manufacturing company of vaccine. 31.43% were not willing to take the vaccine, of this, 60.61 % gave the reason that as Covid-19 is a new disease and new vaccine, there is a lack of evidence and studies on the efficacy and results of the vaccine.

Discussion- Our results indicate that doctors are more willing to take the vaccine due to greater awareness and knowledge of vaccine safety. Interventional educational campaigns targeted towards populations at risk of vaccine hesitancy are urgently needed to combat misinformation and avoid low inoculation rates.

Keywords: Vaccine literacy, Vaccine Hesitancy, COVID vaccine.

Abstract Id	Efi_15_143_COV
Title	**COVID-19 mortality and chronic morbidity in hospitalized patients of a tertiary care hospital of Kashmir Valley**
Authors	Tazeen Khan, Government Medical College Srinagar

Background: COVID-19 has been responsible for more than 4.5 million deaths globally. The mortality rates vary across nations and seem to be higher among patients suffering from chronic morbidities. We studied chronic morbidities and the duration of hospital stay in hospitalised patients who died due to COVID-19.

Methods: Mortality rates were estimated among 8530 COVID-19 patients admitted in a tertiary care hospital of Srinagar, Kashmir admitted from March 2020 till September 2021. The effect of age and chronic morbidity on the duration of stay in the hospital before death was analyzed by ANOVA and t-test respectively.

Results: The overall mortality rate was 10.4% among the COVID-19 patients. Among all deaths 61.5% were males. Nearly half of deaths (47.6%) occurred in the age group of 61-75 years. 1.6% and 8.3% deaths were from the subjects aged below 30 years and 31-45 years age group respectively. 39.5% of patients who died, had at least one chronic morbidity and 22.5% had multiple morbidities. Hypertension, type 2 diabetes, COPD, chronic renal disease and cardiovascular diseases were found in 28.2%, 18.0%, 5.4%, 4.5% and 2.8% patients respectively. Mean Stay in the hospital before death was 5.7±4.5 days. 18.5% of deaths occurred within 24 hours of admission, 52.4% from 24 hours to one week and 24.2% in the 2nd week. The difference in the mean stay in days in hospital according to age and chronic morbidity was not found to be statistically significant.

Conclusion: Mortality is higher among males, hypertensive, diabetic and elderly patients.

Keywords: COVID-19, Mortality, Chronic Morbidity, Duration of stay

Abstract Id	Efi_19_139_COV
Title	**Correlation between knowledge, risk perception to COVID-19 disease and perceived importance to COVID vaccination among people living in Cuddalore district, Tamilnadu - A cross sectional study**
Authors	Dr. N. Rama Swathika, Dr. Viknesh , Rajah Muthaiah Medical College Chidambaram

Introduction: Human behaviour is influenced by peoples' perceptions. In this recent COVID times, adapting and practicing COVID Appropriate Behaviour (CAB) is of vital importance.

AIMS AND OBJECTIVES: To find out the mean COVID knowledge score, risk perception score and perceived importance score of COVID vaccination for various age,sex and educational categories. To find out the correlation between COVID knowledge and risk perception score and perceived importance to COVID vaccination.

Methodology: A cross-sectional study was conducted among 533 participants residing in cuddalore district in the month of August 2021 using a pre-tested,semi-structured questionnaire. Data entered in MS Excel, analysed in SPSS version 26. Results expressed as percentages,in case of qualitative data. Means,SD used in expressing quantitative data. To compare two quantitative variables Pearson correlation test was applied.. 'p'value <0.05 was considerd significant.

Results: mean COVID knowledge score is 12.3152. Mean risk perception score is 18.6642. Mean perceived importance score is 8.3771. Increased educational status is found to be associated with COVID knowledge score,risk perception score and perceived importance score. Increase in COVID knowledge score also increases risk perception to COVID-19 disease and perceived importance to COVID vaccination. Similarly Increase in risk perception to COVID-19 disease also increases perceived importance to COVID vaccination.

Conclusion: Improving knowledge regarding COVID-19 and COVID vaccination will aid in positive (CAB) COVID Appropriate Behaviour in short term. In a long term, improving educational status of the population will aid in an easy adaptation to COVID Appropriate Behaviour (CAB).

Keywords: COVID-19, risk perception, knowledge, vaccination

Abstract Id	Efi_20_138_COV
Title	**Comparison of Epidemiological Characteristics of the first and second waves of coronavirus disease in Tertiary care hospital of Agra, India**
Authors	GEETU SINGH

INTRODUCTION: The year 2020 was marked by COVID-19 pandemic caused by novel- corona virus (2019-nCoV) that emerged in early December 2019 in Wuhan, China and surprised the world with its spread and uncertainties. Different waves of COVID-19 were reported from many countries in 2020 and spanning over year 2021. The fiery second wave of India in April and May 2021 is said to be led by highly transmissible delta variant The nation has recorded more than 33 million cases of COVID-19 and India's COVID-19 vaccination coverage crossed 70 crore landmark achievement on 7th September 2021.

OBJECTIVES: The objectives of present study were to determine demographic factors (age, sex, area wise distribution of patients from Agra districts) for patients admitted at our tertiary care hospital, some epidemiological parameters (duration of stay in hospital, number of members admitted from one family), and trends of COVID-19 disease

METHODS: This is an observational study from March 2020 to September2021 from tertiary care hospital of Agra district, Uttar Pradesh, India. All COVID-19 confirmed cases admitted in Sarojini Naidu Medical College, Agra, Uttar Pradesh from March 2020 to September 2021 were included in this study.

RESULTS: During first and second wave 2639 patients were admitted in our dedicated COVID-19 hospital. Epidemic curve is described as; during first wave (in 2020), maximum number of cases was admitted in month of September, s. While during second wave in year 2021, cases peaked in month of April in our tertiary care setting. During first wave majority of patients belonged to age group 21-40 years and 41-60 years (33.19% and 33.02% respectively) For second wave, in context of age profile of patients; maximum number of patients were admitted in age group of 41-60 years (43.10%) tailed by 61-40. During first wave 35% were females and 65% were males while this percentage narrowed in second wave.

CONCLUSION: We have provided a comprehensive epidemiological analysis of COVID-19 cases in Agra district. Data-driven analyses are urgently needed to help tackle health inequities during the ongoing epidemic.

Keywords: PANDEMIC, COVID-19, WAVES

Abstract Id	Efi_24_134_COV
Title	**A Cross-sectional survey on vaccination coverage at Urban Health Centre of a district in Central Gujarat**
Authors	Dr. Gopi Kalariya, Dr. Bharti Makwana, Dr. Kalpita Shringarpure, Dr. Margi Sheth, Dr. Mohua Moitra, Community Medicine, Medical College Baroda

Introduction: COVID-19 vaccination can lead to herd immunity when a sufficient proportion of population is vaccinated. Effectiveness of vaccination coverage depends on the population's willingness to be vaccinated completely. Objectives of the study was to calculate vaccination coverage in the urban area of a city in Central Gujarat and to document the reasons behind the acceptance and non-acceptance of the COVID-19 vaccine.

Methodology: A cross-sectional house to house survey was conducted to know about the reasons of COVID-19 vaccine acceptance and non-acceptance among people residing in the households n=1346) under an Urban Health Training Center (UHTC) of a Medical College in Central Gujarat. Electronic data collection tool using EpiCollect5 was used for the survey. The interim results are as follows.

Result: Out of the 785 participants in the survey, vaccination coverage was 72.35% for first dose and 83.15% for those who were eligible for second dose. Most common motivation (87.85%) behind taking behind taking vaccination was “good health”. Among the non-users for COVID19 vaccination, 28.57% did not taken the vaccine due to fear of adverse reactions.

Conclusion: Vaccination coverage is average in the urban area surveyed. Majority of the population is motivated to take the vaccine to protect themselves from COVID-19. Public awareness and positive framing of common side effects of COVID-19 vaccination may improve the vaccination coverage.

Keywords: Corona, Vaccination coverage, Vaccine hesitancy

Abstract Id	Efi_32_126_COV
Title	"UTILITY OF MOBILE PHONE IN BENEFICIARIES COMING FOR COVID-19 VACCINATION AT A TERTIARY CARE HOSPITAL, CENTRAL GUJARAT, INDIA"
Authors	Dr Radhika Kuthari, Dr Raman Damor, Dr Kalpita Shringarpure, Dr Mohua Moitra, Medical College Barroda

Introduction: Since the digitalisation of COVID immunisation process, not just owning a mobile phone, but having sufficient skills to use it has become necessary to access the vaccine. This study aims to measure the utility of mobile phones and the factors affecting it, among beneficiaries coming for COVID vaccination at Tertiary Care Hospital, Gujarat.

Methods: A cross sectional study was conducted by purposive sampling among 626 beneficiaries coming for COVID vaccination at Tertiary Care Hospital, Gujarat. After taking informed consent, data was collected with the help of interviewer administered questionnaire via Google form. Data was extracted and analysed in excel sheet and reported in percentage, factors affecting utility have been reported using univariate analysis. We present interim analysis herein as data collection will complete on 30th September.

Results: Of the 626 beneficiaries, 385(61%) were males and 588(94%) owned a mobile phone. Smart phone was used by 537(91%) and 512(81%) had an active internet connection. Only 244(38%) booked the vaccination slots online; of which 132(54%) were booked with the help of other people. Almost one-fourth of total beneficiaries, that is 144(23%) did not register with their own mobile number, a significant number of which 101(70%) were females (p=0.0001). Out of total beneficiaries, 455(77%) had accessed SMS confirming vaccination and 445 (71%) had their vaccination certificate, of those 176(40%) needed assistance to download the certificate. Gender, age, locality and education levels were significantly associated with ability to book slots, access SMS and download certificate (p<0.05) .

Abstract Id	Efi_41_116_COV
Title	A STUDY TO ASSESS IMPACT OF COVID-19 ON TRENDS OF TB PREVALENCE IN TUMKUR DISTRICT
Authors	Gopinath, Savitha rani

INTRODUCTION: Tuberculosis (TB) still continues to be endemic in various regions of the world, with 26% of the global TB cases are from India and needs surveillance, clinical assessment, testing, contact tracing, confirmation of diagnosis with supervised or in supervised treatment regimens for an effective eradication. In 2020, a total of 1.8 million cases reported as against 2.6 million in the previous year. The unprecedented COVID-19 pandemic derailed the momentum gained and the routine TB related services were adversely affected across the country due to COVID containment measures. The rapid and unexpected surge in demand for diagnosis, treatment, and care of COVID-19 patients has interfered with routine TB services. We assess the impact of Covid-19 on trends of TB prevalence in Tumkur district.

Methodology: convenient sampling technique, data of patients diagnosed with TB in Tumkur will be collected from Nikshay portal and District Tuberculosis Centre from the last 3 years for samples tested, TB prevalence, number of relapses, default, failure cases, number of paediatric TB, number of Extra-pulmonary TB, number of MDR, XDR TB. The acquired data will be compared and analysed before pandemic and during pandemic by using statistical software Epi info software version 3.5.3.

RESULTS AND DISCUSSION: It is an ongoing study. Results and discussion to be presented after the analysis.

Keywords: COVID 19, Pandemic, Tuberculosis, Impact.

Abstract Id	Efi_45_112_COV
Title	**Perceptions of medical students towards online teaching during the COVID-19 pandemic from M.R Medical College, Kalaburagi.**
Authors	Dr Della Raj, Dr. Sunil Deshmukh, DR. Mubeen Hussain, M.R.MEDICAL COLLEGE, KALBURAGI, Karnataka

Introduction: The nationwide lockdown restrictions to control the spread of Covid-19 disease have impacted all aspects of life wherein medical education has also been affected. Such measures have resulted in a sudden shift in teaching methods towards online teaching. Online teaching has played a key role in medical education over recent years. Our study has suggested the transition from traditional to online learning is not without challenges. A cross- sectional online survey was conducted on M.R medical college undergraduate students to know the barriers and benefits that they found during online classes.

Methodology: Study Design: A cross sectional study. Study Period: 2 months (July 2021 - August 2021) Place of Study: M. R Medical College, KALABURAGI Sample size: 100 participants. SAMPLING PROCEDURE: Data was collected from a Questionnaire in google form format from the students. inclusion criteria: Third year undergraduate medical students Exclusion criteria: Who wished not to participate.

Results: The study revealed that 20.2 % of participants found online learning not effective, 20.4% found it to be stressful and 25.3% were satisfied with remote learning.

Conclusion: Online learning in medical education is a relatively new concept and one which is rapidly growing. It is important therefore that medical colleges are aware of the barriers and provide ppropriate solutions to the development of this type of learning and support the use of online learning amongst staff and students. In doing so, the teachers and students will be better prepared for the challenges faced in this digital age.

Keywords: online, students, education

Abstract Id	Efi_57_99_COV
Title	**Adverse events following COVID VACCINATION**
Authors	Keerthana A, Dr. Balaji Arumugam. Tagore Medical College and Hospital

Introduction: We have crossed two waves of pandemic COVID-19 disease. Most of the people round the world receive COVID-19 vaccines. In early trials, 75% of participants reported milder vaccine reactions. But now, millions of people have been vaccinated, compared with the thousands enrolled in early studies, reports of some rare, allergic reactions are surfacing and questions are arising about whether any deaths are linked to the vaccine shots. There is no question that the current vaccines are safe and effective. The risk of severe reaction to a COVID-19 vaccine, is outweighed by the protection it offers against the deadly coronavirus.

Objectives: To assess the adverse events following Covishield vaccination. Materials and methods: The study was done among vaccinated individuals through google document forms using questionnaire after obtaining the informed consent. The study participants were selected by convenient sampling method and sample size was 200 vaccinated individuals. The statistical method, chi-square test was applied for testing the hypothesis.

Results: The study was done among 200 vaccinated individuals of which 106(53%) were male and 94(47%) were female. In that most of the people had taken first dose of vaccination (96%). only 29% of people had co-morbidities. In our study, 61% of them experienced pain at the injection site and 57.5% of them experienced tiredness. The next common reactions encountered by most of them was fever (45.5%) and body pain (44%). In this study none of them experienced allergic rash, vomiting and injection site discoloration. The least encountered reactions were nausea, giddiness, sore throat, joint pain, rigor and Insomnia.

Conclusion: In this era of vaccination, there is misconception of information that some of deaths were related to vaccine shots. In order to avoid this kind of information and also to find out any other rare reaction related to COVID-19 vaccination these studies are useful.

Keywords: adverse events, COVID-19 vaccine, allergic reactions.

Abstract Id	Efi_59_97_COV
Title	KNOWLEDGE, ATTITUDE ABOUT COVID VACCINES AND PRACTICES OF COVID APPROPRIATE BEHAVIOUR AMONG PATIENTS ATTENDING COVID SCREENING OPD OF A TERTIARY CARE HOSPITAL IN CENTRAL INDIA: A CROSS SECTIONAL STUDY
Authors	Dr. Manjeet Mohanty, Dr. Aditi Dabir,Dr. Pragati Rathod, Dr. Sarita Wadhva, Dr. Ujwala Ukey Dr. Uday Narlawar ,GMC Nagpur

Introduction- As the world moves from BC to AD- Before COVID-19 to After Disaster; we have reached a phase where COVID vaccines are available, but the acceptance is limited because of little or improper knowledge in the general population. Reinfection, misinformation through multiple media channels have instilled doubts about safety and efficacy of vaccines.

Methods- A Cross-sectional study was carried out in COVID Screening OPD of a tertiary care facility of Central India. Universal sampling was done and all the persons who attended the screening OPD over a period of 1 week from 17-23 June 2021 were included. Of these 266 consented to participate and constituted the study subjects.

Results- Out of 266 subjects, 75.2% were in the age group 18-30 years. 43.2% were females. 21.1% were from rural area. 28.2% had no idea that vaccines are available free of cost at the time of study. 22.6% (95% CI 17.3-28.6%) felt they might get serious side effects following vaccination. 14.6% (95% CI 10.3-19.9%) were of the notion that COVID-19 vaccines might be false\/ faulty. 22.9% (95% CI 17.7-29.1%) felt vaccines were developed & approved without required clinical trials.

Conclusion: Majority of study subjects had adequate knowledge and positive attitude about COVID-19 vaccines. Proper IEC activities should be carried out by governmental and non-governmental organisations with the help of various media using social and online platforms to instil adequate knowledge among those who are lacking it.

Keywords: COVID-19, Vaccines, Knowledge

Abstract Id	Efi_60_95_COV
Title	**CT Severity Among Vaccinated and Non-Vaccinated COVID-19 Patients Admitted in A Designated COVID Hospital, Tamil Nadu.**
Authors	Dr Nivetha, Dr. Balaji Arumugam, Tagore Medical College, Chennai.

Introduction: The first wave of the current pandemic COVID-19 affected senior citizens in larger numbers. So, we began its vaccination drive in India with either Covishield or Covaxin against COVID-19 for 45 years and older.

Objectives: The study is aimed at assessing and comparing the CT severity among COVID-19 patients based on their vaccination status and co-morbid illness influencing the CT severity among the study participants.

Materials and methods: A Hospital records-based – a retrospective study was conducted among COVID-19 patients and the information on their vaccination status, CT severity, comorbid illness in a COVID. The study participants were selected by consecutive sampling method and the sample size was reached at 120 patients in a 2months period. The chi-square test was applied for testing the hypothesis.

Results: A total of 120 patients record were collected in 2 month period of which 72% were male, 48male and the mean age was 57.9 years. Our study compared the vaccinated and non-vaccinated individuals; it revealed 37% of non-vaccinated patients had more CT severity with more lung involvement whereas among vaccinated individuals 3% had the CT severity with more lung involvement which was statistically significant (p-value – 0.0001). Similarly male gender (p-value – 0.0001) and the patients with comorbid illness (P-value – 0.018) showed more lung involvement in our study whereas the age factor has not shown significance in our study.

Conclusion: Our study shows that lung involvement based on CT scan among nonvaccinated patients were more compared to vaccinated patients. Hence COVID vaccination is a key to reduce mortality and morbidity in this pandemic.

Keywords: Vaccination, COVID-19, CT Severity

Abstract Id	Efi_81_72_COV
Title	**Assessment of Covid-19 vaccination session sites in Tribal areas of UT of DNH & DD during Covid-19 pandemic.**
Authors	Dr. Bhaveshbhai Bariya, Dr. Preeti Solanki, NAMO Medical Education and Research Institute, Silvassa, UT of DNH & DD

Introduction: Efficient roll out of COVID-19 vaccine will require a high quality of preparedness at all levels. This study focused on monitoring of Covid-19 vaccination session sites in tribal areas of UT of DNH & DD during Covid-19 pandemic.

Methods: It was a cross sectional observational study conducted at a tribal district of UT of DNH and DD from April to May 2021. Thirty-Six Covid 19 Vaccination session sites were selected randomly and monitored independently for assessing the various parameters like Infrastructure, HR status, Vaccine & logistics availability and AEFI management using the WHO Session site Monitoring Form for Covid-19 Vaccination.

Results: Out of the total 36 session sites observed, majority were held at government health facilities (17;47%) and government schools (16; 44.4%). Three separate designated rooms were available at 21 (58.3%) session sites and hand washing facility with soap and water or alcohol-based sanitizer was available at all the sessions. Almost two third of the session sites (22;61.1%) had displayed IEC materials (banner\/poster\/leaflet) related to COVID-19 vaccination. Mean number of team members for vaccination was 5.08 (SD 1.74). Co-Win app was being used at all the session sites using personal internet connection. Adequate stock of vaccine vials and AD syringes were available at all the session sites. AEFI kit or Anaphylaxis kit was available and Bio medical waste segregation was as per the revised CPCB guidelines at all the session sites. All the team members had received training on their specific roles and responsibilities for Covid 19 vaccination.

Conclusion: A robust mechanism for identification, mitigation and management of challenges is required at various steps of vaccination. Better infrastructure and logistics availability are a prerequisite for successful rollout of Covid-19 vaccination. Close monitoring and supportive supervision will help to identify bottlenecks and challenges at all levels.

Keywords: Covid-19, Vaccination, monitoring

Abstract Id	Efi_82_71_COV
Title	**COVID-19 Preventive Behaviour Based on Health Belief Model. A Cross-Sectional Study among Ayurveda Interns and Postgraduate Students.**
Authors	karma galey, Mackwin Kenwood Dmello, Jeby Jose Olickal, Department of Public health, NITTE University,

Introduction. The health belief model construct can explain and predict individuals' behaviors, particularly regarding the uptake and adoption of health-related behaviors. Hence, we aimed to assess the perspective and practices of Ayurveda professionals towards COVID-19 preventive behavior using the health belief model.

Method. This cross-sectional study was conducted among Ayurveda interns and postgraduates of two selected Ayurveda colleges in Dakshina Karnataka. An online survey using the Kobo toolbox was conducted between the 1st of August to September 4th, 2021. A pre-tested structured questionnaire was used for the survey. Ayurveda professional's perspectives and practices towards preventative behaviors were assessed using the constructs of the health belief model such as perceived susceptibility, perceived severity, perceived benefits, perceived barrier, self-efficacy, and cues to the actions. Data analysis was done using the SPSS version of 15-software.

Result. A total of 152 responses were received; of them, 115 (75.7%) were females, and 131(86.2%) were unmarried. About 149 (98.0%) were vaccinated against COVID-19, 44.1% had served as frontline health workers during lockdowns, and 47.4% believed that the vaccination programs could stop the infection of COVID-19. The mean (SD) score of perceived susceptibility of COVID-19 was 6.6 (1.5), and 69.3% of respondents perceived themselves as susceptible to COVID-19. About 65.1% of students were concerned about the severity of COVID-19 infection, and the mean (SD) score was 8.7 (2.3). Almost all the respondents (94.9%) were agreed on the usefulness of practicing safety measures to prevent infection. More than half of the participants (59.2%) were not felt any barriers to follow COVID-19 preventive measures and 62.5% had TV, radio, or the internet as a cue to action. As being health workers, 88.2% (134) practices safety measures for COVID-19 prevention.

Conclusion. The COVID-19 appropriate preventive behavior was good among Ayurveda students. Our findings also suggest that behavior can be described with the help of a health belief model constructs.

Keywords: Preventive behaviour, Health Belief Model, Ayurveda, COVID-19.

Abstract Id	Efi_84_69_COV
Title	VACCINE HESITANCY AND RISK PERCEPTION AMONG HEALTH-CARE WORKERS IN A TERTIARY HOSPITAL IN NORTH-EAST INDIA
Authors	Dr. Bishwalata Rajkumari, Dr. Regina Wahengbam (Presenting Author)

Introduction: Vaccine hesitancy is an important threat to public health and a major setback for achieving herd immunity especially during the COVID 19 pandemic. Health care workers are a major reckoning force in making the vaccines acceptable to the general population.

Objectives: The study plans to determine the reasons of vaccine hesitancy among health care workers and to assess the association between their risk perception and variables of interest.

Materials and methods: This cross-sectional study conducted among doctors, nurses and other support staff of a tertiary hospital in North-East India who were hesitant to take the vaccine when it was their turn. Using convenience sampling, data collection was done using a pre-tested interview schedule after informed verbal consent. Ethical clearance was obtained for the Institutional ethics committee.

Results: There were 160 participants out of which 30 (18.8%) had low risk perception of COVID-19 infection. Three (1.87 %) of the respondents said they were never going to get vaccinated against the disease and 59 (36.87%) said they may get the vaccine maybe at a later date. While 56 (35%) of the individuals were scared of common AEFI's like fever, chills and rigor, 21 (13.12%) were scared of unknown side effects. Fifteen percent of the respondents had trust issues with the vaccines.

Conclusion: Though majority of the respondents had high-risk perception of COVID-19 infection, but almost one sixth has trust issues with the vaccine. Trust building for the vaccine and information, education, and communication must be in the forefront for making the vaccination drive a success.

Keywords: COVID-19, vaccine, hesitancy, health-care providers

Abstract Id	Efi_121_244_COV
Title	**Covid vaccine hesitancy among pregnant women: A cross sectional study in rural area of Kashmir**
Authors	Iqra Nisar Chowdri, Department of community medicine, GMC, Srinagar

Background: Pregnant women are at increased risk of severe disease, intensive care unit admission, and invasive ventilation when compared with non-pregnant patients of the same age. Therefore, pregnant women are classified as a high-risk population for COVID-19 infection.

Objective: To determine vaccine acceptance and hesitancy attitudes toward coronavirus disease 2019 (COVID-19) vaccines in pregnant women.

Methods: One hundred pregnant women attending the health facility from July to September 2021 were interviewed face to face with questions regarding sociodemographic characteristics, vaccination history, perception of risk for the COVID-19 pandemic, the impact of the COVID-19 pandemic, and acceptance of and attitude toward COVID-19 vaccination were evaluated.

Results: Among all participants, 10 (10%) stated their intent to receive the vaccine. Most common refusal reasons were lack of data about COVID-19 vaccine safety in pregnant populations and possibility of harm to the fetus. Pregnant women in the first trimester expressed higher acceptance of COVID-19 vaccination than those in the second and third trimesters.

Conclusion: The present study reported low acceptance of COVID-19 vaccination in a sample of pregnant women. Concern about vaccine safety was the major reason for hesitancy. Identifying attitudes among priority groups will be useful for creating vaccination strategies that increase uptake during the current pandemic.

Keywords: COVID-19 vaccine, hesitancy, pregnant women

Abstract Id	Efi_123_242_COV
Title	**Assessment of Long Haul in asymptomatic and Mild Symptomatic covid 19 patients – A Community Based Study, in Northern India**
Authors	Dr Sonia Puri, Dr Alka Sehgal, Dr Ravneet Kaur, PGJR

Introduction: In the current pandemic of coronavirus diseases (COVID-19) caused by SARS-CoV-2, multiple studies have been published pertaining to pathogenesis or clinical presentation. An upcoming aspect of the clinical presentation related to COVID-19 is the long-term effects, which are also termed as long-haul or chronic covid syndrome. Various studies have elaborated that not only hospitalized covid patients but also mild symptomatic or asymptomatic sufferers who didn't have severe course of disease also experience persistent symptoms even after the virus is no longer detectable in their body. And on being intensively investigated results are often negative. This research study is an attempt to assess the prevalence of post covid complications in community and educate people about the modalities to combat them.

Objective: To study the prevalence of post covid complications in asymptomatic and mild covid 19 patients.

Methods: A Cross Sectional study has been conducted among recovered covid patients of Northern India. The participant would be selected from the list of covid patients whose contact tracing has been done by systematic random sampling. Information would be sought by Google forms and also telephonically. A self-designed questionnaire would be developed taking help of WHO covid site, Center for disease control Atlanta(CDC) and Ministry of Health , Family welfare Website India, on SARS COV 2.It would be subsequently pilot tested and adequate changes would be made. The questionnaire would contain a brief introduction on the background, objective, procedures, voluntary nature of participation, declarations of anonymity and confidentiality and notes for filling in the questionnaire. Data was analysed using SPSS software for windows

Results: In this Pilot Study of 210 recovered COVID patients (108 were males and 102 females) , of which 75.7% lives in nuclear family and majority of them were hindu (95.7%) followed by muslim(2.8%) and Sikhs(1.4%). The survey as of now shown no correlation with smoking and alcohol use. Out of those 210 respondents, 42% were already vaccinated but 16% got their vaccination after getting infected with COVID19. Hence, those who got vaccinated before COVID infection showed less side effects including weakness , pain in legs and arms .We also assessed those who were already suffering from comorbidities , and of them 22% showed the post COVID effects. It is yet to be made but as per now , this is to be concluded that people who got early vaccination suffered less with COVID 19 symptoms. Although COVID-19 pandemic has impacted people of all ages but those who have pre-existing co-morbidities such as hypertension, diabetes, cardio-vascular diseases are more prone to it and thus is more immunologically susceptible to the virus

Keywords: COVID19

Abstract Id	Efi_135_230_COV
Title	**Facilitators and barriers for Covid 19 contact tracing: evidence from Jodhpur (India)**
Authors	Divya Gehlot, Dr Pankaj Bhardwaj, Nitin Joshi, School of Public Health AIIMS Jodhpur

Introduction: The world has been affected by the deadliest pandemic Covid 19 for the past two years. In the absence of vaccination and prompt treatment among various methods adoption of contract tracing as per WHO recommendations for identification and containment of infection in the community proved to be one of the useful tools in controlling the spread of covid19.This study was carried out to generate evidence about the potential facilitators and barriers for conducting COVID 19 contact tracing in Jodhpur

Method :15 healthcare workers were interviewed who did COVID 19 contact tracing of 600 patients. 600 Covid 19 patients were contacted via telephonic medium during one month (16-04-2021 to 16-05-2021 for contract tracing. The data obtained were then analysed to document the facilitators and barriers while doing COVID-19 contract tracing and what improvisations are required.

Result : The 15-healthcare interviewed revealed, out of 600 patients, 475 attended the call at once, and the rest 125 were contacted again out of which 40 attended the call second and 30 third times. Out of 55 patients, 20 patients' numbers were incorrect and 35 didn't receive the call at all. The list of these patients was communicated to the local health authority for further investigation. Out of 475 patients, 300 were cooperative in providing details. 125 were hesitant about sharing personal information. Rest 50 patients contacted were reported dead.

Therefore, shared responsibility and cooperative behaviour from patients, technical learning, data handling, and communication skills for healthcare workers, and preventive strategy for further spread of disease were the core facilitators observed during contact tracing. On the other hand, privacy concerns, circumspection, fear of stigmatization and patients' unease from patients, timing issues, telecommunication errors for healthcare workers, were the core roadblocks observed during the contact tracing

Conclusion: Thereby keeping into consideration all the above-mentioned observations, contract tracing proves to be a useful tool in halting the spread of COVID-19 and any other communicable disease.

Keywords: COVID-19, contact tracing, healthcare workers

Abstract Id	Efi_137_228_COV
Title	**Testing guidelines and strategies by ICMR: A roadmap to handle COVID-19 pandemic in India**
Authors	Neha Mantri, Dr. Manoj Kumar Gupta, Dr. Pankaj Bhardwaj, AIIMS Jodhpur

Introduction: Since the inception of the COVID-19 pandemic, the cases are continuously increasing in India. Though this growth of the cases was relatively slower during the initial phase of the pandemic, now the cases are increasing rapidly and positioned the country at third place in the world in the COVID-19 tally. This study was done to review all the guidelines and strategies released by the ICMR and MoH&FW, GoI, in regard to the testing of COVID-19 in the country and to compile them with timelines.

Methodology: All the available raw data till 30th July 2020 was retrieved from the crowdsourced database (https: \/\/www.covid19india.org), which includes the reporting from state and central government agencies in India. Cumulative and per day test positivity rates were calculated and their trends were plotted with the trend of the testing capacity of the country.

Results: A sharp rise in the test positivity rate was observed until the first week of April, which declined slightly during the next month. After that, the test positive rate is found to be continuously increasing. At the same time, the testing capacity of the country has also increased from about 250 tests per day at the beginning of March to 6.42 lac per day by the end of July. ICMR put a lot of effort into the expansion of the laboratory network to ramp up the COVID-19 testing capacity in the country.

Conclusion: Without having any delay, dynamic guidelines, and strategies for testing with a lot of innovations were developed and implemented maintaining all the quality and safety parameters. ICMR worked tirelessly on the forefront to devise a roadmap to handle the COVID-19 pandemic in India through the development of testing strategies and guidelines.

Keywords: COVID-19, Laboratory, Pandemic, Testing.

Abstract Id	Efi_138_227_COV
Title	SOCIODEMOGRAPHIC PROFILE OF PEDIATRIC COVID-19 CASES DURING FIRST AND SECOND COVID WAVE IN A TERTIARY CARE CENTRE -A COMPARATIVE STUDY
Authors	ARDRA MERIN GEORGE, Dr. Priya Chandran, Dr. Jayakrishnan Thayyil , Dr. Thomas Bina, Government Medical College ,Kozhikode

Introduction: Covid -19 has become a global threat affecting millions of people worldwide .3.33Cr people in India were affected with Covid -19 in which 13.1% were reported from Kerala. 13.7% of the active cases are admitted either in hospital. Field hospitals. This study has been done to find out the sociodemographic profile of Covid -19 cases of paediatric population (≤12 years) admitted at a Tertiary Care Centre in Northern Kerala from the beginning of Covid Pandemic

Methodology: Retrospective record-based study done by reviewing Regional PEID cell data of Government Medical College, Kozhikode from March 2020-August 2021. Data on sociodemographic details and outcome of disease were collected and analysed using PASW 18.

Results: Pediatric cases constitute 4.7% of total Covid cases in our institution. Out of total 871 case reported during the study period ,57.8% of cases were reported during the 1st wave (march 2020 to January 2021) . Majority were males (55.2%) and the median age was 1year .42.1% of cases were admitted in the second wave (February 2021-August 2021). Most of them were 52.9% and the median age was 4 months. CFR among the study group was 2.5%. Majority of deaths were reported during the second wave (77%) and among younger children (median age -5 months)

Conclusion: There is a decrease of cases from first to second wave. Younger children were more affected during the second wave. CFR were more in second wave. CFR-case fatality ratio

Keywords: Covid -19, Paediatric cases, case fatality rate, first wave, second wave

Abstract Id	Efi_140_225_COV
Title	People's Perspective Towards Covid-19 Vaccination in Puducherry District- A Cross Sectional Study
Authors	Dr. Sadhvika Kanagat, Dr. Abhijit V. Boratne Mahatma Gandhi Medical College & Research Institute

Introduction: In Puducherry district till date a total of 1,22,880 people has been affected and 1801 people have died due to COVID-19 infection. The COVID 19 Vaccination offers an effective way to transition out of this phase of the pandemic by preventing hospitalization and deaths.

Objectives: To assess the willingness to get vaccinated and explore the reasons behind vaccine hesitancy of COVID 19 vaccination among people in Puducherry district.

Methodology: The study was a community based cross sectional study, which was done among the people residing in the Urban health training centre (UHTC) field practice areas of Mahatma Gandhi medical college and Research institute, Puducherry. It was done between march to may 2021 in 1,298 households using web based google forms. Universal sampling was used wherein households belonging to the UHTC field practice areas of Mahatma Gandhi medical college and Research institute, Puducherry were included in the study. People who did not respond and those who were not available were excluded from the study.

Results: 71% of people residing in these areas were willing to take the vaccination. Only 59% of the people were willing to travel more than 30 minutes to get vaccinated. Among various types of healthcare facilities in Puducherry 79% of the people preferred visiting government healthcare facilities. Among the various reasons behind vaccine hesitancy that were documented, 77.4% of the people had fear of adverse effects which prevented them from getting vaccinated.

Conclusion: Majority of the people were willing to take the vaccination in government-based healthcare facilities. People were willing to take the vaccine if it was administered close to their residence

Recommendations: Improvement in vaccine availability should be done in government-based healthcare facilities. A government and private partnership in vaccine logistics, supply and manpower needs should be introduced for a more efficient vaccination drive.

Keywords: COVID-19 vaccination, Vaccine hesitancy, healthcare facilities

Abstract Id	Efi_143_222_COV
Title	**Self-reported adherence to personal protective measures against COVID-19 among social media users in a rural district of Northern India.**
Authors	Dr. Mohsina Mukhtar, Dr. Suhail Nazir, Government Medical College, Srinagar

Background: COVID-19 has led to an unprecedented global health crisis across world infecting millions of people and causing scores of deaths. Hence most effective way to curb this disease still is to strictly adopt and follow various preventive measures against COVID-19.

Methodology: A web-based cross-sectional study was conducted in District Anantnag, Kashmir including active social media users who are 18 years and above of age, residing in different parts of District.

Results: A total of 483 subjects were included. More than 3\/4th (87.0%) knew about mode of spread of virus. More than 90% reported to use a face mask. Only 43.9% reported to sanitize\/ wash their hands with soap after touching public installations. Most of them reported to avoid social gatherings and crowed places. More than half of them perceived COVID-19 a moderate risk. Regarding effectiveness of measures against COVID-19, more than 95% of subjects thought that wearing a face mask and following social distancing are effective for preventing COVID-19.

Conclusion: Overall the knowledge about COVID-19 was satisfactory but the perception of effectiveness of the measures against COVID-19 yielded a mixed response. Though the cases have decreased, the adherence to COVID appropriate behaviour is still the need of the hour.

Keyword: COIVD-19, India, J&K

Abstract Id	Efi_144_221_COV
Title	**Change in quality of life, exercise capacity and mental health among a cohort of COVID-19 survivors in Kashmir Valley: An observational follow-up study.**
Authors	Asif Jeelani, Dr SM Salim Khan, Dept. of Community Medicine, GMC Srinagar

Introduction: With an ever-increasing pool of recovered COVID-19 patients, and studies suggesting that a large proportion of patients have persistent chronic symptoms, health systems must be prepared to deal with long-term sequelae of COVID-19. The present study was conducted to estimate the quality of life, exercise capacity, and post-traumatic stress disorder among recovered COVID-19 patients in the early convalescence phase.

Methodology: A cross-sectional study using EQ-5D-5L, 6 Minute walk test (6MWT), MMRC Scale, and primary-care PTSD screen were done during January 2021. Subjects who had recovered 6 weeks before data collection were included in the sampling frame and selected by stratified random sampling with stratification done based on hospitalization. Selected subjects submitted EQ-5D-5L for both pre-COVID-19 and current status. 6MWT and PTSD screen was submitted only for current status and compared with values for the healthy population. The sample size was calculated using the formula for prevalence studies. Subjects who had any limitation in exercise capacity prior to COVID-19 were excluded. A P-value of less than 0.05 was considered significant.

Results: A total of 112 subjects of whom 13 had been hospitalized were included. The mean age of subjects was 46.4 years and 56% of subjects were male. The mean index score on EQ-5L-5D decreased from 0.86 to 0.71. Mean Visual Analog Score was 68. The mean distance on 6MWT was 416m that was significantly less than non-COVID-19 subjects. 62% of subjects were positive on the PTSD screen. On multivariate analysis, symptomatic COVID-19 increased age, and hospitalization was associated with a decrease in quality of life and exercise capacity. The highest decrease was found in dimensions related to usual activities, pain\/discomfort, and anxiety domains

Conclusion: COVID-19 is associated with a persistent decrease in overall quality of life particularly for symptomatic subjects and older subjects. There is a need for post-acute rehabilitation for COVID-19 survivors.

Keywords: EQ-5D-5L, Long COVID-19, Exercise capacity.

Abstract Id	Efi_147_216_COV
Title	**Cab drivers post pandemic occupational health and safety: an assessment done in Institutional area of Bhubaneswar, Odisha**
Authors	B LAKSHMI PRIYANKA, (Dr.) Sonali kar, Dr. Varsha Srivastav, Dr. Snigdha singh, SPM

Introduction: Covid pandemic ushered an era of curtained thorough fare. Bhubaneswar is a fast-developing city wherein existence of a number of educational and skill-based institutes offers chances of occupation to migrant or local youth in terms of driving vehicles. Covid brought in several restrictions on this group wherein either they had to drive under dangerous situations as in case of ambulance drivers or those working in health sector or were temporarily rendered jobless due to closure of institutions.

Objective: to assess cab drivers in permitted parking lots of a tertiary care hospital for their occupational health safety and covid appropriate behavioural practices.

Methods: Cross sectional study design with purposive sampling. The KIIT medical college institutional parking lots were the study universe and the middle range vehicles chauffeurs were the sample population. we excluded OLA drivers as they stayed for less than 2hsr. The study period was Mid July to Sept 2021, after complete unlock of the city was ordered administratively. A study team comprising of researcher, post graduate and interns, inviting participation from drivers of any middle level, small range vehicles. The respondents were made to respond to a pretested, semi structured questionnaire, getting information on their socio demographic profile, years of the current job, hours of drive and wait, any injury or accident, covid experience and safeguards, vaccination of self and their employers and job stressors.

Results: data from 223 such driver's offering consent was taken up for analysis. Mean age was 29.5 SD 4.5 years; job years mean being 4.6 years and income range being 15,000 to 35,000 Rupees, depending on hours and jeopardy involved. 94.6% were vaccinated for at least 1 dose, all had license and 48.7% had some NCD. Masks and sanitization were appropriately done in 79.3% of cases. Stress was 2.5 times more in case of drivers of doctors and increased to 7.5 times if the employer had covid in past. Detailed analysis is on

Recommendations: This sample warrants stringent covid safeguards due to closed space and high chances of exposure. During lockdowns they should be offered with earning subsidy for economic balances.

Keywords: cab drivers, covid appropriate behavior, lockdown

Abstract Id	Efi_149_214_COV
Title	TELECONSULTATION DOING COVID PANDEMIC
Authors	Dr. Sabira Aalia Dkhar, Dr. Ruqia Quansar, Dr. Tazean Zahoor Malik, GMC, Srinagar

INTRODUCTION: Teleconsultation is an essential tool for used by different countries during pandemic. Teleconsultation, sometimes referred to as remote consultation or telehealth, refers to interactions that happen between a clinician and a patient for the purpose of providing diagnostic or therapeutic advice through electronic means. Teleconsultation are a safe and effective way to assess suspected cases and guide the patient's diagnosis and treatment, minimizing the risk of disease transmission.

METHODS: Study design: cross-sectional analytical study design. Sample size: taking 50% as population proportion and 5% margin of error with 95% confidence interval the sample size comes to 385. We had 386 participants Study tool: the study data collected was done using an online questionnaire which was pretested in a pilot study on 30 final year MBBS students and interns and necessary changes in style, response and language were done. Study population: students from different medical colleges of India - like Chandigarh, Delhi, Kerala, Srinagar, Sikkim. Statistical test: all analysis was done in excel for descriptive results and associations were done using SPSS version 26.0.

RESULTS: In our study we found that 25.4% of the students were part of teleconsultation, most of them were more than equal to 23 years of age (79%). There were 68.9% of final year students and 31.1% were interns. Around 57.3% were hostellers. 24.4% of the students said that their studies were affected. Around 12.2% of the students interns felt that the patients were satisfied. 33.4% felt that they were of some kind of help to the patients. 37.6% students said that their overall work experience during COVID 19 Pandemic was bad. 1.3% students said that they received stipend during this time. Out of the 98 people who were part of teleconsultation, 58 had received training and 56 were under supervision. The overall work experience was significantly associated with gender, age, studies, designation, help to patients and those who received training and were working under supervision.

CONCLUSION: Teleconsultations bring multiple potentials and promises in the case of pandemic, where authorities may request or impose lockdown, closing of borders, limitation on the means of transportation, and so on. Use of teleconsultation among medical professionals should be given more importance and newer approach to improve teleconsultation should be explored.

Keywords: Tele-consultation, MBBS, Interns

Abstract Id	Efi_152_210_COV
Title	**Post-surgery Breast Cancer patients Immediate Quality of Life in Covid pandemic Times: an interim analysis presented using validated EORTC 30 and BR23 questionnaires: Data from a comprehensive tertiary care hospital in Bhubaneswar**
Authors	Dr. VARSHA SRIVASTAVA, (DR) SONALI KAR, DR.S. PARIDA, DR.S. SAHOO, KIMS

INTRODUCTION: Breast Cancer continues to be a stressful and stigmatized disease, in spite of a very high survival rate and very good management strategies. The improved survival rates, awareness about the disease and lowered age of incidence has ushered in a need to do a quality of life (QOL) assessment for such female patients. The European Organization for Research and Treatment of Cancer (EORTC) module QLQ-C30 and the breast cancer-specific module BR-23 have been validated to assess QOL in western women with breast cancer. These questionnaires were designed keeping in mind the lifestyle of western women. The reliability and validity of the questionnaire has thereafter been tested and found to be highly consistent across different language and cultural groups in English-speaking countries, and northern and southern Europe and in the last decade have been found to be equally reliable in Indian languages and in our cultural milieu. QOL assessment is an important surrogate end-point in various clinical trials testing a treatment intervention, in addition to the actuarial improvement in disease-free survival or overall survival. While a proportional reduction in the odds of recurrence or death is observed irrespective of nodal status, the absolute benefit from systemic therapy is clearly more among those with a higher risk of recurrence. The current study is a part of a detailed dissertation of single point assessment of QOL among operated breast cancer patients between May 2020 till date and compare it with published literature to detect an effect of COVID pandemic on the QOL means.

METHODS: After ethics approval, QLQ-C30 and BR-23 modules served for the first time (visit 1) within 2–4 weeks of surgery for breast Cancer, irrespective of the grade and the operative procedure. The breast care nurse served the questionnaire but the patient herself, unassisted by the nurse or any other individual, completed the questionnaire. Thus, only those women who could comprehend the questions asked were included in the study. Hence out of 54 women only 40 could answer the questionnaire with a non-response rate of over 20%. Scoring of the QLQ-C30 and BR-23 was done according to the scoring procedures described in the EORTC scoring manuals. A range of analyses was conducted to establish scale reliability and to evaluate the validity of the questionnaire. Reliability or internal consistency of the multi-item questionnaire scales for the entire sample was assessed by Cronbach alpha coefficient. A magnitude of >0.70 was sought. Non-parametric tests were used because of non-normal distribution of scores. The Mann–Whitney U test was used to compare scores between the two groups at each visit and the Friedman test to test for changes over time. The global QOL score (q29, q30 in QLQ-C30) had a normal distribution.

RESULTS: 40 women with mean age 40.2 years (range 24–72 years); 62% of women were premenopausal and 38% postmenopausal. Chemotherapy significantly affected the global QOL with poor scores during treatment (p=0.016). The results also showed lower functional scales especially with respect to sexual function (p=0.02) after chemotherapy, which could be assesed for only 12 out of 40 subjects. Mean score for EORTC above 70 points indicated good quality of life and those with arm symptoms were badly affected with the mean scores dipping to below 30. As compared to previous studies the scores in covid were at least 9 to 11 points less for all domains of EORTC30 as reported in 2 other Indian studies. Emotional domain was worst documented and main stressor was inability to meet physician and lack of ease to visit hospital. But telemedicine services offered by our institute worked in 25 cases to resolve these issues in time.

Abstract Id	Efi_161_200_COV
Title	ACCEPTANCE AND ATTITUDE TOWARDS COVID-19 VACCINATION AMONG HEALTH CARE WORKERS: AN OBSERVATIONAL STUDY IN A TEACHING INSTITUTE
Authors	Dr. Mishuk Das, Dr. Arindam Das, PGT, Community Medicine, AGMC& GBPH

Introduction: A massive global human disaster has been created by a recent contagious respiratory infectious disease caused by a novel coronavirus (SARS-CoV-2) which holds the same veiled RNA structure resembling SARS-CoV-1 that caused the severe acute respiratory syndrome (SARS) outbreak. Classified by the World Health Organization (WHO) as a pandemic On March 12, 2020. The first cases of COVID-19 were identified in Wuhan, China at the end of December 2019. The virus has now affected virtually every country across the world and the number of deaths continues to rapidly increase.1The World Health Organization estimates that seasonal influenza annually affects 5-15% of the global population with 3-5 million of severe cases and nearly half a million of deaths.2On January 27th,2020 first case of COVID-19 of India was diagnosed.3In Tripura, there were 1240 confirmed cases of covid-19 infection(till june,2020),of which 782 persons recovered.4Nationwide COVID-19 vaccination has been launched since 16th February 2021 and health care workers are offered to get vaccinated at first. Vaccines are one of the most reliable and cost-effective public health interventions ever implemented that are saving millions of lives each year. Following the deciphering of the genome sequence of SARS-CoV-2 in early 2020 [3] and the declaration of the pandemic by WHO in March 2020, scientists and pharmaceutical companies are racing against time in efforts to develop vaccines. As of December 19, 2020, at least 85 vaccines are in preclinical development in animals and 63 are in clinical development in humans, of which 43 in phase I, 20 in phase II, 18 in phase III, 6 have been approved for early or limited use. The Drug Controller General of India(DCGI), the country's national drug regulator, announced on January 3 that the Central Drugs Standard Control Organisation(CDSCO) has decided to accept the recommendations of its Subject Expert Committee(SEC) and approved the Covid 19 vaccines of both Serum Institute of India(COVISHIELD) and Bharat Biotech(COVAXIN) for restricted use in the country. With the uplifting news about SARS-CoV-2 vaccines approval, optimism is raising to see an endto the pandemic through herd immunity. The threshold for SARS-CoV-2 herd immunity is estimated to range between 50% and 67% [16]. One major obstacle facing the achievement of such a goal is believed to be vaccine hesitancy and skepticism among the population worldwide.

Objectives: 1. To estimate the coverage of COVID-19 vaccination among different categories of health care workers working in Agartala Government Medical College.

2. To study their attitude towards vaccination.

3. To find out the associations between selected socio-demographic parameters and vaccination

Hypothesis: Research question: How much is the vaccination coverage among different categories of health care workers and what is their attitude towards COVID-19

NEED STATEMENT AND RELEVANCE: This study will generate baseline data regarding the acceptance and attitude towards Covid-19 vaccination among Health care workers. It may help the policy makers to design strategies for improving vaccination coverage among the frontline workers and the common people in the long run

METHODOLOGY: This hospital based Cross-sectional study was conducted from 12 to 20th February, 2021 among 288 health care workers working in a teaching hospital (Agartala government medical college),chosen by systematic random sampling technique with the objectives to estimate the coverage of COVID-19 vaccination among different categories of health care workers working in Agartala Government Medical College and to study their attitude towards vaccination. The minimum Sample size requirement for this study was calculated by using the formula for calculating sample size for prevalence studies using proportion, i.e, N=(z_(( )\/2)^2×p×(100-p))\/d^2 Where, N =288(Sample size). z_(\/2) =1.96(value of the normal deviate at 5% level of significance with 95% confidence interval);P= 75 %(Population proportion.)d =5 %(absolute error). Thus, the sample size was determined to be 288. Being accompanied by medical social worker of community medicine department, health care workers were visited by research team. The sampling frame of this study included 360 health care workers of Agartala government medical college . Consequently sampling interval was (360÷288) =1.25~2. Health care workers were selected randomly with Random number 2or less, and after selecting the first worker then every alternate health worker was systematically selected. Hence, (288÷9) = 32 health care workers were interviewed every day.Among,360 workers,300 were interviewed and enrolled in the study. Out of them 30 workers were on leave,15 were sick and other 15 didn't want to participate in the study. After taking permission from the selected health care workers, data was collected using pretested, structured interview schedule. Modified BG Prasad socio-economic classification for the year 2019 was used for classifying the socio-economic status of the study subjects. The information thus collected was recorded in the interview schedule and later on, data entry and analysis was performed in computer using SPSS-25. For summarising the qualitative data; frequencies and percentages were used. Chi-square statistic was applied to find out association of socio-demographic profile and vaccination coverage. P value<0.05 was considered statistically significant. The competent authority of Agartala Government Medical College permitted to conduct this study.

DATA ANALYSIS AND INTERPRETATION: Data were analyzed using SPSS 25.0 software. Categorical data related to demographic variables are presented as frequencies and proportions. The associations between independent variables and the primary outcomes (acceptance and intention to receive a COVID-19 vaccine) were tested using t-test or Chi-square test as appropriate. P-value <0.05 was considered as statistically significant

RESULTS: In the study, 300 HCWs participated and completed the questionnaire, including 118 (39.3%) men and 182 (69.7%) women (Table 1). Most participants were aged betwen 24-30 years of age (47%). The majority of participants were doctors 211(70.3%). Among study participants 49.3% thinks that vaccine will give protection against Covid-19 disease.75.3% of the study participants think that there can be adverse effect following immunization. And among 300 study subject 83% of the participants have taken and accepted the first dose of vaccine against Covid-19 said that they would get a 2nddose.Among the study subject 51% participants rated the vaccine 3 out of 5.

CONCLUSION: Currently, during this COVID-19 pandemic, approximately 83% of the HCWs interviewed said they would get a COVID-19 vaccine if available. In the context of a pandemic, vaccine hesitancy is a major barrier to implementing vaccination campaigns. To maintain the benefits of vaccination programmes, understanding and addressing vaccine hesitancy will be crucial to their successful implementation

Abstract Id	Efi_162_199_COV
Title	**Epidemiological study to assess the impact of Covid-19 pandemic on the occurrence of Monsoon-Related Diseases in the city of Mumbai**
Authors	Dr. Vandana Kashyap, Dr. Smita Chavhan, HBT & DR. R N COOPER HOSPITAL, MUMBAI

Introduction: The onset of monsoon season in Mumbai poses an additional health disease burden in the form of rise of vector-borne and water-borne diseases, such as dengue, malaria, leptospirosis, influenza (H1N1), hepatitis, typhoid, chikungunya and acute gastroenteritis. These monsoon related illnesses are preventable with hygienic and sanitation measures which we all have adopted during COVID – 19 pandemic.

Aim: To assess the impact of Covid-19 pandemic on occurrence of Monsoon-Related Diseases in city of Mumbai and find out factors associated with disparity if any.

Material & Methods: This was a retrospective descriptive study. Universal sampling was done using secondary data from the Epidemiological Cell of Municipal Corporation of Greater Mumbai (MCGM). Data mining was performed to obtain the trends of the monsoon-related diseases in Mumbai.

Results: COVID – 19 pandemic has remarkably affected the city of Mumbai with approx. 3 lakh cases till Dec 2020. Municipal Corporation of Greater Mumbai has taken lot of efforts resulting in a recovery rate of close to 95% with less than 3% mortality. With the IEC (Information Education Communication), BCC (Behaviour Change Communication) and SBCC (Social Behavior Change Communication) regarding the use of Masks, frequent Hand washing and Social distancing, there seems to be an impact on monsoon related illnesses in the year 2020. Almost all these diseases have shown significant decline in year 2020 compared to previous two years of 2018 and 2019.

Conclusion: All the monsoon related illnesses taken into consideration in this study are impacted by behavior and lifestyle modifications in terms of hygiene and environmental sanitation practiced during the Covid19 pandemic. This study thus highlights the importance of these universal hygienic practices in long term reduction of communicable diseases including monsoon related illnesses especially in urban agglomeration areas.

Keywords: Covid-19, Monsoon-Related Diseases, MCGM

Abstract Id	Efi_163_198_COV
Title	CLINICO EPIDEMIOLOGICAL PROFILE OF DISCHARGED AND DEMISED COVID19 ICU PATIENTS IN TERITARY CARE HOSPITAL.
Authors	Mahesh kamal babu Tinnaluri, Dr Atul Viraj Wadagale, Assistant Professor, Department of Community Medicine, VDGMC Latur

INTRODUCTION: COVID19 has disrupted the lives of many people and still continuing to do so. It is causing a huge economic crisis the world over. Lab confirmed COVID-19 patients remain asymptomatic and most of these patients develop mild or uncomplicated disease. The most common symptoms observed in studies from India are fever and cough followed by breathlessness, sore throat and headache. The challenge of COVID-19 is very high globally as there is no proper treatment guidelines and the difficulty in control of its transmission. It is proving to be much difficult economically for low and middle-income countries because of very poor health care system, high illiteracy and low awareness about disease and its prevention, lack of skilled health personnel, Limited ICU's and mechanical ventilators. Globally, as 28 September 2021, there have been 232,075,351 confirmed cases of COVID-19, including 4,752,988 deaths, reported to WHO. In India, from 3 January 2020 to 28 September 2021, there have been 33,697,581 confirmed cases of COVID-19 with 447,373 deaths, reported to WHO.

OBJECTIVES- To study Clinico-Epidemiological Profile of Discharged and Demise COVID 19 ICU Patients.

2)To compare Epidemiological Profile of Discharged and Demise COVID 19 ICU patients.

MATERIALS AND METHODS: -

STUDY SETTING: -The present study is a retrospective comparative study of epidemiological, demographic, clinical, laboratory parameters of Discharged and Demise COVID 19 RTPCR confirmed ICU patients.

STUDY DESIGN: Retrospective Comparative Study

STUDY PERIOD: January 2020 to August 2021

STUDY POPULATION: - RTPCR Confirmed ICU Discharged and Demise Patients SAMPLING **METHOD:** - Consecutive sampling method used for selecting Patients, till desired sample size obtained, for each Demised Patient, a Matched Discharged Patient shall be selected based on Age and Sex.

CRITERIA FOR RECRUITMENT OF DEMISED PATIENTS

Inclusion criteria for Demised Patients

RTPCR Confirmed Demised Patient.

Must be Admitted in COVID ICU.

Exclusion criteria for Demised Patients

Patients Who are not Admitted in COVID ICU.

CRITERIA FOR RECRUITMENT OF DISCHARGED PATIENTS

Inclusion criteria for Discharged Patients

RTPCR Confirmed Discharged Patient.

Must be Admitted in COVID ICU.

Exclusion criteria for Discharged Patients

Patients Who are not Admitted in COVID ICU.

Data collected is entered and analyzed in SPSS software [statistical package for the social sciences] 21.0 version and MS EXCEL. Statistical Tests used are Percentage and Chi Square Test. Test of Significance is at P5 days of ICU Hospitalization, presence of Breathlessness, on Ventilator support and Abnormal Lab Parameters are Significantly Associated with Demise of Patient.

CONCLUSION: The Findings Suggested that the patients of demographic characteristics like old age, Rural residence and of Low Socio-economic Class are highly susceptible for Severe Disease as there may be lag period between onset of symptoms and referring to Hospital. The Risk factors like severe Pneumonia and ARDS, Co morbidities like Diabetes Meletus, Hypertension and Renal Diseases, presence of breathlessness should be given utmost Hospital care, patients should be monitored for increasing Lab parameters as they are sign for deteriorating condition of patient and strategies regarding educating masses about preventive measures against COVID 19 and to increase vaccination drive among population.

Abstract Id	Efi_165_196_MCH
Title	**An epidemiological association of infant and young child feeding practices in rural area of Bareilly district :A cross sectional study**
Authors	Akanksha Sinha, 1. Dr Rashmi Katyal; Professor; 2. Dr Medhavi Agarwal; Professor; Department of Community Medicine; RMCH Bareilly

Introduction: In developing countries, malnutrition is a major public health concern. Infant and young child feeding (IYCF) is a set of well-known, common and scientific recommendations for optimal feeding of new born and children under two years of age including initiation of breastfeeding within one hour of birth, exclusive breastfeeding for first six months, after which appropriate and safe complementary foods should be given along with continuing breastfeeding up to two years of age and beyond.

AIM: To find out the epidemiological association of IYCF practices in rural area of Bareilly district.

Material and methods: The study was conducted in rural area of Bareilly, Uttar Pradesh from January 2020 to February 2020 in children aged ≤1 year.

Results: There were significant associations (p< 0.05) between pre-lacteal feed and age of mother, sex of child, education of father and religion.

Conclusion: There have been considerable developments in the status of IYCF practices in Bareilly. However exclusive breastfeeding was not fully practiced. Hence promotion of IYCF is needed.

Abstract Id	Efi_168_193_COV
Title	KEY STAKEHOLDERS IN COVID-19 VACCINATION DRIVE: A COMMENTARY
Authors	Dr Ishani Chadha, 1. Dr Sejal Rathore, Dr Manoj Kumar Gupta,Dr Nitin Joshi, Dr Pankaj Bhardwaj, Dr Akhil Dhanesh Goel, AIIMS Jodhpur

INTRODUCTION: The largest vaccination drive for COVID-19 in India was started on 16th January 2021. However, there are many roadblocks like vaccine hesitancy, vaccine delivery infrastructure, misinformation and technical glitches which hampered the pace of vaccination. For smooth execution of vaccine roll out drive it is always necessary to engage the stakeholders.

OBJECTIVE: To identify and analyse the key stakeholders for COVID-19 vaccination drive in India.

METHODOLOGY: The published literature was retrieved from databases like PubMed, Scopus and Google Scholar. The search strategy used was Covid-19 AND Vaccine AND identified stakeholders. Cross references were also checked and relevant information was used to identify and assess the role of different stakeholders involved in the vaccination drive. Power Interest Matrix was used to analyse and identify the key stakeholders.

RESULTS: Among the four major categories of stakeholders, high-power high interest stakeholders are MoHFW, National Expert group on vaccination for COVID-19, NTAGI, Vaccine Manufactures, SAGE, GACVS, GAVI, Information and broadcasting department (Media), Pharmacovigilance department along with administrators. These key stakeholders played a significant role during the vaccination drive in the Country. Stakeholders having high power and low interest (e.g., WCD ministry, Panchayati raj system, defence, Education department and IT department) were kept in the loop with the constant efforts to generate their interest in this direction. The stakeholders like Citizens, HCW, Public health officials and some non-governmental organisations which have low power and high interest were kept informed through various mass media and IT platforms. Government has concurrently monitored the low power and low interest group stakeholders like; which Self-Help Groups (SHGs) and unaware beneficiaries specially children.

CONCLUSION: Engagement of all types of the stakeholders is crucial in combating COVID-19 and accelerating the vaccination drive. It is quite evident that multi-sectoral approach is needed to formulate a robust system in place for future.

Keywords: Covid-19, Stakeholders, Vaccine

Abstract Id	Efi_170_191_COV
Title	**Knowledge Attitude and Practice Regarding COVID-19 Pandemic among Individuals living in Rural Part of Bihar: A Cross-Sectional Study**
Authors	Dr. RITURAJ KOTOKI, Dr Nikunj Kansara : Pune Dr. AK Yadav , Dr. S Bobdey (Armed Forces Medical College, Pune) Dr. S Minhas : Station Health Organisation, Kirkee

Introduction: - COVID-19 pandemic has caused severe public health consequences. - KAP of villagers of India regarding the COVID-19 transmission and preventive practices plays a key role for effective disease control. - The study was conducted in Rural Part of Bihar to identify factors influencing KAP. The objective for this study is to assess the knowledge, Attitude and Practices of individuals residing in Rural Part of Bihar towards COVID-19

Methodology: A cross-sectional study was conducted in Patna district, Bihar. Villages of the Patna district were selected using chit method, and participants were enrolled using a stratified random sampling method. The questionnaire used in the study was pre-validated(Cronbach's Alpha was 0.78). - Study population: Resident of villages of rural part of Patna, Bihar- Study design: Cross-sectional study- Study period: 01 Sep 2020 to 30 Sep 2020- Study sample: 385Participants above 16 years of age and living in the village for more than 1 year were included in the study- Statistical analysis: SPSS 20

Result :- Out of 385 study participants, 58.7% were males. Majority of the respondents belonged to age group 26-35 years(39.2%). - 64.9% of study participants were working in the private sector, and 5.5% were unemployed. - The Majority of participants (98.44%) agreed regarding the seriousness of the COVID-19 pandemic and had correct knowledge about the main symptoms of COVID-19. The knowledge score of female was slightly higher than males, although the difference was not significant (p>0.05). - Knowledge and attitude score for the age category 26 to 35 was the slightly higher side with the significant difference between groups(p<0.05).nd) Conclusion :- In the present study, the knowledge, attitude, and practice of Rural India in the state of Bihar were assessed. We found that, during the COVID-19 pandemic, participants had extensive knowledge and practice score of COVID-19 infection. This result was in line with a study in India with overall correct rate of 86.5%, in China with 90% correct responses, which was 69% in a Ugandan study & 62% in a study from Paraguay.- Internet search and Television were the predominant sources of information in our study, which was also there in a Thailand study. The use of Television and social media by the Indian governments to circulate news and education on measures to control COVID-19 transmission has been thus utilized by the public.\r- Another interesting findings was a total of 27.79% of the study participants were not aware of the fact that type of the diet(e.g., Veg, Non-Veg or mixed) is not having any role in the prevention of COVID-19.One of the web based KAP study conducted in India shows 15% individual thinks eating Non-Veg food resulting in spread of COVID-19 infection.- Education were associated with higher KAP score which in line with a study conducted in India. And even Income was also associated with Higher KAP Score similar finding was found in online based survey study conducted in India.

Keywords: COVID-19, Knowledge, Attitude, Practice, Bihar

Abstract Id	Efi_181_177_COV
Title	SURVEY OF ADHERENCE WITH COVID-19 PREVENTION BEHAVIORS DURING PUBLIC GATHERING
Authors	Dr. Amarnath, Dr. Srinivas

Introduction: Prevention behaviours represent important public health tools to limit spread of covid 19 CDC guideline includes recommendation to prevent transmission to gathering with non-household members. At any type gathering all attendees were encourage to wear mask, observe social distancing guidelines, wash their hands often and gather outdoor if possible

Objective: To assess the adherence with recommend public health prevention behaviour during gatherings. Methodology: A cross-sectional study was conducted and Participants were recruited through snowball sampling. Participants provided informed consent through online consenting system. An electronic survey using questions based on public health preventive behavior via messaging applications. Prevalence of specified behavior (pre gathering COVID-19 testing, frequent hand hygiene, social distancing, masking, gathering outdoors)

Result: Data from 364 participants were analysed it shows that prior to gatherings, No one underwent testing for COVID-19. 62.8. % Reported washing hands or using sanitizers. 36.5 % avoided contact with others within 6 feet. 71.7 % indicated that they wore a mask or face covering. 13 % of participants reported that gathering was held outside. Poor adherence was shown to be related with five variables: a lower educational level, living with other people at home, being unemployed or a student, living with a spouse, and not working in the healthcare industry.

Limitations: Participants are restricted geographically Survey is based on self-reported data Survey limited to Smartphone users

Conclusion: Despite compulsory restrictions imposed by the government, only about half of the respondents adhered to COVID-19 preventive measures in the DRC and Study result highlight the need for more effective ways to promote all recommend safe COVID-19 behaviour in future.

Keywords: Covid 19, Adherence survey, Preventive measure

Abstract Id	Efi_182_176_COV
Title	**Social Medicine on mass scale its impact on COVID-19 Pandemic Management**
Authors	Aprajita Singla, Diksha Walia, IDSP Haryana,

Introduction: COVID-19 has wreaked havoc on health system and the economy. Politicians are major stake holder and influencer of the society; their positive or negative statements produce a major impact on the psyche of population. It is the time for public health researchers and political scientists to begin understanding how and why governments responded the way they did, to investigate how effective these responses appear to be, and to draw lessons about effective public health policymaking. We contend that without a thorough understanding of policy and politics, it will be impossible to comprehend the many responses to COVID-19 and their consequences. To better understand the causes of COVID-19 responses, we propose four key focuses: social policies for crisis management and recovery, regime type (democracy or autocracy), formal political institutions (federalism, presidentialism), and state capacity (control over health care systems and public administration).

Objective: To assess the effect and compare the political ideologies on the public health response for COVID-19 pandemic.

Methods: Review was done through various search engine like Google, PubMed, Google Scholar etc regarding various political ideologies and statements of politicians across various countries, while different phases of COVID pandemic and their public health response towards the COVID-19 pandemic.

Results: Preliminary results are showing that countries following strict lockdowns and rigid regulations had better response and implementation of COVID appropriate behaviour was better as compared to countries with flexible rules and regulations. It was further investigated that countries having autocratic system, flattened the epidemic curve better and control spread more effectively as compared to democratic countries.

Conclusion: Study shows that politicians played a major role towards response to COVID-19 pandemic, they act as both positive and negative influencer in the society.

Keywords: Politics , ideologies, COVID-19 Pandemic

Abstract Id	Efi_222_COM
Title	**COVID-19 pandemic and perinatal outcomes in a tertiary care centre in Jodhpur, Rajasthan**
Authors	Dr. Zeba Bano, Arun Kr. Singh, AIIMS, Jodhpur

Introduction : The impact of COVID-19 on pregnant women and new-borns has been little known. This study was conducted to compare the number and type of deliveries between two epochs, pre-COVID-19 and during COVID-19 and to assess the perinatal outcomes and challenges faced by pregnant women infected by COVID-19.

Methods : A mixed-method study design was used. For the quantitative study, records of all pregnant women from 21st March 2019 to 20th March 2021 were retrieved retrospectively.

For the qualitative study, 22 COVID-19 positive pregnant women were contacted for in-depth interviews to know about the challenges they faced during their pregnancy.

Results : During the COVID-19 period, there was a substantial reduction in the number of deliveries, particularly in March, when the COVID-19 lockdown was imposed. The number of institutional births decreased by 31.87 %. Vaginal, instrumental, and caesarean deliveries decreased by 43.54 %, 56.25 %, and 25.2 %, respectively. Preterm and LBW births were reduced by 34.12% and 27.41%. It was observed that the rate of vaginal deliveries decreased (p value=0.013) whereas the rate of caesarean deliveries increased (p value=0.007). Multiparity (p value=0.041), increased mean birth weight (p value=0.038), and APGAR score <6 at 1 minute (p value=0.027) were all more common in COVID-19 period.

To assess perinatal outcomes, 44 COVID-19 positive and 176 COVID-19 negative pregnant women were compared. It was observed that the COVID-19 positive group had a higher rate of caesarean births (p value=0.021), hypothyroidism (p value=0.001), pregnancy-induced hypertension (p value=0.031), and gestational diabetes mellitus (p value=0.001) and a lower rate of anaemia (p value=0.006).

COVID-19 positive pregnant women encountered mostly psychosocial issues as a result of their separation from family and fear of isolation and transmission.

Conclusion : Our study concluded that the COVID-19 pandemic led to a decrease in number and increase in the incidence of caesarean deliveries. It emphasizes improving the positive state of physical, psychological, and mental health of women during pregnancy for better perinatal outcomes.

Keywords : COVID-19, perinatal, outcomes, pregnancy, lockdown, pandemic

Abstract Id	Efi_201_cov
Title	**A Descriptive Epidemiological Study Of Mucormycosis Cases Presenting at a Tertiary Care Centre of Western India**
Authors	Dr. Arun Bharat

Background: Mucormycosis emerged as a significant fungal infection mostly during post COVID 19 phase.

Objective: To describe the epidemiological factors of mucormycosis cases admitted at a tertiary care centre of Western India and to identify possible risk factors for Mucormycosis.
Materials and Methods: This cross sectional descriptive study included 55 patients, admitted with suspicion of mucormycosis during May, June 2021, expected to cover post COVID period of second wave. A pre designed, semi structured questionnaire along with hospital case sheets will be used for data collection.

Result: Mean age of patients was found to be 54.4 years, more males as compared to females. Most of the patients were found to be obese with no prior history of diabetes mellitus. Regarding COVID history, majority were treated at home isolation predominantly, most (54.6%) not required oxygen support during COVID course. Majority (89%) reported to be on steroid therapy, intravenous mostly for 5-10 days. Rhinoorbitocerebralmucormycosis is the prevailing form noticed at present set up , symptoms emerged within 15-30 days of onset of COVID symptoms. Mortality reported among 14.5% of treated mucormycosis patients. Mortality, high BMI, deranged HBA1C & rural residence were found to be significantly associated with mortality.

Conclusion: Impaired glycemic control might be either due to pre existing co morbidity or new onset diabetes aggravated by injudicious and high dose use of glucocorticoid seems to be the major associated factor for mucormycosis. Vigilance warranted in post COVID for at least 15-30 days.

Keywords: COVID, Mucormycosis

THEME: MATERNAL AND CHILD HEALTH

Abstract Id	**Efi_104_44_MCH**
Title	**Infant feeding practices among mothers attending a tertiary care centre of Southern Rajasthan**
Authors	Dr. Dhriti Bapna,

Introduction: To achieve optimal growth, development and health of infants, early initiation of breastfeeding and exclusive breastfeeding is essential. This study was planned to assess infant feeding practices among mothers attending tertiary care centre of Southern Rajasthan.

Methods: After taking informed consent, a cross-sectional study was conducted at immunisation clinic at a tertiary care centre of Southern Rajasthan among 100 mothers of infants aged 9 months. A pretested semi-structured interview schedule was used. Data was entered and analysed by using Microsoft Excel version 2010 and SPSS version 24. Results were expressed in proportions.

Results: Breastfeeding was initiated early within one hour of delivery by 60% mothers. Delayed initiation was found among 40% mothers for whom the main reasons cited were breast problems (45%), caesarean section (40%), ignorance (10%) and ill baby (5%). Colostrum was fed to 93% infants. The first food offered was breast milk in 55% infants, whereas, 45% received pre-lacteal feeds like honey, formula milk, janamghutti, tea, etc. 70% of the mothers breastfed their infants on demand. Only 34% infants were found to be exclusively breastfed.

Conclusion: Strong advocacy on importance of exclusive breastfeeding and dangers of pre-lacteal feeds through IEC activities is necessary for optimal growth of infants.

Keywords: feeding, infant, practices

Abstract Id	Efi_106_41_MCH
Title	Study Profile And Factors Associated With High-Risk Pregnancy Among Beneficiaries Of Pradhan Mantri SurakshitMatritva Abhiyan, In Block Barwala,
Authors	District Hisar Of Haryana.

Amit Kumar, Seema Sharma, S M Pandey, MAMC Agroha

Background: Every pregnancy is special and every pregnant woman must receive special care. Any pregnant woman can develop life-threatening complications with little or no advance warning, so all pregnant women need access to quality antenatal services to detect and prevent life-threatening complications during childbirth. The Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) is thus being introduced to ensure quality Antenatal care to pregnant women in the country.

Objectives are to study profile of PMSMA beneficiaries visiting Community Health Centre, Barwala and to Identify high risk pregnancies (HRP) & its associated factors among PMSMA beneficiaries.

Methodology: Record based retrospective study. Information was collected from hospital records of antenatal beneficiaries attending monthly PMSMA clinic in block Barwala from month April 2019 to September 2019. A data of total 401 ANC beneficiaries were analyzed. Maternal characteristics such as age, education, blood group, gravida, parity, trimester and others risk factors were observed. SPSS version 20 was used to analyze collected data.

Results: The records of total 401 antenatal beneficiaries were analyzed out of which 26.9%(108) were recorded as high risk pregnancies. The Maximum number of beneficiaries (51.6%) having second trimester of pregnancy. About 90% of beneficiaries were found to be Anaemic. The association of high risk pregnancy is found to be significant increasing age group, parity, number of living children, gravida and number of abortions. Incidence of high risk increases with duration of pregnancy.

Conclusions: As incidence of high risk increases with duration of pregnancy, so antenatal surveillance for high risk factors should be initiated as early as possible.

Keywords: High risk pregnancy, PMSMA, Antenatal care.

Abstract Id	Efi_139_226_NCD
Title	**Socioclinical profile of osteoarthritic patients residing in urban slums of Berhampur,Odisha- A Cross-Sectional Study**
Authors	Dr Trupti Dash, Dr Sangeeta Das ,D. M. Satapathy- MKCG MCH Berhampur

Introduction: Osteoarthritis (OA) is the most common joint disorder and a major cause of disability in the adult population. Osteoarthritis is not given due importance in terms of public health .The present study was conducted with the following objectives:To study the socio-demographic characteristics of the study population.To determine the risk factors associated with osteoarthritis .

Materials & Methods: A cross-sectional study was conducted among 100 patients(≥50yrs) diagnosed with osteoarthritis residing in urban slums of Berhampur,Odisha during April 2021 to July 2021. Socio-demographic characteristics and risk factors of osteoarthritis were obtained using a semi-structured questionnaire.

Results: The study population included 67% women & 33% men . The mean age in women was 58.9 years & in men was 62.2years. Family history of osteoarthritis was present in 25 % of cases, 57 % belonged to social class-1 as per BG Prasad's classification, 38% had trauma history,44% had associated comorbid conditions, 79% did not do any exercise & most of them were overweight. The mean BMI was 25.11 .

Conclusion: The findings suggest that osteoarthritis is more common in women with co-morbidity and sedentary lifestyle . Measures should be taken to improve physical activity & reduce comorbidity through geriatric counselling.

Keywords: Osteoarthritis, socio demographic, co-morbidity

Abstract Id	Efi_3_158_MCH
Title	**Factors affecting Infant Mortality Rate (IMR) in India: A situational analysis**
Authors	Dr Mamta Patel, Dr Manoj Kumar Gupta, Dr Akhil Dhanesh Goel, Dr Nitin Joshi Dr Pankaj Bhardwaj. Dr Deepti Mathur, Dr Rashmi Kaushal, AIIMS Jodhpur

Introduction: Infant mortality rate (IMR) is not only a health-related indicator but also a social indicator as it is even used in comparing health status of different countries. It reveals mothers quality of life, education of mother and other family members, quality and access of health services, and nutrition. IMR is measured as the number of babies who die before reaching their first year of age divided by number of live births in a specific place and year.

Methods: Published literature was searched from Pubmed, Scopus and Google Scholar. Situational analysis was done by constructing Fish bone diagram and Spider web diagram.

Results: Five major themes affecting Infant Mortality Rate in India are identified- Maternal health, Health service crises, Birth related causes, Childhood infections and Social factors.

Conclusion: Long-term reductions in infant mortality can be brought about by addressing these distal determinants of infant deaths.

Keywords: Infant Mortality Rate, Situation analysis, Premature birth, Maternal

Abstract Id	Efi_35_123_MCH
Title	**Breast Feeding Practices and New-born Care in mothers of children who come to immunization clinic in GRMC Gwalior: A Cross-Sectional Study**
Authors	Dr Pradeep Kumar Verma, Dr Ramniwas Mahore, G.R. Medical college Gwalior

Introduction: Breastfeeding is important for the healthy growth of the young child and reducing child mortality and morbidity. It also strengthens the relationship between mother and child. This study is aimed to describe the breastfeeding practices prevalent in mothers coming to immunization clinic in GR Medical college Gwalior.

Methods: Mothers with children who came to immunization clinic from June 1, 2021 to August 31, 2021 were included in the study and data was collected using the pre-tested questionnaire on breastfeeding and newborn practices. Results Our study shows 98% of the mothers-initiated breastfeeding, 17% used pre lacteal feeds, 92% had hospital deliveries and 8% had home deliveries, and 40% used a house knife to cut the umbilical cord among home deliveries.

Conclusions: This study highlights the need for breastfeeding intervention programs especially for the mother during antenatal and postnatal visits and need to address the practices like discarding the colostrum and early\/late weaning which are still widely prevalent.

Keywords: Breastfeeding practices , initiation, duration,

Abstract Id	Efi_50_107_MCH
Title	**Birth preparedness and complication readiness among women in North India-A Mixed study**
Authors	Sujata Gupta, Dr Yangchen Dolma, AP Dept. of Community Medicine GMC Kathua ,J&K Dr Nazuk Razdan, Demonstrator, Dept. of Community Medicine GMC Kathua ,J&K

Introduction: Safe maternal healthcare practices during the antenatal period can prevent most of the maternal mortalities. Birth Preparedness and Complication Readiness (BPCR) interventions have a significant role in the reduction of maternal and neonatal mortality risk. Little is documented on Birth Preparedness and Complication Readiness practice in countries like India as most studies done here are on safe motherhood focus on service uptake, quality, and utilization. Therefore, this study was done to evaluate BPCR practice and associated factors among currently pregnant women and women in postpartum.

Methodology: A mixed method of community-based cross-sectional study was conducted among the currently pregnant and recently delivered (post partum) women of Buddhi, Kathua district J&K. All the women who were pregnant or in post puerperium residing in the study area during the study period and were registered were included in the study. For quantitative data pre-designed and pretested questionnaire was used . Qualitative data was collected by focus group discussion and analyzed by thematic areas. A woman was considered as 'well prepared' if she spontaneously mentioned at least three or more BP and CR components out of five main components otherwise 'less prepared'. Regarding knowledge of BP and CR, a woman was considered as having “favourable knowledge” if she spontaneously mentioned a total of three obstetric danger signs or more in all the three phases of pregnancy, labour and childbirth and postpartum period otherwise considered as “Unfavourable knowledge. Appropriate statistical tests were applied.

Results: Prevalence of birth preparedness and complication readiness was 53.4% but knowledge of danger signs among women were very low 11.3 %. Factors such as woman education, history of obstetric complication, age, knowledge of key danger signs, having favourable attitude towards birth preparedness and complication readiness, were variables positively associated with birth preparedness and complication readiness

Conclusions: Emphasis should be given on the quality of information offered to the pregnant women and family members during the prenatal contact on BP\/CR and knowledge on danger signs. The community should also has a crucial part to play in ensuring that pregnant women are well prepared and ready for any complications.

Keywords: Birth preparedness ,Complication readiness, Pregnancy, North India

Abstract Id	Efi_61_94_MCH
Title	**Assessment of utilization of maternal health services in field practice area of rural health centres of AIIMS Rishikesh, Uttarakhand**
Authors	Ankita Rahul, Mahendra Singh AIIMS Rishikesh Department of community and family medicine

OBJECTIVES -1.To assess proportion of pregnant women who have full antenatal check-up in field practice area of rural health centres of AIIMS Rishikesh, Uttarakhand.

2.To determine factors affecting utilization of maternal health services in field practice area of rural health centres of AIIMS Rishikesh, Uttarakhand.

INTRODUCTION: Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period (WHO, 2010). Maternal Health Services are considered important globally, and more emphasis should be given in developing countries like India .The process of childbearing needs to be given special attention, as it affects the overall health, especially the reproductive health of the woman, as well as health of her new born. The place where delivery takes place is also important aspect of reproductive health care

MATERIAL AND METHODS STUDY DESIGN: A Community-based cross-sectional study STUDY AREA: Study will be conducted in the field practice area of rural health centres (PHC Raiwala and PHC Thano) of AIIMS Rishikesh. STUDY DURATION: Study will be conducted for one and a half year.STUDY PARTICIPANTS: All pregnant women who are residing in PHC Thano & PHC Raiwala and will be delivered in Calendar year 2020.Inclusion Criteria:Pregnant women who are residing in PHC Thano and Raiwala at current address for at least 1 year.Pregnant women who will be delivered in Calendar year 2020.Who willing to participate

Results – early registration was done only by 54.8 percent of women, about 56 percent female took only upto 60 tablets of IFA, blood test was done 80 percent of female, urine test is done only in 28.8 percent of female, there is relation between exclusive breast feeding and literacy ($\chi 2=4.515$, df=1, P= 0.034), there is association between place of delivery with socio-economic ($\chi 2=10.149$, df=4, P= 0.038), association between early ANC registration with literacy (Fisher's Exact Test 7.417 df=3, P=0.049)

Conclusion -The results of the present study revealed that utilization of antenatal services was poor as majority of them had not received full antenatal care. The prime reason for non\/partial utilization of antenatal services was noncompliance of IFA tablets and lack of knowledge about the importance of all the four antenatal visits. The impression about antenatal care provider from this study was that care from government source was approached more often than from private services. It was happy to note that majority of the mothers had institutional delivery. Doctors conducted most of the deliveries.

KEY WORDS- UTILIZATION, ANTENATAL CARE , HEALTH CENTRES

Abstract Id	Efi_62_93_MCH
Title	**Study of coverage and barriers of immunization among children of age 12-23 months in urban area of Rishikesh, Uttarakhand**
Authors	TJ Asha, Pradeep Aggarwal, AIIMS Rishikesh

Introduction- Ensuring high immunization coverage and its acceptance among the beneficiaries is crucial for a healthy society. Hence this study aims to estimate vaccine coverage and barriers of immunization among children of age 12- 23 months in urban area of Rishikesh, Uttarakhand.

Methods WHO 30*7 cluster sampling technique was used to collect data on immunization status

Results- About 92% of the children (193 out of 210) were fully immunized. BCG has highest coverage rate (99.5%) followed by oral polio vaccine 1 (98.5%) and pentavalent 1 (98%), where the coverage was the lowest for measles vaccine(94.3%). Only 5.2% (11 out of 210) of informant had knowledge on and recommend additional vaccine for the. Full immunization coverage was significantly high among first order child (OR 6.75, p= 0.002), had mother with above high school level of education (OR 5.60, p=0.046) and in children with private hospital usual place of vaccination (OR 4.2, p=0.038). Knowledge and recommendation of additional vaccines were found significantly high among mothers with intermediate and above level of education (OR 5.50, p=0.004) and belonging to upper middle-class family (p<0.05).

Conclusion- There were significant variations of childhood immunization coverage across socioeconomic and demographic factors. Education of mother emerged important in both routine immunization and additional vaccine recommendation of the child. These findings emphasize on the need for regular monitoring and evaluation of immunization coverage to achieve benefits of vaccination in all strata of society.

KEY WORDS- immunization coverage, children, urban

Abstract Id	Efi_64_91_MCH
Title	**A study on perinatal mortality and its associated risk factors in a tertiary care hospital: secondary analysis using hospital records**
Authors	Dr. Zarna Darji, Dr. Bhavesh Shroff, Medical College Baroda, Vadodara

Introduction: WHO defines perinatal mortality as the number of stillbirths and deaths in 1st week of life per 1000 total births. Perinatal deaths are rising as an important cause of infant mortality in developing countries. Analysis of perinatal deaths over a period in a tertiary care hospital will help to identify the perinatal mortality trend and associated risk factors thus helping in taking corrective measures to reduce the perinatal mortality rate.

The objective of the study was to explore the determinants accountable for perinatal deaths and to examine the relationship between various maternal risk factors.b)

Methods: Retrospective analysis was done using extracted data from hospital records of the mothers who lost their babies in perinatal period in a tertiary care hospital of central Gujarat (SSG Hospital, Vadodara) in the year 2020. Causes of perinatal deaths was identified and analyzed.)

Results: Total reported live births in SSG hospital were 3694 during study period (Jan 2020 to June 2020). Stillbirths were 123 and early neonatal deaths were 152. Perinatal mortality rate was 73.94 per 1000 birth. Out of 73.94% perinatal mortality, majority of perinatal deaths occurred due to preterm low birth weight (30.54%) with or without associated factors, 8.72% due to congenital anomalies, more than 50% of the perinatal death occurred due to maternal factors such as antepartum hemorrhage, eclampsia, obstructed labor, malpresentation, medical problem in pregnancy, severe anemia and hydramnios.)

Conclusion: As study was done in tertiary care hospital, perinatal mortality rate was very high (73.94 per 1000 live birth) as compared to national perinatal mortality rate. Perinatal deaths result largely from obstetric complications that can be prevented with proper antenatal care and standard neonatal services. Awareness about risk factors of the stillbirth that can be avoided by proper diet, adequate rest, regular antenatal check-up should be increased..

KEY WORDS- perinatal mortality, risk factors, stillbirths, early neonatal deaths.

Abstract Id	Efi_85_67_MCH
Title	**Effect of Women's and Partners' Education on Maternal Health Care Services Utilization in Five Empowered Action Group States of India: An analysis of 13,443 women of reproductive age**
Authors	Bhavna Sahni

Introduction: Suboptimal utilization of maternal healthcare services is a perennial problem in Empowered Action Group (EAG) states. This study examines role of women's and partners 'education on usage of antenatal, post-natal care and skilled birth attendance in these states.

Methods: National Family Health Survey- 4 (2015-16) data for 13,443 women in reproductive age group of 15 – 49 years in Bihar, Madhya Pradesh (MP), Orissa, Rajasthan and Uttar-Pradesh (UP) was analysed using logistic regression.

Results: Increasing level of education had significant impact on utilization of antenatal services in all states, highest and lowest odds being observed with higher and primary level of partner' education respectively. Skilled birth attendance universally showed rising trend with increasing women education while it remained substantially low even at higher level of partner's education. For postnatal care, utilization increased with increasing level of maternal education. While significantly lower odds of postnatal care were seen with primary level of partner education in Rajasthan and UP, partner's secondary education showed positive and significant association in Bihar, Rajasthan and UP. At higher level of partner education, positive and significant effects on postnatal care were observed only in Bihar, MP and UP.

Conclusions: Universal education is vital to attain Sustainable Development Goals (SDG) at the grassroot level which is happening relatively slowly in the EAG states.

Keywords: Women's education, Partner's education, Empowered Action Group States, Antenatal Care, Skilled Birth Attendance, Postnatal care.

Abstract Id	Efi_86_66_MCH
Title	"PREVALENCE OF CONGENITAL ANOMALIES A ONE-YEAR HOSPITAL BASED CROSS – SECTIONAL STUDY AT KLE DR. PRABHAKAR KORE HOSPITAL"
Authors	Dr. Sushmita Mahantshetti, Dr. Padmaja Walvekar, Professor, M.D Communtiy Medicine

Introduction: Congenital anomalies are an important cause for neonatal mortality and morbidity. An estimated 3,03,000 new-borns die within 4 weeks of birth every year, worldwide, due to congenital anomalies. The prevalence of birth defects in India is 6-7% which translates around 1.7 million birth defects annually. The common birth defects include congenital heart disease (8-10 per 1000 live births), congenital deafness (5.6-10 per 1000 live births) and neural tube defects (4-11.4 per 1000 live births). Congenital anomalies can contribute to long-term disability, which may have significant impacts on individuals, families, health-care systems and societies. Various studies show different prevalence based on the type of study, inclusion of minor defects, still births, and follow up. Hence this present cross-sectional study was conducted to know the prevalence of Congenital anomalies among the total births at KLES Dr. Prabhakar Kore Charitable Hospital.

Methodology: A hospital based cross – sectional study was conducted in 2020 over a period of 12 months from January to December at KLES Dr. Prabhakar Kore Charitable Hospital Belagavi. All the women delivering babies with congenital anomalies, at KLES Dr. Prabhakar Kore Charitable Hospital, were identified. Informed consent was taken before collecting the data. All live born babies during the study period were included. Details of babies born with congenital anomalies was collected using medical records. Diagnosis of congenital anomalies was based on clinical evaluation of newborn babies by the pediatrician and other appropriate investigations.

Results: The collected data was summarized using descriptive statistical measures and prevalence was calculated. System wise distribution was done. Out of the total 5744 deliveries, total number of babies with congenital malformations was 100 (1.74%) during the study period. The prevalence rate was found to be 1.74% during the study period at KLES Dr. Prabhakar Kore Charitable Hospital. All anomalies were categorized based on the ICD-10 classification. System wise distribution of anomalies showed Central Nervous system anomalies contributed the maximum, a total of 25 cases accounting to 25%. Genitourinary system anomalies were 20%. Those belonging to cardiovascular system were 18%. Musculoskeletal system anomalies were 16%. 9% anomalies belonged to Gastrointestinal system. Remaining 12% cases were of respiratory system and multiple system affected.

Conclusion: The prevalence rate in our study is comparable with the national and global estimate. Most congenital anomalies can be diagnosed during antenatal period by scanning or use of other appropriate investigations and majority of them can be prevented by folic acid intake. By improving the antenatal care, postnatal diagnosis and promoting early referral to tertiary hospital, most of the morbidity can be prevented. A well-documented birth defects registry at every level must be maintained. Data on magnitude of the birth defects is needed because most of these conditions can be prevented through primary care interventions targeted towards women in the preconception, intra-conception and antenatal period. Therefore, there is a need for a well-defined national programme with components of prevention, care and surveillance.

Keywords: Prevalence, Congenital anomaly, Cross - sectional study, hospital based

Abstract Id	Efi_127_238_MCH
Title	**Perception of health care providers towards Respectful Maternity Care in public health facilities of Jodhpur**
Authors	Bindiya C Gowda, Neeti Rustagi AIIMS Jodhpur

Introduction: Respectful Maternity Care (RMC) is defined as the care organized for and provided to all women in a manner that maintains their dignity, privacy and confidentiality, ensures freedom from harm and mistreatment, and enables informed choice and continuous support during labor and childbirth. WHO Recommendations (2018) emphasize the quality of interaction between women and their health care providers as a prerequisite for positive outcomes of childbirth. We explored the perception of health care providers towards RMC in public health facilities of Jodhpur.

Methodology: This Qualitative study involved In-depth interview of health care providers (Doctor, LHV, ANM, Nursing staff) from randomly selected 1˚ and 2˚ health care centers, routinely providing obstetric services in both rural and urban areas of Jodhpur, using an interview guide with 9 components, which were audio-recorded after due informed consent and transcribed. The transcript was translated, manually analyzed using inductive approach to fit into 9 themes in our interview guide such as birth experience, mode of delivery, birthing position, pain relief in labor, abuse, stigma and discrimination, social support.

Results Among 29 health care providers interviewed, only few knew the concept of Respectful maternity care. They agree it is important to maintain appropriate interpersonal communication between caregivers and women during labor and childbirth. Healthcare providers do not accept in majority mother's opinion about mode of delivery, given their professional competence. Also they perceive that a female companion should be allowed in labor room for support of mother, and that an informed consent is required to be taken before all the procedures. Though there is overt denial about abuse and discrimination to the mothers, one such incident was identified through interview.

Conclusion: Health care providers' perception regarding Respectful Maternity Care is limited. So it should be emphasized in clinical practice and teaching, so that they better perceive labor and childbirth. This will also improve the birthing experience of mothers with no stigma and discrimination.

Keywords: Respectful, maternity care, perception, opinion

Abstract Id	Efi_154_208_MCH
Title	MATERNAL PROFILES AND PREVALANCE OF SAM AMONG CHILDREN
Authors	Dr. Ritu Pradhan, Anupreet Kaur Sobti Post Graduate Student, Department of Foods and Nutrition, Government Home Science College, Chandigarh

Background: Severe acute malnutrition is one of the major public health problems in developing countries having a devastating effect on the lives of many children under 5 years of age. It is the most extreme and visible form of undernutrition plagued by chronic poverty, household food insecurity, lack of education. A number of factors are associated with SAM. This review is focussed upon determining factors associated with maternal profiles as causative agents of SAM among children below five years of age.

Methodology: Through exclusive review of resources available online and offline, various determinants of SAM among children below five years of age, were identified associated with the maternal profiles.

Result: A child's age, late initiation of breast feeding, non- exclusive breast feeding, diarrheal diseases, unfulfillment of nutritional requirements of mothers during pregnancy and lactation and narrow birth interval were identified as determinants of SAM.

Conclusion: In order to reduce the children's SAM, it is necessary to scale up services to improve the socioeconomic status which includes the education, occupation, and monthly income of the mother. Two contributing factors to decrease SAM are the importance of exclusive breastfeeding practices and the availability and usage of soap in hand washing, which are ideal for low-cost interventions. To reduce SAM, a focus on enhancing complementary feeding through increased affordability and better awareness of nutritious foods is also needed.

Keywords: Severe Acute Malnutrition, chronic poverty, food insecurity, breastfeeding, low-cost interventions, complementary feeding

Abstract Id	Efi_165_196_MCH
Title	**An epidemiological association of infant and young child feeding practices in rural area of Bareilly district: A cross sectional study**
Authors	Akanksha Sinha, Dr Rashmi Katyal, Dr Medhavi Agarwal; Professor; Department of Community Medicine; RMCH Bareilly

Introduction: In developing countries, malnutrition is a major public health concern. Infant and young child feeding (IYCF) is a set of well-known, common and scientific recommendations for optimal feeding of new born and children under two years of age including initiation of breastfeeding within one hour of birth, exclusive breastfeeding for first six months, after which appropriate and safe complementary foods should be given along with continuing breastfeeding up to two years of age and beyond.

AIM: To find out the epidemiological association of IYCF practices in rural area of Bareilly district.

Material and methods: The study was conducted in rural area of Bareilly, Uttar Pradesh from January 2020 to February 2020 in children aged ≤1 year.

Results: There were significant associations (p< 0.05) between pre-lacteal feed and age of mother, sex of child, education of father and religion.

Conclusion: There have been considerable developments in the status of IYCF practices in Bareilly. However exclusive breastfeeding was not fully practiced. Hence promotion of IYCF is needed.

Abstract Id	Efi_190_167_MCH
Title	**Status of iodine in rural pregnant women of different trimesters in Lucknow - A cross-sectional study**
Authors	SUGANDHA JAUHARI, Dr Ram Manohar Lohia Institute of Medical Sciences, Lucknow

Background and objectives: Iodine plays a critical role in fetal brain development and hence has immense importance during pregnancy. Even mild to moderate iodine deficiency in pregnancy has adverse effects on obstetric and neonatal outcome. So, the aim of this study was to assess the trimester-wise urinary iodine status of pregnant women in rural areas and determine their iodine intake.

Methods: A cross-sectional study was conducted in Sarojini nagar, which is a rural block of Lucknow, Uttar Pradesh from August 2016 to July 2017. All married pregnant women (15–45 years) of different trimesters attending the primary health centre (PHC) for antenatal check-up were enrolled in the study after written consent. Total 300 pregnant women were interviewed for Knowledge, Attitude and Practice (KAP) survey. Urine and salt sample was taken from 200 of them for biochemical analysis of iodine. Estimation of iodine in urine was done by wet digestion method and in salt by iodometric titration.

Results: The median urinary iodine concentration of the rural pregnant women was 246.5 µg\/L with IQR of 194.9–383.4 µg\/L. On comparing the urine iodine levels in the three trimesters, maximum deficiency was observed in first trimester (39.5%) followed by third trimester (31.6%) and a dip was seen in the second trimester (28.9%). The median urinary iodine levels did not show a significant difference across the three trimesters.

Conclusion: Iodine insufficiency was observed among pregnant women. Maximum deficiency was observed in first trimester which is the most vulnerable period of gestation responsible for organogenesis and fetal brain development

Keywords: Iodine deficiency disorders (IDDs), Urinary iodine, Iodized salt, Pregnancy, Rural

Abstract Id	Efi_192_164_MCH
Title	**Dental caries, food choices and associated quality of life of children aged 3 to 6 years :Screening cross-sectional results in pandemic period from Bhubaneswar, Odisha.**
Authors	Dr Ansuman Kar

INTRODUCTION : KIMS, as a satellite site for a COVID-19 vaccine trial for the pediatric cohort, got the opportunity to screen children for eligibility for recruitment. The exercise was used as an opportunity to assess them for their food choices and oral health as an ice breaking procedure.

METHODOLOGY: 120 guardian (father or mother) who volunteered to seek information on the vaccine were taken through a pretested and predesigned questionnaire for details on their socio-economic pattern and lifestyle after due informed consent. The age group selected was 3 to 6 years , as these are the formative years to form oral hygiene habits. The child's previous week routine, 7 day food recall and physical activity detail was inquired. Oral hygiene was assessed and corroborated with caries findings. Assessment of the children's quality of life was based on their mother's perception related to how big the disruption of their children's quality of life and normal activities was as a result of dental health and use OHQOL validated questionnaire.

RESULTS: 35.6% of the children had deciduous caries and 20.6% has swollen gums, chips and soft drink consumption was seen to be maximum 88.9% of the age group and was irrespective of the socioeconomic condition of the parents. The primary school age group had a significant association between screen time and caries. Working mothers were more casual about the oral hygiene under the pretext that the teeth would be replaced by permanent. Incidence of ARI was 2.6 times higher in group with poor oral hygiene. Data collection and analysis is going on and final results will be put up for conference.

CONCLUSION: Vaccination sessions should have complementary session of oral health and hygiene of the toddlers as a habit developed early in life would stay for a lifetime and can also save a lot of disease burden.

Keywords; Oral health, Hygiene, Quality of life, Pediatric, Post Pandemic

Abstract Id	Efi_91_61_MCH
Title	**Family planning practices and its determinants in a rural block of Haryana**
Authors	Dr. GARIMA YADAV

Objective: To examine the prevalence of contraceptive use in rural Haryana and to determine factors that influence choice of contraceptive method.

Background: India's continuously growing population has been a matter of serious concern and obstacle in socioeconomic development. Family planning is beneficial for both individuals and the society. Objective was to assess the family planning practices and its determinants among currently married women of rural Haryana.

Methods: The present study was community based cross-sectional study conducted in rural area of Haryana among 500 currently married women (18-49 years).Data on demographics and contraceptive use were collected using a pretested, pre-designed, structured questionnaire and analysed using SPSS version 20.

Results: 54.6% of the participants were using contraceptives among which female sterilization was the commonest. Age, occupation, type of family, concordance between husband and wife and knowledge of contraceptives was significantly associated with contraceptive use. The commonest reason for not using contraception was desiring to get pregnant (28.2%) and not considering it necessary (15%).

Conclusions: Contraceptive usage was low and male participation in family planning was negligible

Key Word- Contraception, family planning

Abstract Id	Efi_91_61_MCH
Title	**Family planning practices and its determinants in a rural block of Haryana**
Authors	Dr. Garima Yadav

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Conclusions: Contraceptive usage was low and male participation in family planning was negligible Key Word: Contraception, family planning nutrition) respectively. After the training programme 63.3% of AWWs could explain frequency of feeding or “how many times should one feed complementary food to a normal child of 12-24 months, besides breast feeding” and 70.8% could be able to told that how one can increase the nutritional value of a child's food, however, this critical area needs more intervention. Knowledge in growth monitoring 45.5% before test was also significantly improved in post-test 55.9%

Conclusions: As the Anganwadi worker is the key person in the programme, her education level and knowledge of minor ailments for under five children plays an important role related to her performance in the Anganwadi Centre.

Key Word- AWW, Knowledge, Under five children, Major Ailments

Abstract Id	Efi_92_60_MCH
Title	**A study to assess the effectiveness of self-instructional module on minor ailments of children among Anganwadi workers**
Authors	Dr. Nishant Gupta, G.R. Medical college, Gwalior

Introduction: Pediatric minor ailments are those which can be treated by someone with very little knowledge and does not require specially trained person. Minor ailments like diarrhea, dysentery, common cold, cough, fever, worm infestation and scabies can treat with very low knowledge. 1 The National Policy for Children, 1974 has given a high priority on early childhood care and education. In the year 1975, integrated child development (ICDS) programme gave provision of meeting the holistic need of the children, in response to the challenge of early childhood care and education the Anganwadi worker is the community based voluntary frontline workers of the ICDS programme. She assumes the pivotal role due to her close and continuous contact with the children. The Anganwadi workers monitor the growth and development, immunization, organizing complimentary feeding and she treats minor ailments. A study was done on the evolution of knowledge and efficacy of Anganwadi workers and result was found that there was significant improvement in the knowledge after the training. Result of the study showed that initial inadequate knowledge in spite of training programme. It was suggested that more frequent and, on the job, training should be given to Anganwadi workers. Since most of the children go to Anganwadi center every day and minor ailments like diarrhea, dysentery, common cold, fever, malnutrition was more in children, it is responsibility of Anganwadi worker to know about the minor ailments of children. So, to give care of children the Anganwadi worker should have adequate knowledge and knowledge will improve after self-instructional module on minor ailments. In view of the above statistical data considering the knowledge of minor ailments among children, the researcher personally felt that there is a need to study in this area and educational intervention to Anganwadi workers which will change knowledge level to provide care in the Anganwadi Centre itself. Anganwadi workers (AWW) are India's primary tool against the menace of child malnourishment, infant mortality, and lack of child education, community health. The Anganwadi workers should have basic knowledge of treatment of minor ailment in under five children.

Methods: This study was undertaken to explore the important parameters of functioning of ICDS in terms of knowledge and practices of AWWs. A descriptive cross-sectional survey was planned on AWCs of purposively selected ICDS centers of district Gwalior between November 2020 and January 2021. To exclude the biasness in the sample, 48 AWCS were selected by simple random technique. Structured questionnaire was prepared to collect socio demographical data, assess knowledge. The questions regarding knowledge, functioning was formulated in simple language for clarity and ease of understanding, on the basis of pertinent literature. The nature and purpose of study was explained to AWW. The study was carried out with AWW consent and cooperation. A pre- designed and pre - tested questionnaire prepared in vernacular language was used to collect information from AWW. The basic information was collected in terms of her name, age, education and experience. The questionnaire was

designed so as to cover every aspect related to minor ailment among children. It included questions on different aspects of minor ailments like Immunization, diarrhea, respiratory infections, malnutrition, growth monitoring and danger signs for referral etc. One mark was given for a correct response, while no mark was given for a wrong response or unanswered question. Pretest assessment to determine the knowledge of minor ailments among AWW was carried out before providing training and one post-test assessment was carried out after completion of training. Pre- and post- test assessment was conducted using the same questionnaire. There were 45 questions in the questionnaire and each correct answer was given a score of 1. Thus, the test had maximum score of 45 in both pre and post-test. Thus, information was collected from 48 AWW. The data collected was statistically analyzed using MS Excel sheet. Assessing knowledge score Forty-five knowledge questions were considered to estimate the mean knowledge score related to eight domains of ICDS services. 1. Immunization 2. Diarrhea 3. Pneumonia 4. Prophylaxis against blindness 5. Nutrition and Health Care 6. Supplementary Nutrition 7. Growth monitoring 8. Referral services If the response is correct then it is coded as 1 or else equal to 0. So, the individual knowledge score will vary from 0 to 45. Total knowledge score is estimated by adding the individual scores of each response. Knowledge score for individual (i) = Score of (q1+ q2+ q3+.....+q44+q45) Where i=1, 2.....48. Total knowledge score: Sum total of individual knowledge score. The obtained data was entered and analyzed in Microsoft excel. Descriptive statistics were used to describe demographic characteristics and other variables considered in the study. All the respondents approached to participate in the study completed the questionnaires. This cross-sectional study was conducted on 48 AWWs of selected ICDS centers of District Gwalior, Madhya Pradesh by simple random sampling method. Brief structured interview and structured questionnaire techniques were used to collect responses from the AWWs.

Results: All the AWWs (48) were trained and had been rendering adequate services but they were not much reflective of the same when being questioned on the knowledge parameter. The study revealed that out of 48 AWW, more than 80% were in the age group of 25-45 years. After IMCI based training given to AWWs, their knowledge and skills for treating minor ailments under five children was significantly improved from pre-test assessment (Total score 1087 with Mean (SD) score 2.83 (1.32) to post-test assessment1392 with Mean (SD) score 3.62 (1.38). Knowledge of AWWs regarding under five children in all 8 domains of illness was changed significantly 14.1% from 50.3% in baseline survey to 64.4% in end line survey. We conducted descriptive analysis to determine difference between pre-test and post-test performances of the selected AWWs. The education profile of AWW revealed that 64% were educated up to Senior Secondary (up to 10th and 12th), while 22% were educated more than senior secondary level and only12.5% were educated up to middle class. As regards work experience, maximum subjects (58.3%) had work experience of more than 5 years (Mean 7.8 yrs.) The 2 days training resulted in large knowledge improvements amongst AWWs from pre to post-tests. It is apparent that after training; there is an improvement in knowledge of AWWs in most of the indicators and majority of such improvement are also statistically significant. It is not surprising to see that knowledge of AWWs is high for indicators which are continuously monitored (e.g.,

immunization 70.5% with mean (SD) score was 4.2 (0.8)) but that knowledge is very low for indicators that are not being monitored in their routine program like referral services 31.9% with mean (SD) score was 0.9 (0.8). It is evident that 70.5% AWWs were having correct knowledge about immunization before the training programme; after the training the percentage of knowledge increased to 83.3%. A mere 48.5% and 49.5% of the AWWs were aware regarding the treatment of diarrhea and pneumonia with the mean [SD] 3.4[1.1] and 3.9[1.0] score respectively before the training; post training assessment shows significant improvement 58.9% and 56.2% with the mean [SD] score 4.1[1.3] and 4.5[1.2] respectively. Before the training only 37.5% AWWs had knowledge regarding the prophylaxis against blindness. After the training 50% of the AWWs could explain regarding the prophylaxis treatment for preventing blindness with the pre-test mean (SD) 2.2 (0.7) and post-test mean (SD) 4.9 (1.0). Before the training programme, 54.6% and 59.9% of AWWs were aware regarding appropriate advice to be given to a mother about their children diet (nutrition and health care) and the nutritional value of a child's food (supplementary nutrition) respectively. After the training programme 63.3% of AWWs could explain frequency of feeding or “how many times should one feed complementary food to a normal child of 12-24 months, besides breast feeding” and 70.8% could be able to told that how one can increase the nutritional value of a child's food, however, this critical area needs more intervention. Knowledge in growth monitoring 45.5% before test was also significantly improved in post-test 55.9%

Conclusions: As the Anganwadi worker is the key person in the programme, her education level and knowledge of minor ailments for under five children plays an important role related to her performance in the Anganwadi Centre.

Key Word: AWW, Knowledge, Under five children, Major Ailments

Abstract Id	EFI_112_MCH
Title	A study to assess Unmet need of family planning services in reproductive age women in Rajasthan- A Mixed Method Study
Authors	Neelam Kumari, Akhil Dhanesh Goel ,AIIMS Jodhpur

Objectives: - This study was undertaken to determine the prevalence of unmet need for family planning and its determinants, barriers and facilitators among married reproductive age group women.

Methodology: - A sequential mixed-method study was conducted in Primary Health Centre, Keru, Jodhpur. Married women of reproductive age were mapped and interviewed using a semi-structured questionnaire after their informed consent to ascertain their unmet need for family planning. Barriers and facilitators were further explored through in-depth interviews of various stakeholders.

Result: - Of the 131 participants, the majority (68,51.9%) belonged to the lower middle class. Almost all (126,96.2%) knew about any one of the contraceptive methods with the major source of knowledge (114,87.0%) being health care facilities. Current use of contraception was reported by almost 3/4th (98, 74.8%) of the participants and IUCD was the most preferred (49,37.4%) method. Of 131 participants 112 had expressed the need of FP and out of which 14 were not currently using any FP method (UMN=10.68%). The unmet need of FP had significant association with autonomy of females in family, perception and role of husband and family in FP. The facilitators were integration of services, basket of choices, community participation and mobilization, coping mechanisms, role models, acceptance of modern contraceptives, robust health care system and family support. While the barriers were opposition by husband and family, myths and misconceptions, fear of side-effects, religious beliefs, poor knowledge about contraceptives, social stigmas, practiced behaviour, non-compliance and provider's own biases.

Conclusion: - There is a need to develop family cantered interventions and increase the husband's participation in FP use and counselling services to reduce the unmet need for FP. The existing outreach services needs to be strengthened as it was found to have strong association with the use of contraceptives.

Key Words: Unmet Need, Family planning, married women, rural, community

THEME: MENTAL HEALTH

Abstract Id	Efi_107_37_MENT
Title	**Post traumatic stress disorder among adolescent girls infected with COVID 19 - A cross sectional study"**
Authors	Dr. Anandu S,.Dr. Sindhu Shankar S,.Dr.Pradeep.TS, SDUMC, SDUAHER, Kolar, Karnataka.

Introduction: COVID-19 has already led to diverse mental health problems, including anxiety, depression, posttraumatic stress disorder and other stress-related disorders. Post-traumatic stress disorder (PTSD) is a mental health disorder that may develop after exposure to exceptionally life threatening or horrifying events.

Aim: To find out the prevalence of PTSD among adolescent girls who have contracted COVID-19 infection and factors associated with PTSD

Methods: The present study was cross sectional study carried out for a period of 6 months at R.L.Jalappa Hospital and Research centre, Kolar. All adolescent girls infected with Covid-19 diagnosed with RT-PCR were included and previously diagnosed PTSD were excluded.To assess the socio-demographic details, pretested semi-structured questionnaire was used. To assess for PTSD, MINI–Kid and CPSS questionnaire were used. Data entered in Microsoft office excel, analysed using SPSS v 22(IBM Corp). Descriptive statistics applied and to see for association between factors, Chi-square test applied.

Results : 43(43%) girls were 18 years, 86(86%) belonged to Nuclear family, 46(46%) had hospital stay for 7 to 14 days, 39(39%) had suffered Social isolation, 41(41%) had fever and 33% had throat pain. 15 (15%) of girls who had contracted COVID 19 infection had been diagnosed positive for PTSD. Girls with Throat pain, headache and diarrhea were found to have statistically significant association with PTSD.Discussion Needless to say that mental health screening seems to be disregarded in Covid cases as controlling the ongoing pandemic and providing the optimal care of COVID-19 patients are still the dominant task in many parts of the world.

Conclusions: Screening for PTSD among adolescent girls post COVID infection should be given importance.

Keywords: PTSD, Adolescents, COVID 19

Abstract Id	Efi_12_146_MENT
Title	**Assessment of Burnout among the Medical Postgraduate Students working in hospitals attached to Bangalore Medical College and Research Institute, Bangalore**
Authors	Dr K Md Shoyaib, Dr Ranganath T S, Medical College and Research Institute, Bangalore

Introduction: Burnout is common in many professions and refers to a clinical syndrome characterized by excessive stress, lack of satisfaction, and a feeling of being overworked. Burnout is increasingly being recognized globally as a major concern, affecting physical and mental well-being of HCWs. During the current COVID-19 pandemic, closing of international and state borders, strict city, and area wise lockdown has affected HCWs and their families as well, causing excessive negative psychological effects.

Objectives: To assess the severity of Burnout among the Postgraduate students enrolled in residency during the academic year 2020-21 while posted non-covid duties.

Methodology Study Area: Victoria Hospital, attached to Bangalore Medical College and Research Institute Study Duration: 2 Months, 15th July to 15th September during non-covid duties Study Population: Post Graduate students admitted to various broad specialities during the academic year 2020-21

Sampling Method: Universal Sampling Study Tools: Copenhagen Burnout Inventory Scale Data Collection: Online Survey method using paid subscription of the survey website, Survey Monkey which allows to send unique link to each participant for the same set of questionnaires and prevents repeated responses based upon the device the survey is being taken from, location of the participant and the IP address.

Analysis: Data collected will be exported in excel sheet. Statistical analysis will be done using SPSS v27.0 Grad Pack. Charts and tables will be used for presenting the Descriptive Data. Normality of the data will be assessed using Kolmogorov–Smirnov test and the Shapiro–Wilk test. Post results appropriate Statistical Tests of significance based upon the distribution of the data.

Results: Out of 135 participants, (56%) were females and rest were males, with majority (99%) of them belonging to the age group 25 to 34 years and rest belonging to the age group of 18 to 24 years. Mild Burnout was found among 72% participants, Moderate Burnout among (25.5%) and High Burnout in (2.5%) was which was contributed mainly by Personal Burnout component and Work-related Burnout component measured by the Copenhagen Burnout Inventory.

Conclusion: Burnout was found among most of the participants and High burnout was found in a small proportion of participants.

Keywords: Medical Students, Professional Burnout, Mental Health

Abstract Id	Efi_124_241_MENT
Title	A STUDY ON AWARENESS, ATTITUDE, PRACTICES AND NEED ASSESSMENT TOWARDS PREMARITAL COUNSELLING AMONG YOUTHS OF RURAL PUDUCHERRY
Authors	Dr. Angelin R.G, Mr. Jeshanth J - Under Graduate, Department of Community Medicine, Mahatma Gandhi Medical College & Research Institute, Puducherry 2. Dr.Abhijit V. Boratne - Professor & Head, Department of Community Medicine, Mahatma Gandhi Medical College & Research Institute, Puducherry

Introduction: Broken family, problem family act as one of the causative factors for many of the psychosocial health issues. Premarital days are the receptive period in which youth can be furnished with unbiased scientific information, screening, health education and counselling to equip them with preparedness to lead a harmonious family life which paves way for creating a healthy future generation. Need assessment of premarital counselling service & youth's awareness, attitude & practices are least explored topic.

Objective: To study the status of awareness, attitude & practices about pre-marital counselling and to identify, its needs among youth of rural Puducherry.

Methods: A community based cross-sectional study was conducted among the youth residing in rural areas of Puducherry. The sample size was estimated as 234, with prevalence taken 11% (awareness about premarital counselling) from the literature. Simple random sampling method was employed. The data was collected using a pilot tested semi-structured questionnaire for two months and analyzed using SPSS 23 version. Frequency distribution along with correlation was employed to test statistical significance.

Results: Out of 234 participants, 133 (57%) had a felt need for want of premarital counselling facilities; despite only 50 (21.4%) participants were aware of premarital counselling. Almost three fourth of the study participants, 173(74.1%) were not willing to seek premarital counselling services. Among the barriers in accessing premarital counselling, lack of facilities (45%) & lack of awareness (40%) were the main contributors.

Conclusion: In rural Puducherry, more than half of youth have need for premarital counselling services. Recommendation: Community based premarital health screening & counselling service need to be established. Awareness creation, peer educator system can enhance community participation.

Keywords: Pre-marital counselling, youth, Need assessment

Abstract Id	Efi_87_65_MENT
Title	ASSESSMENT OF MENTAL HEALTH STATUS AMONG TYPE 2 DIABETICS IN URBAN FIELD PRACTICE AREA OF JSS MEDICAL COLLEGE, MYSURU
Authors	Dr Chandan N, .1. Dr. Abhishek R, District Epidemiologist, Ramanagara district, Karnataka, India 2. Dr.Narayanamurthy M R, Professor and Head, Department of Community Medicine, JSS Medical College, Mysuru

Introduction: Type 2 diabetes (T2DM) and mental health disorders are major health problems in the community. Patients with severe medical illnesses, including diabetes, experience affective stress that can affect pathophysiologic systems as well as mood. This can lead to mental health disorder and a poor prognosis for patients with T2DM

Aims: To assess the mental health status and to determine the associated risk factors of mental health disorder among Type 2 diabetics residing in urban field practice area of Department of community medicine, JSS medical college, Mysuru

Methodology: Cross-sectional study was conducted in urban field practice area of Department of Community Medicine, JSS Medical College, Mysuru. Total 390 Diabetics were included in our study. Pre designed, semi structured questionnaire and DASS 21 scale was used for data collection and the data was analyzed using SPSS 23 (Licensed to JSSAHER). P <0.05 was considered statistically significant.

Results: Prevalence of Depression, anxiety and stress were 162(41%), 126(32.3%), 124(31.8%) respectively. Age, education, tobacco chewing, history of hypertension were statistically significantly associated with depression. Age, occupation, hypertension were statistically significantly associated with anxiety. Age, education, occupation were statistically significantly associated with stress

Conclusions: Depression, anxiety and stress among diabetics in our study is less. Age, education, occupation, history of hypertension were common factors associated with mental health status. Counselling should be done at regular intervals for all T2DM patients for better mental health well-being.

Keywords: Anxiety, DASS 21,Depression, Stress, Type 2 Diabetes mellitus

Abstract Id	Efi_180_178_MENT
Title	**Effect of screen time on sleep pattern among undergraduate medical students at a medical university of Northern India**
Authors	Mukesh Kumar Gola, UPUMS

Introduction- Sleep in good quality and in adequate amount is required by every individual. The sleep wake cycle is an important circadian rhythm which is under the control of central "clock" located in suprachiasmatic nucleus (SCN) of anterior hypothalamus. Circadian rhythm is influenced by external cues like light-dark cycle. Extensive use of social media by young adults between 18 and 35 years of age is linked with elevated tendency to develop sleep problems and disruption of daily activities. Additionally, excessive screen time is associated with problem behaviours attributed to sleep disturbances and inattentiveness. Medical students, in particular, are often thought to have less free time, longer courses, and longer working hours than most of their fellow non-medical peers. Sedentary lifestyle, excessive screen exposure, and improper sleep habits culminate in higher BMI among children and reduce cognitive performance. Use of social media and digital devices provides a platform to ameliorate social isolation, but when used close to bedtime negatively impacts sleep among young adults

Aims and objectives: To find out effect of screen time on sleep quality among undergraduate medical students. To find out its association with various demographic, anthropometric and other risk factors

Material and methods: A cross-sectional study was carried out among medical students of all professionals in Medical University. A pre-designed, pretested, structured, self-administered questionnaire related to demographic, anthropometric, screen time, sleep quality(PQSI and STOP- BANG scale) was used. Frequency, Chi-square test and Mann-Whitney test were used to find out association of various risk factors with screen time.

Result: To be done at the time of presentation.

Keywords: Screen time, sleep pattern, BMI, medical students etc.

Abstract Id	Efi_18_140_MENT
Title	**Illness perception of self-reported morbidity amongst adults in a Rural Block of West Bengal**
Authors	Dr MitaBasu, All India Institute of Hygiene and Public Health Kolkata

Introduction: Illness perception is defined as a patient's cognitive appraisal and personal understanding of a medical condition and potential consequences. Perception of a morbidity may be positive or negative which may influence the care seeking and compliance to treatment. The present study has attempted to estimate illness perception amongst adults in a rural block of West Bengal with their self-reported morbidities and to describe their sociodemographic profile.

Methods: A cross sectional study was conducted interviewing 141 adult villagers of Bhangore-I Block, West Bengal with a pre tested semi-structured schedule. 30-cluster sampling method was used where 30 out of 80 populated villages of the block were sampled. A fifteen-day recall of self-reported morbidity was considered. Brief illness perception questionnaire (BIPQ) was used to estimate the illness perception.

Results: The prevalence of self-reported morbidity was found to be 15.2%. 63% of the study subjects were female and 54.3% had a literacy of middle school and above. 40.3% belonged to Category III of the BG Prasad socioeconomic scale. In the 0 to 10 BIPQ Scale overall illness perception score was on the higher side. Of the nine the lowest. Subjects who self-reported non communicable disease had a lower items mean consequence score was more than 7 while mean personal control score was below 5, the mean identity score was around 6 while the emotional representation score was score overall depicting a lower concern for the disease, while musculoskeletal pain and abdominal bloating had the highest concern score.

Conclusion: Widespread awareness and health education can make the subjects aware of the importance of their health condition such that they can prioritize their care seeking.

Keywords: Cross-sectional studies, Perception, Self Report

Abstract Id	Efi_39_119_MENT
Title	**Assessment of knowledge, risk perception and psychological effect of COVID-19 pandemic among quarantined healthcare workers**
Authors	NIKITA SHARMA, Dr. Kapil Goel, Dr. Gurmeet Singh, Dr. Yogesh Kumar Arora, Dr. Arun Kumar Aggarwal, PGIMER, Chandigarh Dr. RPS Bhogal PGIMER, Chandigarh

Introduction: Health care workers are at the front line of the COVID-19 outbreak response. They are facing a multitude of challenges including increased workload, risk of infection and violence, and insufficient supply of protective materials. The psychological response of overloaded healthcare workers (HCW) is useful to inform prevention, control and mitigation measures during epidemics.

Methods : A cross sectional study was conducted among the healthcare workers of a tertiary care institute in Chandigarh, India. The study was conducted on a convenient sample of 200 on-duty health care workers who were quarantined at two residential facilities. A semi- structured questionnaire about worker's perception of risk, knowledge, and the General Health Questionnaire (GHQ-12) was used to assess the psychological status of the participants. Data was collected using Epicollect5 and analyzed using SPSS version 24.

Results A total of 267 HCWs participated in the survey. The mean (±SD) age of the participants was 33.5 (7.6) years. Half of them worked as sanitation attendants while others were hospital attendants (44.9%) and kitchen assistants (5.6%). The majority of them were males (82.8%) and married (84.3%). The majority of the participants knew symptoms of COVID-19 (88.4%), droplet spread (99.3%), and the importance of quarantine (99.3%). The mean GHQ score (S.D.) of the participants was 1.91 (1.35) and 76 (28.5%) participants had scores above the mean GHQ score. About 35.2% of the participants were worried about their family members getting infected while 26.2% were worried about their colleagues. Age, male sex, and duty in COVID-19 confirmed area had a significant positive correlation with the psychological status of the participants while the duration of stay in the quarantine facility was negatively correlated with the GHQ score. Sex, religion, designation, and duty area were associated with good knowledge scores. Being female, working in COVID suspected area and religion other than Hindu were predictors of poor knowledge.

Conclusion: Improvements in knowledge and reduced psychological distress may be possible by providing enhanced education and support to healthcare workers. Quarantine reduces the transmission of infectious disease within and across the hospital settings.

Keywords: Quarantine, COVID-19, Healthcare workers, mental health.

THEME: MISCELLANEOUS

Abstract Id	Efi_133_232_MISC
Title	**Epidemiology of Leptospirosis cases admitted in a tertiary care hospital in North Kerala during Covid-19 pandemic**
Authors	Milu Elizabeth Cyriac, Dr Jaya KrishnanT, Dr Priya Chandran, Dr Nimin Hafeez, Government medical college, Kozhikode

Introduction: Leptospirosis is one of the most common and emerging zoonoses of public health importance. Large number of cases are reported in North Kerala. This study has been done to find whether Covid-19 pandemic has affected the trend of Leptospirosis cases reported at a tertiary care centre of Northern Kerala from the year January 2020 to September 2021.

Methodology: A retrospective record-based study was done by reviewing the Regional PEID cell data of Government Medical College, Kozhikode. Data on Socio – demographic details of the cases and the disease outcome were collected from the cases and comorbidity status cause of death were collected from deaths.

Results : Total number of cases reported was 335 (Females – 25.6% and Males – 74.4%) with 97 deaths (Females – 25.7% and Males – 74.3%) compared to previous year data (2018-838, 2019-670, 2020-192, 2021-46) there has been a reduction in cases admitted. Mean age of cases and deaths was 45.9±16.2 years and 49.1±13.2 years respectively. Median interval between admission and death was 1 day. CFR was 29% with the commonest cause of death being Myocarditis and ARDS. Among deaths, 56% had a history of contact with contaminated water, 38% had an associated comorbidity and 51.5% had ≤1 day interval between admission and death.

Conclusion: There has been a significant reduction in the number of cases admitted compared to the pre pandemic period. There has also been a delay in seeking treatment since more than half of the deaths had a very short interval between admission and death.

Keywords: Leptospirosis, Epidemiology, Complications

Abstract Id	Efi_26_132_MISC
Title	HOUSEHOLD OUT OF POCKET EXPENDITURE ON HEALTH CARE IN URBAN FIELD PRACTICE AREA OF MYSORE MEDICAL COLLEGE – A CROSS SECTIONAL STUDY
Authors	RACHANA K NAIR, Dr Mansoor Ahmed; Associate Professor

Background: In India Health expenditure accounts for less than 5% of the GDP (Gross Domestic Product) and the level of out-of-pocket expenditure is 62.67% of the total health expenditure. Thus, a major proportion of health expenditure by households is as out-of- pocket expenditure (OOPE). OOPE estimates vary from time to time as a result of epidemiological trends, changes in health-seeking behaviour, and changes in accessibility of health services and inflation. Hence, periodic assessment is needed to monitor trends and distribution of OOPE. Also, as the country proceeds toward Universal Health Coverage, local level estimates are needed to build the evidence base.

Objectives 1)To estimate the proportion of households incurring Out of Pocket Expenditure (OOPE) and the average amount spent by the households for health care in the urban field practice area of Mysore 2)To assess the various factors associated with the OOPE.

Methodology A cross sectional study will be carried out in the urban field practice area, Nazarbad, Mysuru during the period from April 2021 to August 2021. Sample size was estimated to be 110 households1. Ethical committee approval has been obtained. Data will be collected using pre designed and pretested questionnaire in the sampled households and compiled in Microsoft Excel sheet. Analysis will be carried out using relevant statistical tests. SPSS VERSION 22 (Trial version) will be used for the analysis of data.

Conclusions: Results will be presented in the conference.

Keywords: Out of pocket expenditure, Urban area, Households, hospitalization.

Abstract Id	Efi_28_130_MISC
Title	**Epidemiology Of occupational health hazards among Agricultural workers of Southern District of Karnataka.**
Authors	Dr Nayanabai Shabadi, Dr Deepak Anil,. Dr M R Narayana Murthy,

Introduction: Agricultural works are associated with a variety of unique occupational health hazards in the form of physical factors like extreme weather conditions, sunrays, etc; chemical\/toxicological hazards in the form of pesticides\/fertilizers, etc, including different forms of biological and mechanical hazards. India being a country of agriculture, majority of its population is engaged in agriculture-based activities in a varied manner either directly or indirectly. they are highly susceptible for suffering from numerous work-related health disorders. The current study is undertaken with the following objectives.

Objectives: 1.To find out the magnitude of occupation related injuries and illnesses among agriculture workers 2. Study of factors influencing occupational related injuries and llnesses among agricultural workers. b)

Methods: A Cross-Sectional study planned for the period of two months starting from the month of August to October. Data Collection: A questionnaire was developed in the local language Kannada for the purpose of this study. A pilot study was conducted on 10 participants. Data collection was done through house-to-house survey. Analysis of Data: Data will be entered and analysed in SPSS version 24(licenced). The data will be presented in percentage (%) and in the tabular form. Uni variate analysis will be done to know the factors influencing the occupational hazard among agricultural activities. c)

Results: as the data collection process of the study is still in progress, the results of the study will be presented during the conference presentation.

Keywords: Occupational health hazard, Agricultural health hazard, rural India,

Abstract Id	Efi_29_129_MISC
Title	**Validation of self-reported smoking status of tuberculosis patients in a randomized controlled effectiveness trial on nicotine replacement therapy for smoking cessation**
Authors	JAGANNATH PURUSHOTHAMA, Sanjeev Badiger, Nanjesh Kumar, Nanda Kishore Baikunje, Neevan D'Souza, Nitte (Deemed to be University)

Introduction: Self-reported questionnaires used to measure smoking status of individuals generally, provide underestimated outcomes when compared to the actual smoking prevalence. This is because smoking is perceived as a socially undesirable behaviour. A systematic review of adults reported that the absolute difference between self-reported smoking prevalence and biochemically measured smoking prevalence ranged from 1–47% depending on the subjects and methods of survey, indicating considerably varying validities of self-reported surveys across studies. The gold standard used by previous studies for assessing the validity of smoking surveys are mostly biochemical tests using urine, saliva, serum, and hair specimens.

Methods: The objective of the study is to assess the validity of self-reported smoking status among 300 tuberculosis patients who have undergone six months of intervention for nicotine replacement therapy or placebo in a randomized controlled trial conducted in Dakshina Kannada district of Karnataka state. The self-reporting of smoking status was immediately validated with semi-quantitative urine cotinine test. Cohen's kappa statistic was used to measure the agreement between the two methods. Sensitivity and specificity of the test was determined.

Results: Out of 300 participants, 146 (48.67%) reported smoking abstinence. Upon validation with urine cotinine semi-quantitative test, 95 (31.67%) tested negative (interpreted as smoking abstinence). Number of observed agreements is 241 (80.33% of the total observations), number of agreements by chance is 151.5 (50.49%). Cohen's kappa statistic was 0.60 (0.51 to 0.68 at 95% CI; SE 0.04) indicating moderate agreement. Sensitivity and specificity of the self-reported test was 97.40% and 62.33% respectively.

Conclusion: biochemically verified cotinine tests are recommended as the gold standard for confirmation of smoking status of trial participants to minimize over-reporting of smoking abstinence.

Keywords: validation study, randomized controlled trial, cotinine, pulmonary tuberculosis, tobacco use cessation

Abstract Id	Efi_131_234_MISC
Title	**Root Cause Analysis of Health Inequities in India**
Authors	Dr Swati Suman, Dr. Ishani Chadha, Dr. Kajal Taluja, Dr. Manoj Kumar Gupta, AIIMS JODHPUR

Introduction- Health Inequity is described as absence of avoidable differences in health among social groups which forms the causes of Health Inequity. WHO has provided a Conceptual Framework for actions on the social determinants of Health Inequities. One of the first steps in taking corrective measures is identifying the challenges and bringing them together to avoid the inequities. This study was planned with the objective to identify the root causes of Health Inequities in India using Fish Bone Analysis.

Methods- All the published and unpublished literature was retrieved from online databases like PubMed, Google Scholar and Scopus on Health Inequities in India. Data from the last one decade was used. Cross references were checked and the relevant information related to the root cause of Health Inequities in India was used for this analysis. Fish Bone Analysis was done under the headings of Social\/Economical, Political, Cultural and Governance.

Results- The cause of health inequities in India were categorized in to four major categories i.e., Social\/Economical, Political, Cultural, Governance. The social\/Economical category analyses that education, occupation, caste, religion, gender, addictions, OOPE (out of pocket expenditure), desire to spend and exposure to technology were the leading root causes. Politically; priorities, bias and lack of intersectoral co-ordination were the leading root causes. Additionally, cultural gaps led to gender discrimination that plays an important role in faith, religious practices, customs and beliefs leading to the Health Inequities in the country. Apart from this, it was found that accountability and auditing transparency, improper distribution of resources with lack of quality and quantity, accountability, incentivization, IEC and improper planning were the key governance causes of the inequities.

Conclusion- The identified root causes play a key role in health inequity and are important considerations that need to be controlled. These inequities are avoidable and can be tackled by effective co-ordination of different sectors.

Keywords: Health Inequities, Root Cause Analysis, Fish Bone Analysis

Abstract Id	Efi_167_194_MISC
Title	PERCEPTION REGARDING FLIPPED CLASSROOM AMONG MEDICAL STUDENTS
Authors	Dr RuqiaQuansar, Dr. S.M. Salim Khan, G.M.C, Srinagar Dr. Sabira Aalia Dkhar - GMC, Srinagar

INTRODUCTION: A flipped classroom is a type of instructional strategy and blended learning where students are introduced to content at home and practice working through it at school. Education has been pressured to shift towards more flexible, effective, active, and student-centered teaching strategies that mitigate the limitations of traditional transmittal models of education

METHODOLOGY: Study design: The study has a cross-sectional study design. Study tool: the study data collected was done using an online questionnaire which was pretested in a pilot study and then later was done through Google forms. Study population: students of government medical college, Srinagar. Statistical test: all analysis was done in excel for descriptive results.

RESULT: A total of 152 students participated in this study. The perception of the students regarding Flipped classroom activity. 56.6% of students find Flipped classrooms better than the traditional classroom. 84.2% of students felt confident after watching the video and before the actual interactions whereas 69.7% of students felt confident after watching the video and the actual interactions. 75.7% of students felt that the teacher \/instructor was able to engage them during the Flipped classroom. 73.7% of students felt that the teacher \/instructor was able to provide clarification on difficult concepts during the Flipped classroom activity. 41.6% of students felt that the teacher need to make all the videos less than 10 minutes cause if they are longer, students start feeling bored. 53.3% of students felt that in order to help support more in the Flipped classroom, the teacher should make videos more interesting. 92.8% of students felt that they should take more responsibility for their learning.

CONCLUSION: It was seen that students felt the perception regarding flipped classroom was good and preferred it more than traditional classroom teaching.

Keywords: Flipped classrooms, Medical students, Education

Abstract Id	Efi_142_223_MISC
Title	**A review of propensity score matching and their use in exclusive breastfeeding research**
Authors	Aravind Dharmaraj, Prasanna Samuel, Sindhu Kulandaipalayam Natarajan, Christian Medical College, Vellore, Tamil Nadu,. Samarasimha Reddy, ICMR-National Institute of Nutrition, Clinical Epidemiology Division

Randomized Control Trial are considered as gold standard for estimating treatment effect but it may not always feasible or ethical and such problem might be in breastfeeding research. Observational studies provide sufficient evidence for estimating treatment effect but results in confounding bias where baseline characteristics differ systematically between two groups. In such a situation, propensity score matching (PSM) ensures the even distribution of observed baseline covariates similar to RCTs and treatment effects can be estimated. Propensity score is the conditional probability of assignment to a particular treatment given a vector of observed covariates. The purpose of the review was to provide a general key concept of propensity score matching with worked examples using secondary datasets related to exclusive breastfeeding research to illustrate how the analytical strategies might be applied. We also summarized a method of PSM used in leading journals. A step-by-step R statistical code to perform propensity score matching was provided. Further, we recommend to use PSM technique in following breastfeeding research where researches face ethical issues.

Keywords: Exclusive breastfeeding, observation studies, propensity score matching

Abstract Id	Efi_115_20_MISC
Title	A cross sectional study to study the patient's satisfaction at District Hospital Indore
Authors	Dr Chhaya Bohare, MGMMC, Indore

INTRODUCTION-: Patients' perceptions of the quality of care and services they receive at a healthcare practice offer practitioners and staff valuable information and data on which to build improvement efforts. One method for collecting information about patient experiences is through the use of patient satisfactions surveys. A well-designed and implemented survey can collect critical patient feedback and also serve as a tool for improving communication between healthcare providers, staff and patients. Patient Satisfaction is one performance measure of health care quality. Since patient satisfaction is not directly observable, patient satisfaction surveys are commonly used as a measuring device. Patient satisfaction surveys attempt to translate subjective results into meaningful, quantifiable, and actionable data. Measuring patient satisfaction and extracting useful and relevant information involves determining which aspects of patient satisfaction to measure, developing reliable and valid questions, randomly sampling individuals from within a patient population, and using standard techniques such as mail surveys, telephone surveys, or face to face interviews.

METHODS:- Cross Sectional Study was carried out on patients arriving in OPD at DISTRICT HOSPITAL INDORE by simple random sampling by using pre- designed semi- structured questionnaire. Statistical analysis was done in Microsoft -Excel using Percentage.

RESULTS:- this study was carried out on patients arriving in "OPD AT DISTRICT HOSPITAL INDORE "on 200 Patients and results are following- Maximum patient were in range of 5 -25 km distance. 24 % were resident outside Indore district. Maximum patients were not visiting the hospital for the first time. Maximum patient think that OPD slip is handed over in 5 to 20 mins time. 67.9 percent think that time taken for OPD slip is sufficient 45.7 percent patient find difficulty to understand the direction given from the counter. Majority of patient are satisfied with the behaviour of the receptionist 65.7 percent of patient were unable to interpret the language written on OPD slip as it is written in English language only. Though majority of people have no issue in finding the respected department but 34.5 percent patient find it difficult to reach department.49.7 percent patient find the use of sign board very helpful, whereas 49.2 percent patient were unaware about the sign boards. The 77.8 percent patient were comfortable with waiting for visiting doctors. 86.2 percent patient were satisfied that doctor listen to their problem carefully. 62.1% patient thinks that doctor explained about their disease. 84.3% patients were able to understand about their treatment as explained by doctor. 67% patient were completely satisfied and 28.9% were partially satisfied. 57.2% patient were completely satisfied with drug store of hospital. 68 % patient got relief from the medicine provided by the hospital. 58% patients think that they got all the medicine from hospital itself. 77.2 % patients think that investigations recommended by the doctor are available in hospital. 59.3% patient received their report timely. 54.5% patient were satisfied with the behaviour of the hospital staff. 60.3% patient were satisfied by the food and water provided by the canteen within the hospital.

CONCLUSION:- As per the study conducted on 200 patients in " DISTRICT HOSPITAL INDORE" , we concluded that majority of patients were satisfied with the hospital services like behaviour of consultant and staff, investigation and diagnostic facilities, treatment, availability of medicine, drinking water and food facilities.

Keywords: PATIENTS, DISTRICT HOSPITAL, OPD, INDORE

Abstract Id	Efi_113_23_MISC
Title	**To study knowledge attitude and practice of universal precautions among healthcare workers in a tertiary care hospital during covid 19 pandemic**
Authors	Dr Nowsheen Zaffar, Kashmir Institute of Medical Sciences

Background: Healthcare workers (HCWs) are potentially exposed to blood and body fluids (BBF) in the course of their work and therefore are at risk of infection with blood-borne pathogens. Despite their best intentions, sometimes, healthcare workers act as vectors of disease. They disseminate new infections among their unsuspecting patients.

Methods: This is a cross-sectional, study to determine Knowledge, Attitude and Practice of universal precautions among healthcare workers of a tertiary care hospital. A cross-sectional survey was carried out in the maternity hospital of Sher I Kashmir Institute of Medical Sciences, Srinagar for a period of two months from September to October 2020. All the healthcare workers of the said facility were included in the study. A questionnaire was prepared based on the WHO and CDC guidelines on UPs and was distributed among the study population. Those who did not return the proforma were excluded from the study. The respondents were divided into three groups viz G1, G2 and G3 which included doctors, nurses and technicians respectively.

Results: A total of 72 HCW's participated in the study. The data reveals that group 1 had mean awareness score of 18 in the time of covid pandemic with 100% doctors having adequate awareness as compared to nurses who had mean awareness score of 15.2 and 90% nurses having adequate awareness. The data reveals that group (technician) had mean awareness score of 14.5 in the time of covid pandemic with 83.3 % technician having adequate awareness Analysis revealed that hand washing was done by greater proportions across all the groups (G1=100%, G2=82%, G3=66.67%). Wearing gloves as one of the major practices of UPs was emphatically observed and recorded. Analysis revealed that gloves were worn by greater proportions across all the groups (G1=100%, G2=82%, G3=66.67%).

Conclusion: Practices of universal precautions has increased among healthcare workers during covid pandemic. The wearing of masks, gowns, gloves, use of hand sanitizers has increased to a great extent. It can be increased to a greater extent by by regular education programmes.

Keywords: HCW: healthcare workers, UP: universal precautions

Abstract Id	Efi_103_45_MISC
Title	**To study knowledge and attitude regarding organ donation among medical and non-medical students**
Authors	NazukRazdan, Soumya puri, , Maharishi Markandeshwar Medical College and Hospital, Solan

Organ transplantation is a major treatment protocol for a number of cases of end stage organ failure. Many organs such as cornea, kidney and liver are commonly transplanted to human recipients. There is worldwide shortage of donor organs in comparison to the need for transplantation. Therefore organ donation is the cornerstone in the process of transplantation. Situation is even more gloomy in India where every year more than 1 lakh people are estimated to suffer from organ failure and only 0.34 per million of population have donated organs in comparison to 36 per million and 27.02 per million in Spain and USA respectively.

Objective: The study aims to study the knowledge and attitude regarding organ donation among the medical and non-medical students.

Methodology: It is a cross-sectional type of study conducted at 2 colleges of district Solan and was conducted among the students who are enrolled in MBBS and those pursuing courses other than medical. Sample size of 400 was taken with 200 each from medical and non-medical streams.

Data analysis: The data collected was compiled, analyzed and was converted to electronic format and entered into MS Excel and analyzed using SPSS (Statistical Package for Social Sciences) version 21 for calculating percentages and mean for the data.

Results: Total 400 students were registered for the study including 200 medical students and 200 students pursuing other courses. The average age of participants was 20.9 years. 88% Medical students and 68.5% non-medical students knew that organs can be donated during life as well as after death. 65% medical students and 80.5% other students had shown willingness to donate their own organs immediately after death. 68% medical students and 59% non-medical students were willing to join organ donation group of city to motivate others.

Conclusion: There is need to add syllabus imparting knowledge about organ donation in school curriculum to increase awareness and remove all myths regarding organ donation. At the same time medical curriculum should also be amended with inclusion about knowledge, attitude and practices regarding organ donation and transplantation.

Keywords: Medical, Non-medical, Organ donation, Transplant, Recipient

Abstract Id	Efi_109_35_MISC
Title	**The Perception of Medical Students in using technology to meet the challenges of medical education during COVID 19 outbreak**
Authors	DR ABHISEK MISHRA, Dr Arvind Kumar Singh . Dr Swayam Pragya Parida

Introduction: The prevailing COVID19 pandemic, exposed the students to a new platform of virtual online teaching. The study was planned to find the “Perception of Medical Students in using technology to meet the challenges of medical education”.

Methods: the study was conducted in May 2020, after one month of starting online classes; using a cross-sectional study design, the students of 2019 admitted batch were given a researcher-made google questionnaire with sections on i. Challenges of Medical Education, ii. Educational Advantages of Technology, iii.medical apps used, iv.advantages and disadvantages of using technology in medical education.

Results: 119 of 150 medical students responded, equating to a response rate 79.33%. 73.9% believed that technology should be to support learning and is not a replacement for face-to-face learning. Among advantages reasons cited were, helped keep in touch with studies, cover syllabus, studying from the comfort of their home. Disadvantages cited were, they couldn't connect with the teachers as classroom teaching, technical problems, sometimes lack of synchronization.

Conclusion: The study helped identify the students' perception of technology in medical education, which will help policy makers in identifying a role of appropriate need-based inclusion in the medical curriculum. This feedback gave a students' perspective of the challenges faced in use of technology in Medical Education.

Keywords: Perception, online class, medical education

Abstract Id	Efi_133_232_MISC
Title	**Epidemiology of Leptospirosis cases admitted in a tertiary care hospital in North Kerala during Covid-19 pandemic**
Authors	Milu Elizabeth Cyriac, Dr Jayakrishnan T, Dr Priya Chandran, Dr Nimin Hafeez, Government medical college, Kozhikode

Introduction : Leptospirosis is one of the most common and emerging zoonoses of public health importance. Large number of cases are reported in North Kerala. This study has been done to find whether Covid-19 pandemic has affected the trend of Leptospirosis cases reported at a tertiary care centre of Northern Kerala from the year January 2020 to September 2021.

Methodology: A retrospective record based study was done by reviewing the Regional PEID cell data of Government Medical College, Kozhikode. Data on Socio – demographic details of the cases and the disease outcome were collected from the cases and comorbidity status cause of death were collected from deaths

Results : Total number of cases reported was 335 (Females – 25.6% and Males – 74.4%) with 97 deaths (Females – 25.7% and Males – 74.3%) compared to previous year data (2018-838, 2019-670, 2020-192, 2021-46) there has been a reduction in cases admitted. Mean age of cases and deaths was 45.9±16.2 years and 49.1±13.2 years respectively. Median interval between admission and death was 1 day. CFR was 29% with the commonest cause of death being Myocarditis and ARDS. Among deaths, 56% had a history of contact with contaminated water, 38% had an associated comorbidity and 51.5% had ≤1 day interval between admission and death.

Conclusion: There has been a significant reduction in the number of cases admitted compared to the pre pandemic period. There has also been a delay in seeking treatment since more than half of the deaths had a very short interval between admission and death.

Keywords: Leptospirosis, Epidemiology, Complications

Abstract Id	Efi_202_misc
Title	To Explore Depression, Anxiety, Stress Levels, Job Satisfaction and Quality of Life among Police Personnel in Etawah district of Uttar Pradesh: A cross-sectional study
Authors	

Introduction- For several decades, the scientific community has studied workplace stress and its effects, in terms of both physical and psychological health and individual behaviour. The ongoing outbreak of COVID-19 has affected both stress and quality of life (QoL) at all socioeconomic levels, including professionals in the police force. Police personnel also experience elevated levels of stress, anxiety, and irritability. Their work has been described as one of the most stressful occupations in the world, because the physical threats in their operational field are enormous. However, organizational stressors, such as the administrative structure and working environment, are considered to be more significant compared with the operational issues that police personnel handle.

Research Significance: The aim of this study is to assess police personnel' perceived stress levels, job satisfaction, QoL, and their relationships during these difficult times in Etawah district of Uttar Pradesh.

Methodology- A cross-sectional study has been conducted in10 selected police stations covering 400 police personnel in the Etawah district of Uttar Pradesh. Study participants were those police employees who provided the consent to participate in the study and comprise the sample population for the study. The World Health Organization Quality of Life-BREF Questionnaire, Perceived Stress Scale-14 (PSS-14) and Depression, Anxiety and Stress Scale21 (DASS-21) questionnaires were used to assess QoL and perceived stress, depression and anxiety respectively. The data thus collected was scrutinized for completeness and entered in Microsoft excel spread sheet and statistically analysed using SPSS software version 25, IBM Chicago, USA.

Result – Awaited.

Abstract Id	Efi_98_52_MISC
Title	ANALYSIS OF HEARING IMPROVEMENT BY VARIOUS OSSICULOPLASTY TECHNIQUES (AUTOLOGOUS VERSUS PROSTHESES) IN CHRONIC OTITIS MEDIA PATIENTS UNDERGOING EAR SURGERY IN ENT OT AT ELMCH
Authors	Imran alam

Introduction: The main purpose of surgery in cases of chronic otitis media(COM) is the eradicate the infection and restore the middle ear hearing function. Both intact tympanic membrane and ossicular chain are essential for restoration of hearing in these cases. The world of material science has provided the otologist with a wide array of biomaterials for middle ear reconstruction. The use of ossicular graft material in ossicular chain reconstruction and significantly improved hearing results after tympanoplasty and tympanomastoid surgery for chronic otitis media.

Aims and objectives: To assess the degree of hearing improvement by various ossiculoplasty materials. To evaluate the degree of hearing improvement by using autograft as ossiculoplasty material vs Teflon TORP\/PORP as ossiculoplasty material in chronic otitis media patients.

Materials and methods: The study involved the total of 50 patients presenting with dry tympanic membrane perforation with ossicular disruption and air bone gap (ABG) OF >25. The patients were randomly allotted into two groups and they underwent tympanomastoidectomy with ossiculoplasty. In one group homologus incus was used as ossiculoplasty material and in second group Teflon TORP\/PORP was used as ossiculoplasty material.

Results: The data was analyzed using Statistical Package for Social Sciences Version 21.0. Data has been analyzed using Chi-square test, Independent samples 't'-test and paired 't'-test respectively. A 'p' value less than 0.05 was considered to be statistically significant. The present study concluded that there was no intergroup difference in post-operative hearing outcome however the two groups individually noted significant post-operative improvement in hearing.

Conclusion: By this study we conclude that there was significant improvement in hearing after ossiculoplasty in both groups. But when we compare the both groups there was no significant difference in outcome of ossiculoplasty with autologous incus graft and Teflon PORP\/TORP.

Keywords: Total Ossicular Replacement Prosthesis, Partial Ossicular Replacement Prosthesis, Ossiculoplasty, Otitis media and Mastoidectomy

Abstract Id	Efi_171_190_MISC
Title	AN EXPLORATORY STUDY ON DOCTOR-PATIENT COMMUNICATION AMONG INTERNS AT MGM MEDICAL COLLEGE AND LSK HOSPITAL, KISHANGANJ, BIHAR, INDIA
Authors	Dr. Dharmendra Kumar, M.G.M. Medical College and LSK Hospital, Kishanganj, Bihar

Background: There is supreme importance for teaching-learning among Interns regarding their perceptions on Doctor-Patient relationship on the basis of Doctor-Patient communication.

Objectives: To find out the perception of Interns regarding the Doctor-Patient Communication.

Methods: A hospital-based prospective open-label observational cross-sectional study was conducted among interns to find out the perception and correlates based on distinguished questions on Doctor-Patient Communication at the emergency, out-patient and in-patient departments, at M.G.M. Medical College and LSK Hospital during March to May 2021.

Results: The perceptions of the Interns' regarding reported expectation of patients, and Interns' satisfaction after independently dealing the patients to assess the strength of mutual communication. On the Interns' perception regarding expectation of patients, all the responses were in favour of them except 'time constraints' and 'general advice'; all were statistically highly significant. On the Interns' reported satisfaction after independently dealing with the patients, majority of responses favoured Intern's positive approaches of calm hearing, addressing complaints and caring patient's view; yet, private matters and other issues of the patients were not satisfactorily addressed; these responses were highly significant. On critical analysis, the Interns were satisfied while communicating with the patients amid increased stress, workload and patient load; Interns were content on patients' compliance which was statistically significant.

Conclusions: This study revealed most updated observation on Intern's perceptions regarding the Doctor-Patient communication on the positive note along with their own satisfaction.

Keyword: Interns, Doctor-Patient relationship, Doctor-Patient communication

Abstract Id	Efi_160_201_MISC
Title	**Assessing Indian Public Health Standards for A Rural hospital in Maharashtra: A Case Study**
Authors	Dr Dipali Chandrakant Puri

Introduction- The P.R.I.D.E India (Planning Rural-Urban Development through Education) is a non-governmental organization with the core foundation based on a holistic approach to bring about a sustainable change in the marginalized communities living in rural and urban poverty. PRIDE India set up a 30 bedded SPARSH (Sastur Project of Action Research Services Through Hospital) rural Hospital in Sastur village of Osmanabad district of Maharashtra in the wake of 1993 earthquake that hit 83 villages taking thousands of lives. To assess the IPHS at RH level, little efforts have been made in India. So, effort has been made to assess IPHS at RH level in the present study. The main objective of this study is to study services available, availability of infrastructure facility, manpower and diagnostic services available at rural hospital and compare these with the IPHS for RH.

Methods- Present study was conducted using IPHS guidelines as a study tool over a period of one month from 1st January 2020 to 30th January 2020 by direct observation. Permission of the project manager of the SPARSH rural hospital was taken.

Results- It was found that specialist services were available as per IPHS recommendations but gaps in infrastructure facilities and shortage of manpower were observed. Due to a smaller number of OPD rooms, two doctors were consulting in same room. As per IPHS recommendations, total essential and desirable manpower at rural hospital should be 46 and 52 respectively but manpower available at SPARSH hospital was 34 and 36 respectively. Availability of diagnostic services were satisfactory. However, retinoscopy, Ophthalmoscopy & dental X ray were unavailable. Out of 35 essential and 36 desirable diagnostic services, 32 essential and 33 desirable diagnostic services were available.

Conclusion- SPARSH rural hospital can be upgraded by recruiting staff and improving infrastructure facilities as adequate number of manpower is required to provide services more effectively.

Keywords: IPHS, Manpower, Rural hospital

Abstract Id	Efi_5_154_MISC
Title	**"Attitudinal change towards yoga after its introduction into new curriculum: A comparative study among medical students"**
Authors	Dr Aparajita Mishra, Dr IpsaMohapatra, Dr Amrita Burma, Dr Bidisa Sarkar,

Department of Community Medicine, KIMS

Introduction India is the birth-place of Yoga; still the benefits have not been explored due to lack of awareness, interest and misconceptions. Medical students are exposed to high level of stress & anxiety during their training. With CBME, yoga was introduced in the new curriculum; determining medical students perceptions about Yoga, would serve as a step to understand their decision to include yoga in practice and continue it in future. Keeping this in mind, the study was conducted to compare the students attitude towards yoga, to identify the barriers of yoga practice among them.

Materials and methods Using a cross-sectional study design, a total of 300 students, 150 from 6th semester and 150 from the 4th semester were contacted. A self-administered questionnaire- Google form-with researcher-made questions was sent to those who consented. All data was collected, coded, tabulated and analysed using SPSS version 20.0.

Results In this comparative study, among 4th and 6th semester students, it was found that 43.4% of the 4th semester and 53.7% of the 6th semester students knew about the benefits of yoga(p=0.040). 23.1% of 6th semester, while 20% of 4th semester were motivated by their family members to do yoga(p=0.009). On comparing their attitude, it was considered to be purely a weight loss program by 17.9% of the 4th semester and 8.8% of the 6th semester students respectively(p=0.017). 94.5% students of the 4th semester and 87.1% of the 6th semester, believed that yoga helped in improving the immunity(p=0.023). The barriers identified by students were busy schedule(11% in 4th semester while 7.5% by 6th semester), lack of time (13.1% in 4th semester and 12.9% in 6th semester).

Conclusion: The study helped reveal that the integration of yoga into the medical curriculum had not brought much attitudinal change in them. The identified barriers will help implementing yogic lifestyle education programs among medical students, who are the future health care providers.

Keywords: Attitude, Yoga, Curriculum, Medical, Perception

Abstract Id	Efi_176_183_MISC
Title	**Quality of life and factors affecting quality of life of postmenopausal women in an urban Block of district Srinagar, Kashmir**
Authors	Syed Najmul Ain, GMC Anantnag Kashmir

Introduction: Quality of life (QOL) is the subjective component of one's well-being. QOL reflects how happy you are about your life. Menopause often decreases the QOL of women

Objectives: 1. To assess the quality of life of postmenopausal women in Block Hazratbal, district Srinagar, 2. To determine the correlates of quality of life of these women

Methods: This Community based Cross-sectional study was conducted in Block Hazratbal by department of Community Medicine GMC Srinagar. Women 10 years post-menopause were eligible. Those not giving consent, with mental health issues, hysterectomy and on HRT were excluded. Sample size was calculated using maximum standard deviation (2.02) of overall means of domain scores in pilot study. This gave a sample size of 392. Proportionate sampling was used to select the number of participants from different areas while consecutive sampling was used in each area for data collection. Menopause Specific Quality of Life Questionnaire (MENQOL) was used.

Statistical analysis: Data was entered in Microsoft Excel 2010 and analysed using IBM SPSS v.23. Pearson's correlation, Spearman's Rho, t-test, Mann Whitney U, ANOVA were used.

Results: Of 407 total participants, 70% were 46-50 years of age, 85.7% were currently married, 86% illiterate, and 57% living in joint families. For 52% time since menopause was 1-5 years. Vasomotor symptoms were the most bothersome (mean score 3.7) followed by the physical domain (mean score 2.4). In the vasomotor domain, hot flashes were the major complaint (76%) followed by sweating (53.6%). With increasing age, bothersomeness of vasomotor symptoms decreases(r= -0.343, p value < 0.001), and that of sexual symptoms increases (r=0.217, p value <0.001).

Conclusion: In our study, vasomotor symptoms were most distressing. But as the years pass, their intensity decreases and the women get adjusted to this new phase of life. Besides being provided good family support, women must seek advice from specialists for severe complaints for a better QOL.

Keywords: Quality of life, Menopause, symptoms

Abstract Id	Efi_177_182_MISC
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Keywords: Quality of life, Menopause, symptoms

Abstract Id	Efi_146_219_MISC
Title	**A cross-sectional study on the doctor patient communication among the post graduate students at a tertiary care teaching hospital in eastern India**
Authors	Dr. Tanay Sinha, MGM Medical college

Introduction: There is an utmost importance for imparting insight on the doctor-patient relationship on the basis of doctor-patient communication in the teaching-learning programmes among the post graduate trainees (PGTs).

Objectives: To find out the knowledge and perception of the post graduate (PG) students regarding their issues of communication with their patients.

Methods: A hospital-based prospective open-label observational cross-sectional study was conducted among the PGTs to find out the correlates on Doctor-Patient Communication based on distinguished questions at the emergency, out-patient and in-patient departments, at a medical college and hospital in Bihar India during June to August 2021.

Results: To assess the level of bilateral communication, the PGTs' opinions of stated patient expectations and their satisfaction after treating the patients were analyzed. Except for time constraints and personal advice, our study noted highly statistically significant internalization of the PGTs' answers in favor of the patients' perspective. According to the PGTs, patients feel free to express their or their wards' concerns. PGTs' attentiveness, addressing complaints, and caring for patients' issues are highly significant, based on the patients' problems. Despite a high patient load, which resulted in an increased workload and a language barrier for some of the PGTs, there was overall satisfaction while communicating with patients, according to a critical analysis of their responses regarding their reasons, if any, for dissatisfaction with appropriate communication with the patients. Furthermore, when asked to rank the most important cause of their discontent, the plurality of PGTs chose increased patient load as the critical reason.

Conclusions: The perceptions of the PGTs regarding explicit and implicit expectations of care-seekers and caregivers along with their satisfaction and dissatisfaction levels after managing the patients were our exclusive and positive findings.

Keywords: Postgraduate trainee, doctor, patient, relationship, doctor-patient communication

Abstract Id	Efi_131_234_MISC
Title	**Root Cause Analysis of Health Inequities in India**
Authors	Dr Swati Suman, School of Public Health, AIIMS Jodhpur

Introduction Health Inequity is described as absence of avoidable differences in health among social groups which forms the causes of Health Inequity. WHO has provided a Conceptual Framework for actions on the social determinants of Health Inequities. One of the first steps in taking corrective measures is identifying the challenges and bringing them together to avoid the inequities. This study was planned with the objective to identify the root causes of Health Inequities in India using Fish Bone Analysis.

Methods- All the published and unpublished literature was retrieved from online databases like PubMed, Google Scholar and Scopus on Health Inequities in India. Data from the last one decade was used. Cross references were checked and the relevant information related to the root cause of Health Inequities in India was used for this analysis. Fish Bone Analysis was done under the headings of Social\/Economical, Political, Cultural and Governance.

Results- The cause of health inequities in India were categorized in to four major categories i.e., Social\/Economical, Political, Cultural, Governance. The social\/Economical category analyses that education, occupation, caste, religion, gender, addictions, OOPE (out of pocket expenditure), desire to spend and exposure to technology were the leading root causes. Politically; priorities, bias and lack of intersectoral co-ordination were the leading root causes. Additionally, cultural gaps led to gender discrimination that plays an important role in faith, religious practices, customs and beliefs leading to the Health Inequities in the country. Apart from this, it was found that accountability and auditing transparency, improper distribution of resources with lack of quality and quantity, accountability, incentivization, IEC and improper planning were the key governance causes of the inequities.

Conclusion- The identified root causes play a key role in health inequity and are important considerations that need to be controlled. These inequities are avoidable and can be tackled by effective co-ordination of different sectors.

Keywords: Health Inequities, Root Cause Analysis, Fish Bone Analysis

Abstract Id	Efi_174_186_MISC
Title	**Quantifying Age heaping and age mis-reporting in a multicentric survey**
Authors	Dr. (Major)Sumeet Singh, Dept. of Community Medicine, AFMC, Pune

Introduction: Age is an important variable in all epidemiological studies and an invariable part of community-based surveys. Age data tend to display excess frequencies at certain numbers, such as at multiples of ten and five. As of now, there are only few studies which have quantified the age misreporting bias. We have used demographic indices known as the age heaping indexes to explore the patterns of age misreporting. The article present the finding of quantifying age heaping and age misreporting in a multi-centric survey

Methods The data of 3252 individuals was analyzed and measurement of errors in age for the sampled data have been evaluated by Whipple's Index (WI), Myer's Blended Index (MI) and United Nation's Age-sex accuracy Score (AI) which comprises of Sex ratio Score (SR), Male Age Ratio Score (MARS) and Female Age Ratio Score (FARS).

Results Out of total 3252 participants, 828 (25.5%) were female. The mean (SD) age of our population was 34(8.5) years and ranges from 15 years to 65 years. The percentage of female ages ending with digits 0 or 5 = 23.55% and percentage of male ages ending with digits 0 or 5 = 23.28%. The calculated WI was 117.75 and 116.34 for males and females respectively. The calculated Myer's index for female and male is 10.53 and 25 respectively.

Conclusion: The study provides evidence that probably age heaping bias is less of problem in the conducted study. However, It is recommended that the researcher should be aware of age heaping bias in acquiring age data in large studies by having inbuilt techniques in data collection which can measure and minimize errors to ensure the accuracy of age data .

Keywords: Age heaping, Whipple Index, Myer's blended index, age rounding

Abstract Id	Efi_132_233_MISC
Title	**SWOT analysis of pneumoconiosis policy of Rajasthan state**
Authors	Dr. Kajal Taluja, School of Public Health, AIIMS Jodhpur

Introduction – Pneumoconiosis is a term applied to "the group of lung diseases which results from inhalation of dust in various occupations i.e. pneumoconiosis, silicosis, asbestosis, Barytosis, Siderosis, Stannosis, etc. According to the studies, silicosis affects between 12 and 50 percent of stone quarry workers. In Rajasthan, silicosis accounts for about 95% of pneumoconiosis cases.

Objective- To carry out a SWOT analysis of pneumoconiosis policy in Rajasthan.

Method- the relevant information to carry out a SWOT analysis of policy has been retrieved from published and unpublished databases. The information includes challenges related to implementation for policy and parameters related to its feasibility. Perspectives of various stakeholders related to pneumoconiosis policy were also considered through online available mass-media platforms.

Results- because pneumoconiosis is a fatal infection once contracted, the policy places a strong emphasis on prevention which is a major strength. Policy demands a multi-sectoral convergence approach as a major opportunity but considering poor experiences of policy implementation in the country, it poses an immense threat for policy implementation. Weakness-benefit can be availed under the policy through the digital platform and considering illiteracy and unawareness of workers in Rajasthan, it is considered as a major weakness of this policy.

Conclusion- Though Rajasthan is the pioneer in developing the pneumoconiosis policy with certain strengths and implementational opportunities, yet there is a need to tackle the inherent weaknesses and convert the threats into opportunities.

Keywords: pneumoconiosis, policy, SWOT analysis, stakeholders

Abstract Id	Efi_148_215_MISC
Title	**Knowledge, attitude and practice of medical ethics among the medical professionals. A web based survey.**
Authors	Dr Muzamil Hassan Khan, Government Medical College,Srinagar.

Background: It is mandatory for the healthcare professionals to have a knowledge of Medical Ethics. In simpler terms we may say that ethics is the practical application of moral values and principles in dealing with the human lives. It is important to assess the knowledge of medical professionals about medical ethics to get an idea about the extent to which their conduct is influenced by the moral code of conduct in medical practice.

Methods: A cross-sectional web based survey was done. A questionnaire was created in google form which was then pilot tested among the colleagues of the department and the final version of the questionnaire was then forwarded through the platform of social media like Whatsapp etc. The data was analyzed in Microsoft Excel.

Results: A total of 153 responses were received. Majority of the participants were between 22 to 35 years of age. Females(69.4%) were the ones who responded more compared to males. Pharmacists formed the major chunk of the respondents(13.9%).91.7% of the respondents had knowledge about medical ethics. In majority(8.3%) of the participants the source of information was books and internet.47.1% of the respondents were aware of the content of all the codes and guidelines applicable in medical practice.58.3% of the respondents knew about the existence of Ethical committee in their Institute.77.8% of the respondents believed that the ethics are important not only to avoid legal action but should be an integral part of our code of conduct.

Conclusion: In our survey we found that it were the pharmacists who were aware about the importance of ethics in their practice and the source of information was books and internet. Practicing doctors and students should inculcate ethics into their day to day dealing with the patients and teaching of medical ethics should form a part of the teaching curriculum of medical students to ensure better healthcare and avoid maleficence in medical profession.

Keyword: Ethics, practice, medical professionals.

Abstract Id	Efi_145_220_MISC
Title	**Dynamics of determinants of health seeking behavior in geriatric population of Chandigarh, India**
Authors	Dr. Sonia Puri, GMCH, Chandigarh

Introduction : Aging a natural phenomenon usually brings along with it deterioration in physiological, biological, emotional, and financial ends. Hence, there arises a need for a robust health care system to cater to their increased health needs. . This study is an effort to assess the health-seeking behavior of elderly people (>60 years of age) and its effect in relation to their varied parameters like age, gender, literacy, socio-economic and marital status for doing behavioral change intervention.

Objectives: 1.To study the morbidity profile of elderly.

2.To assess their health-seeking behavior and its determinants in urban\/peri-urban areas of Chandigarh.

Methods: A cross sectional population based study was carried out in urban and peri-urban area of Chandigarh for duration of 12 months. After systematic random sampling, residents more than 60 yrs of age and who had given their voluntary consent to participate were taken as participants. A default prevalence of morbidity at 50% was taken with worst possible estimate at 45% on one side and 95% confidence interval. The sample size calculated was 380 subjects. To have more accuracy we took more sample size approximately, assessed 500 subjects in urban and peri urban area.

Results: Among total of 360 participants, females (26.9%) outnumbered males (25.4%). Maximum elderly (38.1%) were in age group 65-69 yrs and least (16.7%) in age group more than 75 yrs. 62.4% of participants were Hindus followed by Sikh (27.2%). Around 3.6% were illiterate, with females (5.5%) more than males (1.7%). Maximum. 80% of elderly were married. Majority of the participants lived in a nuclear family (39.4%). More than half (57.2%) were fully dependent on their children for their health issues. Only 11.4% were independent. Acid peptic disease was most common, 61.4%. Among non communicable diseases, majority had hypertension (55.6%), Diabetes (52.5%) and arthritis (51.1%). Most of study subjects were visiting the government health facilities (70%) for their health issues. More than half (55.8%) were taking self medication and only 27.8% were going to private health facilities. Allopathic medicine was taken by 50.8% in comparison to 32.8% who were going to faith healers. Reasons for not seeking health care by elderly were multiple. Majority of participants especially females i.e. 60.8% felt that the health issues were age related. Around 40% were not even aware of their morbidity. More than half of the participants did not have any family support i.e. 53.6% and almost 50% had financial issues. Many were dissatisfied with the working and condition of health facility i.e. 40% and 21.9% had difficulty in accessing health facility.

Conclusion: Elderly had a positive behavior towards seeking help in regards to the health care. Multiple morbidities were evident among elderly, and modern medication was of a greatest choice. Improved perspective towards health, easy accessibility, awareness regarding the disease may contribute for the willingness of seeking help for the health care needs.

Keywords: Health seeking behavior, Elderly population, Chandigarh, determinants

Abstract Id	Efi_172_189_MISC
Title	Body Weight Perception and Prevalence of Overweight\/Obesity among Medical and Paramedical Students at a Medical University of Northern India: A Comparative Cross-Sectional Study
Authors	Lokesh Raheja, UPUMS

Introduction: Obesity is a medical condition in which excess body fat accumulates to the extent that it may harm health, which leads to an increase in many health problems. It can be in the form of generalized obesity or central obesity. The anthropometric parameters commonly used for assessing obesity are Body Mass Index (BMI) and Waist Circumference (WC). According to the World Health Organization, generalized obesity is defined as BMI ≥30 kg\/m2, overweight as BMI 25-29 kg\/m2, and abdominal obesity is defined as waist circumference ≥90 cm (males), ≥80 cm (females).

Methods: A comparative cross-sectional study was conducted among Medical and Paramedical students who are pursuing their respective academic courses in the Uttar-Pradesh University of Medical Sciences, Saifai, Etawah. After ethical clearance and a predesigned, pretested, structured questionnaire was distributed to all the students. For data collection, due permission from respective deans was obtained and timings were adjusted in such a fashion that the academic classes and their teaching and training activities didn't suffer. Students were asked to fill the responses in the questionnaire after which their Anthropometric measurements were done using various tools like Body Weight, Height, Waist Circumference (WC), Hip Circumference (HC). The data thus collected was encoded in an excel spread sheet and scrutinized for completeness. The statistical analysis of the obtained data is being done using SPSS software, version 25.0, IBM Chicago, the USA for interpretation of results.

Results: Out of 428 students, 220 (57.4%) were males, 208 (48.6%) were females and 309(72.2%) and 119(27.8%) were medical and paramedical students respectively. About 43.2%. 29.1%, 27.7% of participants were normal, overweight\/obese, and underweight respectively. There was a significant, strong correlation (R2=0.81, p<0.001) between perceived BMI & actual BMI. Actual BMI shows a significantly strong correlation with Body Image Dissatisfaction (r=0.53, p< 0.001).

Conclusion: There is a need to increase awareness of the importance of healthy eating behaviours and regular physical activities to improve body size, shape perception, and satisfaction among college males and females.

Keywords: Body Weight Perception, Overweight, Obesity, Medical Students, Paramedical Students

Abstract Id	Efi_133_232_MISC
Title	**Epidemiology of Leptospirosis cases admitted in a tertiary care hospital in North Kerala during Covid-19 pandemic**
Authors	Milu Elizabeth Cyriac, Government medical college, Kozhikode

Introduction: Leptospirosis is one of the most common and emerging zoonoses of public health importance. Large number of cases are reported in North Kerala. This study has been done to find whether Covid-19 pandemic has affected the trend of Leptospirosis cases reported at a tertiary care centre of Northern Kerala from the year January 2020 to September 2021.

Methodology: A retrospective record-based study was done by reviewing the Regional PEID cell data of Government Medical College, Kozhikode. Data on Socio – demographic details of the cases and the disease outcome were collected from the cases and comorbidity status cause of death were collected from deaths

Results: Total number of cases reported was 335 (Females – 25.6% and Males – 74.4%) with 97 deaths (Females – 25.7% and Males – 74.3%) compared to previous year data (2018-838, 2019-670, 2020-192, 2021-46) there has been a reduction in cases admitted. Mean age of cases and deaths was 45.9±16.2 years and 49.1±13.2 years respectively. Median interval between admission and death was 1 day. CFR was 29% with the commonest cause of death being Myocarditis and ARDS. Among deaths, 56% had a history of contact with contaminated water, 38% had an associated comorbidity and 51.5% had ≤1 day interval between admission and death.

Conclusion: There has been a significant reduction in the number of cases admitted compared to the pre pandemic period. There has also been a delay in seeking treatment since more than half of the deaths had a very short interval between admission and death.

Keywords: Leptospirosis, Epidemiology, Complications

Abstract Id	Efi_191_165_MISC
Title	**Prevalence, Frequency and Pattern of Fast Food consumption among students of a medical college in Western Maharashtra: A cross sectional study**
Authors	Pundla Nagarjuna

Introduction: 'Eat healthy and live healthy' is one of the essential requirements for long life. However due to the advent of globalization and increased job opportunities, more and more people are migrating to urban areas. Cosmopolitan culture has transformed the eating habits of younger generation who enjoy eating fast foods. Fast food culture is a vigorously uprising trend among the younger age groups and students. Stressful life due to increased study load, staying away from home, peculiar working hours, etc negatively influences the food choices of students in medical profession. Hence this study was conducted to estimate the prevalence, frequency of fast food consumption and decipher the pattern of fast food consumption among Undergraduate, Nursing and Postgraduate students in a medical college in Western Maharashtra.

Methods: An Online questionnaire-based study was conducted amongst consenting medical college students. The questionnaire includes socio demographic factors, anthropometry, dietary habits, food preferences, factors influencing the fast-food consumption and Knowledge regarding risk factors due to consumption of fast food. Data was tabulated and analyzed using Microsoft excel and SPSS version 20 software. Chi square test and binary logistic regression analysis was used to determine the association between frequency of consumption of fast-food with various variables. P value < 0.05 was considered significant. The results were presented as tables.

Result: 398 students were surveyed from a medical institution including Undergraduate and nursing students and Postgraduate students. Age range was 17-38 years. Mostly All the students used to consume fast-food, however in different frequencies. A few (55) students were found to be overweight. Pizza was found to be the most frequently consumed fast food among both sexes. The most common reason to consume fast food was found to be the taste factor among both sexes. The majority of the study participants knew that fast foods are hazardous to health. Statistically significant association found between frequency of consumption of fast food with Dietary Preference (p=0.008) and Body Mass Index (p=0.025).

Conclusion: The high prevalence of fast food consumption which can results in various NCDs in Undergraduate, nursing and postgraduate students is a cause of concern. Thus there is a need for preventive efforts, nutrition counselling to bridge the gap between knowledge and practice about healthy eating behaviour. This would also solve the problem of gaining overweight among students in the future.

Keywords: Fast food, Students, Medical College

Abstract Id	Efi_194_162_MISC
Title	"HEALTH SCREENING OF FIRST YEAR NURSING STUDENTS OF GOVERNMENT NURSING COLLEGE, CIVIL HOSPITAL AHMEDABAD."
Authors	Dr. Ripal Nandlal Panchal

Introduction: Adolescence is a unique stage of human development and important time for laying the foundation of goof health. During this phase , adolescents establish pattern of behavior for instance, related to diet , physical activity, substance use, and sexual activity that can protect their health and the health around them, or put their health at risk now and in the future. The Leading causes of morbidity and mortality among young and adults are due to certain health risk behavior. Preventive health screening has long been advocated as one of the most important health care strategies to facilitate early diagnosis and treatment, improve quality of life. The present study was undertaken to evaluate the morbidity pattern and medical health status of first year nursing students of government nursing college, civil hospital, Ahmedabad.

Methods: This study was conducted at public health lab of community medicine department of BJMC. A total 169 students of B.Sc. nursing (61) and General nursing (108) were included. Semi structured Questionnaire was used for data collection.

Result: Out of 169 students 154 were girls and 15 were boys. Of total students 34.32% were underweight and 9.47% were overweight. Anemia was reported in 33% of which majority had mild to moderate Anemia. Out of 154 girls, 17% were having irregular cycle, 56% were having painful bleeding and 8% were having Heavy menstrual bleeding. Visual field defect was found in 46.75%.

Conclusion: A multidimensional approach covering all health problems in needed. Mass Screening in students could be an effective tool to control the existing disease and to prevent occurrence of any new disease.

Keywords: Health screening, Late adolescents, Nursing students

Abstract Id	Efi_6_153_MISC
Title	**Assessment of Health status and Impact of pollution from Thermal power plant on health of population & environment around the Plant in Udupi District, Karnataka**
Authors	Sharvanan Udayar, Ramachandra Kamath, Kodagu Institute Of Medical Sciences

INTRODUCTION Coal-based thermal plants contribute around 41% of electricity generated globally and there is increased demand for electricity due to rapid boosting of the economic growth.1 To meet the demands from increasing population in India power generation has increased substantially with abundant availability of coal leading to establishment of these plants which account for 60% of electricity generated in our country.2 Fly ash containing heavy metals such as nickel, lead, cadmium , chromium and arsenic can result in serious manifestations on cardiovascular, neurological and respiratory systems. Fine particles can damage lungs thereby manifesting in pneumoconiosis. 3-5 In addition to health effects it poisonous gases like sulphur dioxide, sulphurtrioxide , carbon monoxide and nitrous oxide are released into the atmosphere due to coal combustion .All these factors have an impact on air, soil and water.6 Previous Studies have established the impact of these emissions on humans health.7-11 In India exposure to PM10 released by coal plants had resulted in more than 20 million asthma cases and 80000 to 115000 premature deaths.12

Many studies in India13 have established the impact of environmental abuse on human health, however, there hasn't been any scientific study done to assess the health impact of environmental abuse in Padubidri area so far that could aid tailored regional policy interventions. Hence the present study was undertaken with the objectives of assessing the respiratory health status of the population of villages within a defined geographical area, around the Plant and to measure the PM2.5

Keywords: Power Plant, Environmental Pollution, Particulate Matter

Abstract Id	Efi_169_192_MISC
Title	**Gender Differences in Oral Carcinoma: Textual Synthesis Review**
Authors	Dr. Tanvi Kaur Ahuja, 1. Dr. Annu Choudhary, MPH Scholar, AIIMS Jodhpur 2. Dr. Manoj Kumar Gupta, Associate Professor, CMFM, AIIMS Jodhpur 3. Dr. Nitin Joshi, Senior Demonstrator, School of Public Health, AIIMS Jodhpur 4. Dr. Pankaj Bhardwaj, Additional Professor, CMFM, AIIMS Jodhpur 5. Dr. Akhil Dhanesh Goel, Associate Professor, CMFM, AIIMS Jodhpur

INTRODUCTION: Oral cancer ranks among top three cancers in India. There is a distinct male predominance in head and neck cancers which has been outlined by GLOBACON report 2020. Numerous studies have been conducted to assess the differences in knowledge, attitudes and practices with respect to oral health but there is paucity of studies that reflect directly upon the role of gender in oral cancer. This study was planned with an effort to bring out the possible rationale behind the disproportionate prevalence of oral carcinoma keeping in view gender considerations such as socio-cultural norms, access and control over resources as well as biological factors.

OBJECTIVE: To carry out the textual synthesis review on gender analysis using existing data and information about oral cancer in India.

METHODS: Data for this review was retrieved through internet search. All published and unpublished research and reports on oral carcinoma in India and their cross references from the last two decades were used. Relevant information was synthesized using WHO's Gender Analysis Matrix to address the desired objective.

RESULTS: Our review revealed that biological factors may increase the vulnerability of an individual to oral cancer. Female hormones may contribute to head and neck carcinogenesis. Besides this, Socio-cultural norms influence disease risk differently for both genders. For example, gender responsive tobacco control report by WHO suggests that tobacco is considered as a sign of masculinity whereas socially unacceptable for women. Health and social outcomes may also vary considerably. Although quality of life of oral cancer patients is affected irrespective of gender in all dimensions, women face more distressful situations.

CONCLUSION: Biological factors, Socio-cultural norms, Resource accessibility and control are important considerations with respect to gender and play a key role in determining the risks factors and outcomes of oral cancer.

Keywords: Oral carcinoma, gender analysis, textual synthesis review

Abstract Id	Efi_96_55_MISC
Title	**A Cross sectional study on knowledge attitude and blood donation practices among resident doctors in BJMC Civil Hospital Ahmedabad**
Authors	Yogesh Rameshbhai Mori, BJMC Civil Hospital Ahmedabad

Introduction: Safe blood transfusion is one of the essential components of a quality health care service package. The amount of blood that is used for transfusion is collected from healthy individuals in the age range of 18 – 60 years. Voluntary blood donors are the main contributor of safe blood to be transfused. Sufficient and safe blood donation\/transfusion service is an essential component of the health care system of a nation. Health workers are expected to practice blood donation so as to create a good image for the public.

Methods: IA institution based cross-sectional study on voluntary blood donors among Resident doctors in BJ Medical college on 7th August 2021 took place. Donors were interviewed with pre-tested proforma and information regarding knowledge, attitude and practices were gathered. Data is evaluated in MS excel

Results: Total 78 resident doctors of B.J. Medical College, Civil Hospital Ahmedabad participated in a blood donation camp. Mean age of study participants is 25.85 ± 1.48 SD Years. Maximum age 29 Years and Minimum age 23 Years. Total 80 blood donation camps organized by a Blood bank, Civil Hospital Ahmedabad in last 1 year and total of 4052 blood donations collected from those camps

Conclusion: The Knowledge, attitude and practices regarding blood donations were found to be adequate among resident doctors. There are residents who have a habit of donating blood often. As resident doctors, other medical and health workers should be encouraged and rewarded for blood donations. Public and students should be educated and given counselling about how blood donations save a life.

Key Words: AABB, TTI, TTP

Abstract Id	Efi_95_56_MISC
Title	**Solid organ donation after brain death among hospital admitted patients of Civil HospitalAhmedabad- A Cross sectional study to promote organ donation**
Authors	Yogesh Rameshbhai Mori,

Introduction: Organ donation is the process when a person allows an organ of their own to be removed and transplanted to another person, legally, either by consent while the donor is alive or dead with the assent of the next of kin Worldwide Spain has the highest donor rate in the world at 46.91 per million people. Nationwide Tamil Nadu has the highest donor rate,1392 people(8245organs) have been harvested and implanted so far.

Methods: It's a cross-sectional study done among 9 brain dead patients whose solid organ has been harvested and donated to patients in need. Study duration: from 1st of January 2021 to 7th September 2021

Results: Male donors (brain dead), were 77% when compared to female donors 22%. The mean age for Male is 40 years, and the mean age for females is 34 years. The most common cause of brain dead is Head injury followed by RTA. The most common GCS score is 2T\/10. Meantime taken from brain dead and organ harvest 9 hours and 30 minutes. The liver has been harvested from all the study participants. A total of 30 organs have been harvested and implanted for 30 people.

Conclusion: Organ transplant is a novel service which with the consent of the donor implanted to people in need. More such organ donations should be encouraged and promoted. Proper awareness among people especially youth is important for registration for organ donation. Health facilities also should be updated and kept ready for counselling relatives, organ harvesting units, safe organ transportation and implantation to needful people.

Keyword: organ donation, liver, kidney, pancreas, solid organ harvesting

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Keyword- AABB, TTI, TTP

Abstract Id	Efi_46_111_MISC
Title	Health status Assessment & its association with occupational stress among with ASHA Visiting Tertiary Care Setup
Authors	Dr Aruna Mundal

Introduction- WHO states that right workers with the right skills in right place to do the right things. To provide effective health care services, health status of the service providers should be assessed. Under NHM, the government aims to increase the availability and accessibility of health care delivery to rural area and for this good health of care providers is to be ensured to achieve universal health coverage. Being subject to dual demands of home and workplace they are liable to face a crisis of adjustments which may cause strain and stress.

Methods- A hospital-based cross-sectional study was conducted in VIMSAR – a tertiary level medical college in Burla town of Odisha state during November 2019 to February 2020. The study population comprised of ASHAs visiting Dept of community medicine (Immunization OPD) & Dept of O&G, VIMSAR. After due informed consent, a total of 110 patients were included in the study. The data was collected using predesigned questionnaire. The results were analyzed using appropriate statistical measures.

Results- In our study, out of 110 ASHAs, 65.13% were moderately stressed while 34.87% were in low stress category. 80% of ASHAs had below normal value Waist-Hip Ratio(<0.85). While 71% of ASHAs have normal BMI, 24% were found to be overweight and 5% obese. Stress scores in ASHAs were significantly associated with Waist-Hip ratio (WHR) (p <0.00 at 95% CI), Asthma(p=0.01 at 95% CI), Family History of Diabetes(p=0.04 at 95% CI).

Conclusion- Our study shows that assessing the health status of the ASHA is simple easy and cost-effective way of indirectly assessing the work efficiency of the grassroot level workers of the community. Significant association of Stress scores and Obesity and WHR may be due to multiple job responsibilities and lifestyle. Further, community-based studies are required to generate more evidence.

Keywords: ASHA, Health Status, Stress, Waist-Hip Ratio, Obesity.

Abstract Id	Efi_151_212_MISC
Title	**Assessment of knowledge, attitude and practice regarding food safety and personal hygiene among food handlers working in the food establishments at tertiary healthcare facility of Northern India**
Authors	Atul Kumar, Dhiraj Kumar Srivastava, Prashant Kumar Bajpai Pankaj Kumar Jain UPUMS, Saifai

Introduction: Unsafe food becomes a global public health and economic threat to humans. The spread of diseases through food is still a common problem which results in appreciable morbidity and occasional mortality. Food handlers play an important role in ensuring food safety throughout the chain of production, processing, storage and preparation. The personal hygiene, knowledge, attitude and practice of food handlers have crucial impact on food contamination.

Methods: A cross-sectional study is being conducted with food handlers working in cafeterias, mess and food establishments of Uttar Pradesh University of Medical Science, Saifai, Etawah. A questionnaire is being used to collect data on their socio-demographic characteristics – age, sex, residence, education, job and food safety knowledge, attitude, practice, personal hygiene and health status. Data collected will be entered into Microsoft excel sheet and descriptive analysis will be performed of all the variables and appropriate statistical analysis to be done by using SPSS version.

Result: To be done at the time of presentation

Conclusion: To be done at the time of presentation

Keywords: knowledge, attitude, practice, personal hygiene, food handlers, food establishment

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Conclusion: To be done at the time of presentation

Keywords: knowledge, attitude, practice, personal hygiene, food handlers, food establishment

Abstract Id	Efi_58_98_MISC
Title	A CROSS-SECTIONAL STUDY ON PREVALENCE OF GENDER STEREOTYPING AND SELF ESTEEM AMONG MEDICAL STUDENTS, PARAMEDICAL AND NURSING STUDENTS IN TERTIARY HEALTH CARE CENTRE IN NORTH KERALA
Authors	Dr Beeson Thomas, Asst Professor

INTRODUCTION: The issue of gender stereotyping is deeply entrenched in our society and has a profound impact in our day to day life. Gender stereotyping is defined as the overgeneralization of characteristics, differences and attributes of a certain group based on their gender (1).It creates widely accepted biases about certain characteristics or traits and perpetuate the notion that each gender and associated behaviors are binary (2) Gender stereotypes shape self-perception, attitudes to relationships and influence participation in the world of work. In a college environment, they strongly influence a young person's academic experience and performance and subject choice as well as well being (3). The common notion that orthopaedics is meant for men and gynaecologists are supposed to be women substantiate the existence of gender stereotyping among medical students. Research also shows that these stereotypes create dangerous consequences that limit a person's full potential and well being and thereby dampening their self-esteem. Self-esteem is an individual subjective evaluation of their worth and it encompasses beliefs about oneself as well as emotional states such as triumph, despair, pride and shame. Men and women because of their stereotypes are forced to conform to the cultural notions of 'masculinity and 'feminity (4)'. Stereotyping lower ones self-assessment and a sense of competence and adversely affect their self-esteem. Self-esteem is one of the most popular constructs in personality or social psychology and a crucial element of the confidence and motivation students need to engage in and achieve educational pursuits. (5) Another study conducted on gender differences in respect to self-esteem and body image among students of Israel revealed that gender differences start at a very young age and impacts adolescents' body image and self-esteem adversely (6) In India, discriminatory attitudes towards either sex have existed for generations and affect the lives of both sexes, creating a vicious cycle of low self-esteem and dependence, particularly among the female population. Since the few studies carried out on this topic, the determination of gender-egalitarian attitudes is beyond the horizon for the Indian population especially college-going students. The assumptions we make about boys and girls may be conscious or unconscious but may result in students being treated differently or offered different opportunities based on their gender. (7) The study objective was to determine the prevalence of gender stereotyping and self-esteem on medical, paramedical, nursing students in tertiary care centers during the period of March 2021, North Kerala.

Methodology : A cross-sectional study was carried out from 1st March 2021 to 30th March 2021 among 960 students including 600 medical students, 240 paramedical students and 120 nursing students in the tertiary health care centre in Kozhikode district of Kerala. The sample size calculated was 285 (where Prevalence from the previous study,26% d = Relative precision 20% of P .(5) The sample of 346 students, included 216 medical,87 paramedical and 43 nursing students, who were selected by proportionate sampling method. Informed consent was taken

and the data collection was proceeded by administering a semi-structured questionnaire to assess socio-demographic information and structured standard questionnaire for self-esteem and gender stereotyping by the interviewer after piloting the questionnaire. Modified BG Prasad scale updated in 2020 was used for socioeconomic status calculation. (8) Self-esteem was assessed using Rosenberg self-esteem scale (Cronbachs alpha =0.86, Minimum score 10, maximum score 40)(9) A self-esteem score of less than or equal to 29 was considered to be poor self-esteem while a score More than or equal to 30 was considered as good self-esteem. Gender stereotyping was evaluated by using the gender role attitude scale(Cronbach alpha =0.99, minimum score 38, maximum score 190) (10). Similarly, for the gender role attitude scale, a score less than or equal to 151 was considered as high stereotyping while the score more than or equal to 152 was taken as low stereotyping. The data was entered in Epi-Data 3.1 and analyzed in a trial version of IBM SPSS statistics of the software version 20.0. The sociodemographic characteristics and other variables of the study population were presented using frequency and percentage for categorical variables and mean +\/- SD for continuous variables. The bivariate analysis will be done to generate the prevalence odds ratio for the strength of association between socio-demographic factors and gender stereotyping with self-esteem. 95% confidence interval for prevalence Odds ratio, P value less than 0.05 and chi-square test and t-test will be used for the significance of the test Ethical committee clearance was obtained from the institution.

RESULTS : A total of 346 students between 17 to 26 years of age with a mean age of 21±1.722 in a tertiary health care centre were surveyed. The study shows that the prevalence of poor self-esteem in the study population was 58.09% (95% CI: 52.79 -63.39). The prevalence of high gender stereotyping is 38.06% (95% CI: 32.94 -43.18). Results say that out of 346 responses, only 99 (24.3%) out of 212 females and 63 (12.2%) out of 134 males deny the statement that“ he or she has nothing to be proud of. ” It means that rest of them have poor self esteem.22 among the 212 females i.e. 10.38% of the total female population strongly believed that they were not good at all at certain times. Only 7 males (5.23%) out of 134 gave a strong negative answer to the same question. It is embarrassing to note that, out of total responses, only 30.6percent (78) of the females supported equal chances for both genders in professional development while 52.9% (183) males had the same opinion. Out of the 346 individuals, 58 (16.77%) feels that the last decision regarding the choice of a woman's partner should be by her father. It is worth noting that 26 (12.27%) among them are females.38.5% (133) females and 13.3% (46) males agreed on the fact that man is the head of the family, as, in every Indian family, the father is the decision-maker and one intended to take up responsibilities. 10.7% (37) of the total study population want a man to marry again if the woman is not able to deliver a child. Of this 16 (7.55%) are females. It is interesting to note that 113 (84.43%) among the total male participants disagreed with the statement. It should be noted that 34 (9.83%) among the 346 participants of this survey feel useless at times. Out of this 26 (12.27%) are females while 8 (5.98%) are males. Among the 346 participants, 47 (13.59%) individuals disagree with the concept of equal sharing of domestic work between spouses in the family. It is surprising to note that in that 21 (9.91%) of them are females and 26 (19.41) are males.16.2% (56) of the study population believe that man's main task in the house is breadwinning. Among that 10.85% (23) were females and 24.63% (33) were males. Among the 346 participants of this survey 64 (18.50%), individuals believe that women's basic task is motherhood. It is astonishing

to note that of the 24 (11.33%)are females. 40 (29.86%)males also have this concept. It is interesting to note that only 7.1% of the total female participants think that a woman is precious if she delivers a boy. Out of 364 participants, 280(76.9%) supports the opinion that women should be able to go out at night. Among this 177(83.49%) are females and 103(76.86%) are males. The survey reveals 76.3%(278) participants feel that they have good qualities. It is interesting to note that out of them 84.43%(179) were females. Among the 346 participants of this survey, 51(14.74%) feels that equal fee should not be paid to the women and men in professional life. Among that 24 (11.3%) were females and 27(20.1%) were males. Out of 346 participants of this survey, 44(12.7%) feels that husbands should make the decisions regarding a woman's life. Out of them 26(19.4%) were males and 18(8.49%)were females. 17%(59) of the study population believe that Men should be employed in high-status professions. Among them 25(11.8%) were females and 34(25.37%) were males.261 (75.43%) among the study population agree that they are able to do things as well as most other people. Among them 167 (78.78%) were females and 94 (70.15%) were males. It is glad to know that 300 (86.71 %) of participants wanted spouses to decide together in the family, surprising among them 190 (89.62%) were females and 110 (82.09%) were males. It is disappointing to note that 14.45%(50) completely agree that women should prefer to remain silent instead of arguing in case of a conflict with their husbands, among them 19 (8.94%) were females and 31 (23.14%) were males. . There is no significant difference between self-esteem and gender. (p value 0-0.8).There is no significant difference in gender stereotyping and self-esteem among medical, paramedical and nursing students(ANOVA test) (p value-0.32,p value-0.06). The bivalent analysis of gender role attitude with their gender which implies that male has got low gender stereotyping as compared to females. The study participants who experienced gender stereotyping had 2 times lower self-esteem as compared to the participants who had not been stereotyped.(Chi-square value -8.962 ,p value – 0.002,OR -2.022, 95% CI-1.271-3.216)\t

CONCLUSION: A great deal of progress has been made towards gender equality, but there is no question that the goal of gender equality has not yet been achieved. Male has got low gender stereotyping as compared to females in this study((p value -<0.001) This study concludes that stereotyping is associated with self-esteem which is one of the most important key elements in achieving success. At the Community level, emboldens women to take up Power positions and train them to participate in men dominating sports and games Encourage gender-neutral workspace and campaigns for equal pay thereby make women financially independent. At the Family, level reinforces positive gender stereotype in children especially boys. At the individual level eliminating self-criticism and introducing self-compassion may help one to boost their self-esteem. Since it is a study conducted in medical professional college students, there is a scarcity of data from other general population groups. There is a need of higher epidemiological studies to prove the strength of association between gender stereotyping and self-esteem.

Keywords: self esteem, gender stereotyping ,students

Abstract Id	Efi_44_113_MISC
Title	**Use of modified Nordic questionnaire and Visual Analogue Scale of EQ 5D Quality of lifeindices to conduct a qualitative health assessment on construction workers in the City of Bhubaneswar, Odisha**
Authors	Bidisa Sarkar

Rapid development in Bhubaneswar, Odisha is marked by widespread construction activity. This occupation, despite the hazards offers good income to the workers. Myriad work options and assured payments make them oblivious to the unsafe work environment.

OBJECTIVES Assessing work related injuries and health complaints of the studied sample of construction workers. Applying the validated Nordic questionnaire to assess MSD and establishing correlation between Nordic and visual analogue scale of quality of life tools. Suggesting recommendations to improve work safety and health of the sample.

METHODS This study was undertaken among workers at construction sites, defined as a building sites engaging 15 or more workers construction purpose of structures, who gave informed consent, were >21 years, regardless of gender & have had been in profession for at least 3 years. Taking 50% prevalence of health problems, at 10% precision and 95% CI, inclusive of 10% non respondency, a sample of 260 was calculated. A multistage sampling helped to select the sample for the study & a qualitative self developed questionnaire was administered to the population in the local language, abiding by all ethical concerns. Sociodemographic details, work scenario, tests for BMI, BP, RBS & assessment for detailed musculoskeletal problems was done using the validated Nordic questionnaire. EQ5D tool was used to assess the QOL and was correlated with Nordic results.

RESULTS 32.3% in twenties, 73.8% males, 26.5% illiterates, 64.2% Hindus, 55.4% had per capita income between Rs. 1166 & 2252, 64.6% married, 73.8% from joint families, 80% did not know their caste. 95.4% heavy workers, 23.1% laborers, 28.1% had <10 years' experience, 72.3% satisfied with their job, 19.2% had work related injuries in last 3 months. There was a strong negative correlation between Nordic score and VAS of EQ5D, the correlation coefficient 0.728 & p-value< 0.001.

CONCLUSION They have poor assess to care. A civic body should be entrusted to do these simple assessments & advice them. It would improve their work efficiency and QOL.

Keywords: Nordic questionnaire, MSD, Musculoskeletal problems, EQ5D, Construction Workers

Abstract Id	Efi_215_MISC
Title	**Work-related musculoskeletal disorders among health care workers in a tertiary care hospital and its attached rural and urban health training centers**
Authors	Diksha Mahajan

Introduction: - Work-related musculoskeletal diseases (WMSD's) are the major cause of illness and mortality among the working class; they are multifactorial and have become a global problem as a result of industrialization. The objective of this study was to identify the prevalence and distribution of musculoskeletal disorders among health care workers and to identify the risks factors associated with musculoskeletal disorders among health care workers.

Methodology: - It was a cross-sectional study conducted among doctors of various clinical departments, dentists, and nurses in a tertiary care hospital and its attached training centers in Jodhpur, India from June 2021 to July 2021. Face-to-face interviews were done with 310 participants. Validated and standardized questionnaires were used for collecting different types of data as it's comprised of three parts: socio-demographic data, Nordic musculoskeletal questionnaire, and international physical activity questionnaire.

Results: - A high proportion of health care professionals reported WMSD's out of 310 health care professionals 221(71.3%) have MSD's in the last 12 months and 129 (41.6%) have MSD's in the last 7 days, in which doctors are found to be 89 (74.2%) and nurses are 138 (72.6%) were having any kind of MSD and there was no statistically difference between both. Neck pain (47.5%) is common among doctors & lower back pain (52.1%) is common among nurses. Working in the same position for long period (60.7%), not getting enough breaks or rest (42.7%) are the commonly reported job risk factors. There was no statistically significant a ssociation of MSD's with age, BMI, years of experience, working hours but a significant association was found with gender (p=0.004).

Conclusion: - About three fourth of the health care professionals have any MSD and the lower back was the most common and the elbow is the least commonly reported. Working in the same position for long period and not enough rest breaks or rest were found to be the most commonly reported risk factors for MSD. There is a significant association between gender and MSD's.

Keywords: - MSD's, healthcare workers, doctors, nurses, physical activity.

Abstract Id	Efi_160_201_MISC
Title	**Assessing Indian Public Health Standards for A Rural hospital in Maharashtra : A Case Study**
Authors	Dr Dipali Chandrakant Puri

Introduction- The P.R.I.D.E India (Planning Rural-Urban Development through Education) is a non-governmental organization with the core foundation based on a holistic approach to bring about a sustainable change in the marginalized communities living in rural and urban poverty. PRIDE India set up a 30 bedded SPARSH (Sastur Project of Action Research Services Through Hospital) rural Hospital in Sastur village of Osmanabad district of Maharashtra in the wake of 1993 earthquake that hit 83 villages taking thousands of lives. To assess the IPHS at RH level, little efforts have been made in India. So effort has been made to assess IPHS at RH level in the present study. The main objective of this study is to study services available, availability of infrastructure facility, manpower and diagnostic services available at rural hospital and compare these with the IPHS for RH.

Methods- Present study was conducted using IPHS guidelines as a study tool over a period of one month from 1st January 2020 to 30th January 2020 by direct observation. Permission of the project manager of the SPARSH rural hospital was taken.

Results- It was found that specialist services were available as per IPHS recommendations but gaps in infrastructure facilities and shortage of manpower were observed. Due to less number of OPD rooms, two doctors were consulting in same room. As per IPHS recommendations, total essential and desirable manpower at rural hospital should be 46 and 52 respectively but manpower available at SPARSH hospital was 34 and 36 respectively. Availability of diagnostic services were satisfactory. However retinoscopy, Opthalmoscopy & dental X ray were unavailable. Out of 35 essential and 36 desirable diagnostic services, 32 essential and 33 desirable diagnostic services were available.

Conclusion- SPARSH rural hospital can be upgraded by recruiting staff and improving infrastructure facilities as adequate number of manpower is required to provide services more effectively.

Keywords: IPHS, Manpower, Rural hospital

Abstract Id	Efi_38_120_MISC
Title	**Health status Assessment & its association with occupational stress among ASHA Visiting Tertiary Care Setup**
Authors	Dr Aruna Munda, Dr S.K. Panda ,Dr S.C. PandaVIMSAR, Burla.

Introduction WHO states that right workers with the right skills in right place to do the right things. To provide effective health care services, health status of the service providers should be assessed. Under NHM, the government aims to increase the availability and accessibility of health care delivery to rural area and for this good health of care providers is to be ensured to achieve universal health coverage. Being subject to dual demands of home and workplace they are liable to face a crisis of adjustments which may cause strain and stress.

Objectives 1.To determine the health status of ASHAs 2.To find out association between health determinants and stress levels of ASHAs.

Materials & methods A hospital-based cross-sectional study was conducted in VIMSAR – a tertiary level medical college in Burla town of Odisha state during November 2020 to February 2021. The study population comprised of ASHAs visiting Dept of community medicine (Immunization OPD) & Dept of O&G, VIMSAR. After due informed consent, a total of 110 patients were included in the study. The data was collected using predesigned questionnaire. The results were analyzed using appropriate statistical measures.

Results In our study, out of 110 ASHAs, 65.13% were moderately stressed while 34.87% were in low stress category. 80% of ASHAs had below normal value Waist-Hip Ratio(<0.85). While 71% of ASHAs have normal BMI, 24% were found to be overweight and 5% obese. Stress scores in ASHAs were significantly associated with Waist-Hip ratio (WHR) (p <0.00 at 95% CI), Asthma(p=0.01 at 95% CI), Family History of Diabetes(p=0.04 at 95% CI).

Conclusion Our study shows that assessing the health status of the ASHA is simple easy and cost-effective way of indirectly assessing the work efficiency of the grassroot level workers of the community. Significant association of Stress scores and Obesity and WHR may be due to multiple job responsibilities and lifestyle. Further, community-based studies are required to generate more evidence.

Keywords: ASHA, Health Status, Stress, Waist-Hip Ratio, Obesity.

Abstract Id	Efi_148_215_MISC
Title	**Knowledge, attitude and practice of medical ethics among the medical professionals. A web based survey.**
Authors	Dr Muzamil Hassan Khan

Background: It is mandatory for the healthcare professionals to have a knowledge of Medical Ethics. In simpler terms we may say that ethics is the practical application of moral values and principles in dealing with the human lives. It is important to assess the knowledge of medical professionals about medical ethics to get an idea about the extent to which their conduct is influenced by the moral code of conduct in medical practice.

Methods: A cross-sectional web based survey was done. A questionnaire was created in google form which was then pilot tested among the colleagues of the department and the final version of the questionnaire was then forwarded through the platform of social media like Whatsapp etc. The data was analyzed in Microsoft Excel.

Results: A total of 153 responses were received. Majority of the participants were between 22 to 35 years of age. Females(69.4%) were the ones who responded more compared to males. Pharmacists formed the major chunk of the respondents(13.9%).91.7% of the respondents had knowledge about medical ethics. In majority(8.3%) of the participants the source of information was books and internet.47.1% of the respondents were aware of the content of all the codes and guidelines applicable in medical practice.58.3% of the respondents knew about the existence of Ethical committee in their Institute.77.8% of the respondents believed that the ethics are important not only to avoid legal action but should be an integral part of our code of conduct.

Conclusion: In our survey we found that it were the pharmacists who were aware about the importance of ethics in their practice and the source of information was books and internet. Practicing doctors and students should inculcate ethics into their day to day dealing with the patients and teaching of medical ethics should form a part of the teaching curriculum of medical students to ensure better healthcare and avoid maleficence in medical profession.

Keyword: Ethics, practice, medical professionals.

Abstract Id	Efi_146_219_MISC
Title	**A cross-sectional study on the doctor patient communication among the post graduate students at a tertiary care teaching hospital in eastern India**
Authors	Dr. Tanay Sinha

Introduction: There is an utmost importance for imparting insight on the doctor-patient relationship on the basis of doctor-patient communication in the teaching-learning programmes among the post graduate trainees (PGTs).

Objectives: To find out the knowledge and perception of the post graduate (PG) students regarding their issues of communication with their patients.

Methods: A hospital-based prospective open-label observational cross-sectional study was conducted among the PGTs to find out the correlates on Doctor-Patient Communication based on distinguished questions at the emergency, out-patient and in-patient departments, at a medical college and hospital in Bihar India during June to August 2021.

Results: To assess the level of bilateral communication, the PGTs' opinions of stated patient expectations and their satisfaction after treating the patients were analyzed. Except for time constraints and personal advice, our study noted highly statistically significant internalization of the PGTs' answers in favor of the patients' perspective. According to the PGTs, patients feel free to express their or their wards' concerns. PGTs' attentiveness, addressing complaints, and caring for patients' issues are highly significant, based on the patients' problems. Despite a high patient load, which resulted in an increased workload and a language barrier for some of the PGTs, there was overall satisfaction while communicating with patients, according to a critical analysis of their responses regarding their reasons, if any, for dissatisfaction with appropriate communication with the patients. Furthermore, when asked to rank the most important cause of their discontent, the plurality of PGTs chose increased patient load as the critical reason.

Conclusions: The perceptions of the PGTs regarding explicit and implicit expectations of care-seekers and caregivers along with their satisfaction and dissatisfaction levels after managing the patients were our exclusive and positive findings.

Keywords: Postgraduate trainee, doctor, patient, relationship, doctor-patient communication

Abstract Id	Efi_56_100_MISC
Title	**Barriers for contraceptive practices among rural population: A community based cross-sectional study**
Authors	Nallapu Sandeep

Introduction: India is one of the growing population in the world. With the implementation of family planning program in 1952, population growth rate was significantly declined, though not achieved satisfactory results. UN estimates India population will reach 1.64 billion by 2050. Current study was planned to find out proportion of eligible couples using contraceptives and the reasons for non-usage.

Methods: A community based cross-sectional study was conducted among eligible couples of rural field practice area of the medical college. By convenience sampling method, data of 212 couples collected. Data collection was done using a semi structured questionnaire which includes socio demographic information and usage of contraceptives.

Results: 38.9% eligible couples using contraception. Permanent contraceptive methods come out as preferred choice over temporary methods.77% preferred tubectomy and less or no preference for vasectomy. 16% couples using condoms and 4.2% using oral contraceptive pills. 73.9% couples were having 3 or lesser children. Age at marriage, socio-economic status and education status significantly affected the contraceptive usage.

Conclusion: The number of eligible couples not using the family planning methods was 38.9%. Thus suggesting the need for rigorous awareness campaign to increase the knowledge of contraceptives.

Keywords: Eligible couples, contraceptive usage, family planning

Abstract Id	Efi_220_MCH
Title	**A study to assess the patient safety culture among healthcare providers in a tertiary healthcare facility in Western Rajasthan**
Authors	Rupali Gupta, Mahendra Kumar Garg AIIMS, Jodhpur

Introduction An important principle of healthcare is patient safety. It includes a broad range of actions such as improvement of health facility performance and management of risk factors such as control of infection, safety of equipment, safe use of medicines, secure environment and safe clinical practice. The study aimed to assess the patient safety culture in a tertiary healthcare facility in Jodhpur district and identified the number of adverse events (patient safety issues, medical errors) reported as well as explored strengths and weaknesses.

Methodology A cross-sectional study was conducted from June 2021 to July 2021. The total sample size of 100 was selected through convenience sampling, among doctors, nurses, lab technicians and pharmacists. A semi-structured questionnaire adopted from 'Hospital Survey on Patient Safety Culture' (HSOPSC,) developed by Agency for Healthcare Research and Quality (AHRQ) was used. It assesses 12 dimensions of patient safety, with two outcome measures (overall perceptions of patient safety and frequency of event reporting). Personal interviews were conducted with the study participants and their responses were recorded and analysed.

Results More than half of the participants were nurses (55%), and majority of participants reported having a direct contact with patients (97%). The two outcome composite dimensions: (1) the overall perception of safety showed a mean score of 4.09 ± 0.39; and (2) frequency of event reporting showed a mean score of 3.39 ± 0.92. Concerning the overall grade on patient safety, 24% of participants reported 'excellent' and 58% reported 'very good'. No event in the last 12 months was reported by 47% of all participants and 1–2 events were mentioned by 30% of them, while more than 6 by 4%.

Conclusion Based on the evidence presented in this study, hospital management worked effectively for a positive patient safety culture and for improving the problematic areas. Good intra-team/ intra-department coordination was found to be a main factor for above average patient safety culture in the hospital. However, adoption of a non-punitive approach for resolution of systematic errors is required, rather than focusing on individuals.

Keywords: Patient safety, Hospital Survey on Patient Safety Culture, Healthcare providers, Overall perception of safety, Frequency of event reporting

Abstract Id	Efi_145_220_MISC
Title	Dynamics of determinants of health seeking behavior in geriatric population of Chandigarh, India
Authors	Sonia Puri

Introduction : Aging a natural phenomenon usually brings along with it deterioration in physiological, biological, emotional, and financial ends. Hence, there arises a need for a robust health care system to cater to their increased health needs. . This study is an effort to assess the health-seeking behavior of elderly people (>60 years of age) and its effect in relation to their varied parameters like age, gender, literacy, socio-economic and marital status for doing behavioral change intervention.

Objectives: 1.To study the morbidity profile of elderly. 2.To assess their health-seeking behavior and its determinants in urban\/peri-urban areas of Chandigarh.

Methods: A cross sectional population based study was carried out in urban and peri-urban area of Chandigarh for duration of 12 months. After systematic random sampling, residents more than 60 yrs of age and who had given their voluntary consent to participate were taken as participants. A default prevalence of morbidity at 50% was taken with worst possible estimate at 45% on one side and 95% confidence interval. The sample size calculated was 380 subjects. To have more accuracy we took more sample size approximately, assessed 500 subjects in urban and peri urban area.

Results: Among total of 360 participants, females (26.9%) outnumbered males (25.4%). Maximum elderly (38.1%) were in age group 65-69 yrs and least (16.7%) in age group more than 75 yrs. 62.4% of participants were Hindus followed by Sikh (27.2%). Around 3.6% were illiterate, with females (5.5%) more than males (1.7%). Maximum. 80% of elderly were married. Majority of the participants lived in a nuclear family (39.4%). More than half (57.2%) were fully dependent on their children for their health issues. Only 11.4% were independent. Acid peptic disease was most common, 61.4%. Among non communicable diseases, majority had hypertension (55.6%), Diabetes (52.5%) and arthritis (51.1%). Most of study subjects were visiting the government health facilities (70%) for their health issues. More than half (55.8%) were taking self medication and only 27.8% were going to private health facilities. Allopathic medicine was taken by 50.8% in comparison to 32.8% who were going to faith healers. Reasons for not seeking health care by elderly were multiple. Majority of participants especially females i.e. 60.8% felt that the health issues were age related. Around 40% were not even aware of their morbidity. More than half of the participants did not have any family support i.e. 53.6% and almost 50% had financial issues. Many were dissatisfied with the working and condition of health facility i.e. 40% and 21.9% had difficulty in accessing health facility.

Conclusion: Elderly had a positive behavior towards seeking help in regards to the health care. Multiple morbidities were evident among elderly, and modern medication was of a greatest choice. Improved perspective towards health, easy accessibility, awareness regarding the disease may contribute for the willingness of seeking help for the health care needs.

Keywords: Health seeking behavior, Elderly population, Chandigarh, determinants

Abstract Id	Efi_54_102_MISC
Title	SELF-MEDICATION TREND: AMONG STUDENTS OF GOVERNMENT MEDICAL COLLEGE IN SOUTH GUJARAT, INDIA
Authors	Dr Teesta Gusain

Introduction: Self-medication refers to identifying and treating one's own ailments and taking medicine for the same. Although convenient, this may have severe adverse effects. This study aims to identify the pattern of such practices in the last 6 months amongst students in a Medical College of South Gujarat.

Methods: A cross sectional study was conducted by convenient sampling among the 65 students after taking informed consent with the help of a self-administered questionnaire on Ona. Excel data sheet was extracted, cleaned and analyzed using Epi info 7.0.

Results: 32 males and 33 females participated in the study. Mean age was 20.4 years.48(73.8%) admitted to have taken self-medication. Fever among 39 students (60%) followed by common cold among 29 students (44.6%) were the most common illnesses forcing them for self-medication. Paracetamol, analgesics, cough syrups, anti-allergics, multivitamins, antacids and antibiotics were the commonly used drugs in decreasing order of preferences. 22 students (33.8%) took antibiotics for cold and sore throat out of which only 12 (54.5%) took full course of antibiotics. 56(86.2%) think that irrational use of antibiotic is a serious problem.2 (3%) students took drugs like hypnotics and sedatives.

Conclusion: In our study self-medication is being widely practiced amongst students. Use of Paracetamol may be attributed to covid pandemic. Irrational use of antibiotics, sedatives and hypnotics is an area of concern.

Keywords: self-medication, medical students, antibiotic-use

Abstract Id	Efi_31_125_MISC
Title	**COVID-19 lockdown and air quality in India: a scoping review**
Authors	Dr. Anjali Agrawal (MPH Scholar, AIIMS J)

Introduction: In general, different parts of India are affected by poor air quality and atmospheric pollution. The lockdown in response to COVID-19 has reduced air pollution significantly. This literature review systematically examines the effect of COVID-19 lockdowns on pollutant concentrations (mainly PM2.5, NO2, O3) in India by integrating the reported evidence.

Methodology: PRISMA guidelines were used to search databases of peer-reviewed published research that studied the link between COVID-19 and air quality in India, using present eligibility criteria. Compilation of the relevant data after screening the titles, abstracts, and full texts of the retrieved results to meet the study objectives. The design of this scoping was developed utilizing a methodological framework provided by Arksey and O'Malley.

Results: We were able to find 11 studies that were suitable in all of the databases we analyzed. Six of them assessed all three pollutant concentrations (PM2.5, NO2, and O3), whereas the other five reported only NO2 and PM2.5 levels. The majority of analyses have revealed that there is a considerable reduction in PM2.5 and NO2 levels, while a rise in tropospheric O3 levels. The decreases in air pollution reported varied by geography and time period in India.

Conclusion: The air quality has greatly improved during the whole lockdown, providing crucial information to the cities' administration as they drafted rules and regulations to improve air quality. The findings would prompt the Indian government to consider how to strictly reduce air pollution in order to improve air quality and maintain improved public health in India.

Keywords: Air quality, COVID-19, Lockdown

Abstract Id	Efi_68_87_MISC
Title	**Impact on kayakalp scores after undertaking of a PHC by Community Medicine dept. of a Medical college of J&K**
Authors	Dr Sonika Sangra

introduction- Kayakalp is an initiative by Government of India, to improve cleanliness, hygiene and sanitation of public health facilities by recognizing and giving awards to those who exhibit high level of cleanliness, hygiene and infection control.

Objective- To assess the level of cleanliness, hygiene and infection control practices in the health care facility after undertaking by department of community medicine of a medical college.

Methodology- A retrospective comparative observation study was conducted at RHTC in Kathua district of J&K state. We compare the level of cleanliness, hygiene and infection control practices using Kayakalp scoring tool before and after taking over by the department of community medicine of a medical college .The scoring for various areas of concern is based on a checklist for quality assessment which include Facility Upkeep, Sanitation and hygiene, Waste Management and Infection control

Results- The total scores varies before and after undertaking of PHC by Community Medicine Department of new medical college of J&K. overall scores varies from the baseline score of 56% before to 84% now after 2 years of undertaking.

Conclusion- The standardized approach of the evaluation of public health facilities through Kayakalp tool would help in judging their performance on a uniform pedestal. So, public health expert plays a crucial role in the upliftment of the Kayakalp scores.

KEYWORDS- Kayakalp tool , Scores , PHC

Abstract Id	Efi_66_89_MISC
Title	A STUDY ON INJECTION PRACTICES AMONG NURSING STUDENTS IN TERTIARY CARE HOSPITAL, TIRUPATHI
Authors	Dr A V YASHODA LAKSHM

INTRODUCTION: Injections are the most frequently used medical procedure. A large majority of injections are administered for curative purpose and rest for immunization. Majority of these injections are given by providers indiscriminately which are not warranted. An injection is considered to be safe when it does not harm to the recipient, does not expose the health care worker to any risk and does not result in waste that is dangerous to the community. So we have to administer an injection using a sterile devices like syringe, needle, etc and adopting sterile technique by a qualified and well trained person and discarding the used devices in a puncture-proof container which are specially designed for appropriate disposal. If we don't follow these processes makes the injection unsafe. Unsafe injections cause a substantial proportion of. Unsafe injection practices are most common in developing country health settings. These unsafe practices predispose to various health risks and also transmission of infections with bloodborne pathogens to health care professionals and the community.

AIM: A study on injection practices among nursing students in a tertiary hospital, Tirupathi.Objectives: To assess the knowledge and practice about safe injection practices among nursing students.

MATERIALS AND METHODS: A hospital based cross-sectional study was conducted among 120 nursing students in tertiary care hospital in Tirupathi. Data were collected with 23 questionnaires, along with demographic details questions regarding knowledge, practices, and disposable methods were included. Study period:- 1st June 2021 to 31st July 2021.

RESULTS In the present study results are expressed in terms of knowledge and practices of nursing students in injection safety.In the present study, 89% of the nursing students were found to have received training in safe injection practices. Knowledge on washing hands, wearing gloves and shoes was found to be 64%, 39% and 47% respectively. Knowledge on steps in giving injection was 30% and use of multi-dose vials was 66% . Knowledge on various steps of injection preparation among nursing students ranged from 30-66%. Knowledge on disposal of used needles by using hub cutter was found to be 48% and disposal of used syringes by disinfection was 42% whereas the knowledge on segregation of injection related waste according to color- coded bags was 40%. Nearly 2\/3rd (75%) of nursing students were having good knowledge on complications (local reactions , abscess and blood-borne diseases) due to unsafe injection.

KEYWORDS- Safe injection practices, nursing students, puncture-proof container, unsafe injections.

Abstract Id	Efi_33_125_MISC
Title	Quality Of Infrastructure of Anganwadi Centres in Burla, Sambalpur, Odisha
Authors	Dr Lily Bhoi

Introduction: Anganwadi Centres (AWCs) act as the focal point of providing comprehensive services to both children and women under Integrated Child Development Scheme (ICDS), which is now recognized as one of the world's largest programmes for early childhood development.

Objectives: To evaluate infrastructure of Anganwadi centres in Burla Sambalpur, Odisha.

Methods: It was a cross sectional study conducted at 25 AWC for a period of 4 months (August-November 2019) in service area of Burla with the help of a redesigned, pretested and semi structured questionnaire and a checklist. 25 AWC were selected out of total 52 AWC, Convenient sampling technique was used. Three questionnaires, 1st for the Infrastructure of AWC, 2nd for background characteristics of AWW and 3rd for Facilities at AWC in each area was administered. A face-to-face interview was done with the children, teachers and helpers of the AWC. Ethical clearance was obtained from VIMSAR Ethical Committee & informed consent were taken. After collection, data were entered and analyzed by Microsoft Excel windows 10. Descriptive statistics were performed.

Results: This study revealed that the AWCs were not satisfactory in terms of infrastructure and materials. Only 8% of the centres were being operated in their own building, 52% had improper ventilation, 88% did not have any separate kitchen. Only 20% had toilet facility.

Keywords: Anganwadi Centre, ICDS, field visit, Infrastructure. This study provides an insight into the existing situation which is found to be far from satisfactory. Immediate steps should be taken to improve the working ambience of all AWCs at large.

Abstract Id	Efi_49_108_MISC
Title	Knowledge, Perceptions and Practices of Medical Students towards Climate Change and Global Warming: A cross sectional study
Authors	Gudelli Prashanth Reddy

Introduction: Climate change is the biggest global health threat and also the greatest health opportunity of the 21st century. Despite the works of many scientists for the past two centuries, climate change was first rushed into limelight of policy-makers by Dr. James Hansen (1988) who showed an undeniable link between man-made global warming and climate change, which is currently a well-established fact. The United Nations Framework Convention on Climate change (1992) defined climate change as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability which is observed over comparable time periods.” Nine out of the ten warmest years among the last 140 years have occurred since 2005, with five warmest years occurring between 2015 and 2019.By the year 2100, Earth's mean temperatures are on its way to rise additionally up to 3.2°C, global mean sea level will rise 0.43 to 0.84 m. Between the years of 2030 and 2050, climate change is expected to cause approximately 2,50,000 additional deaths per year, from malnutrition, malaria, diarrhea and heat stress. The cost of damage to health due to climate change (i.e., except costs in sectors such as agriculture and water and sanitation), is estimated to be between USD 2-4 billion\/year by 2030. The United Nations in 2015 have established 17 Sustainable Developmental Goals (SDGs) among which Goal-13 (SDG-13) is “to take urgent action to combat climate change and its impacts”. As per the Paris Agreement, to limit the global rise in temperature to 1.5°C (maximum 2°C), Global Greenhouse Gas (GHG) emissions must fall by 7.6% each year starting in 2020. Research suggests we could have as few as 8 years to prevent the world from warming beyond 1.5°C, a temperature threshold that, if breached, will have serious consequences for global health. In spite of the temporary reduction in carbon footprint due to the COVID-19 pandemic-related movement restrictions, which started in the year 2019, the target temperatures will be unable to be met and are expected to worsen once the movement restrictions are lifted. In the world's largest survey on climate change conducted by UNDP and Oxford University, 64% people voted climate change as a global emergency despite an on-going COVID-19 pandemic. Health care-sector was also responsible for 4.6% of global greenhouse gas emissions in the year 2017. The World Health Organization in 2015, have asked all the health professionals of the world to be on the forefront in protecting the people from the harmful health impacts of the climate crisis. Medical fraternity exerts significant influence on the society to educate eco-friendly practices to people and to also advocate for sustainable public health policies. Alarmed by the overwhelming corroborations regarding the impacts of climate change and also to assess the knowledge, perceptions and practices of medical students, the study is conducted in two medical colleges of Karimnagar district, Telangana state, India. Objectives: 1.\tTo evaluate the knowledge regarding climate change and global warming among MBBS and Post-Graduate Medical students. 2.\tTo determine the perceptions

and behavioural practices towards climate change and global warming among MBBS and Post-Graduate Medical students.

Methods: 903 undergraduate and post-graduate medical students who consented for the study were included in this study. A pre-structured questionnaire was used. The study participants were briefed about the purpose and nature of the study, and informed consent was obtained before data collection. Study was approved by Institutional ethics committee.

Results: Majority of the participants were females (64.9%) and 44.7% of the participants were from 1st and 2nd MBBS. Poor Knowledge regarding Sustainable Developmental Goal for climate action, Organizations dealing climate change and Government actions towards climate change were observed among study participants. Majority of the 3rd and 4th year MBBS students (79.1%) and male students (76%) have adequate knowledge but the difference between the groups is not statistically significant. Deforestation is answered as the biggest contributor to climate change whereas agricultural activities are perceived as the least contributor to climate change by the participants. Cardiovascular and respiratory diseases (84%) were answered as the major health impacts of climate change and few (9%) subjects were not aware about health impacts of climate change. Majority (97.4%) of the participants agreed that human actions are also the cause for global warming and 94.5% of the subjects feel that children should be taught more about climate change. The difference between perceptions of study groups about climate change is not statistically significant.

Conclusion: Majority of participants agreed that global warming is both a current and future problem and also agreed that people need more information on climate change. The knowledge of climate change and global warming is adequate among majority of the participants. Even though health-care sector is a well-educated community, our study found that major proportion of study participants doesn't adopt environment friendly practices. However the participants with adequate knowledge were significantly found to have better environmental-friendly practices. There is a need to motivate them in translating the knowledge of participants into a deliberate practice.

Keywords: Climate Change, Sustainable Development Goal, Global warming.

Abstract Id	Efi_113_MCH
Title	**Assessment of Utilization of Janani Express (104 ambulance) Program in Jodhpur District Rajasthan.**
Authors	Jinesh Saini

Introduction - If a pregnant woman or a sick new born does not receive prompt transport/referral within a stipulated time, one of the primary variables contributing to high NMR and MMR is a delay in reaching an adequate health facility. There are currently 581 Janani Express ambulances/vehicles available for referral transit. To address this issue, the Indian government started the Janani Suraksha Yojna in 2005 as part of the National Rural Health Mission (NRHM). The study's goals are to determine the use of Janani express yojana in selected health facilities and to learn about the Janani express yojana's various reimbursement and money transfer mechanisms. Identifying and resolving implementation issues.

Methodology - A sequential mixed- method study conducted in the health care centres of 10 blocks of Jodhpur district were visited to interview various stakeholders of JE programme. Physical verification of 104 ambulances was done to obtain data from its checklists in 2 months of study periods. Stakeholders including CHMO, DPM, District 104 manager, Medical Officers of CHCs and PHCs, Nodal officers of 104 JE ambulance, District Project Manager [DPM], ANMs And ASHAs, Pilots of 104 JE ambulance, Beneficiaries (ANC, Delivery, PNC, Neonate and Post LS) Study tools was Semi-structured questionnaire developed after extensive literature search and consultation exercise from experts was used to record Quantitative data.

Result – Out of 27 ambulances, more than half (59.25%) of the 2012 Omni model 104 ambulances were located at PHCs. Only half (55.55%) of them were on road. Out of these 27 ambulances, only one third (25.92%) were in good condition. All of the ambulances had two drivers but only half of them resided inside the premises of health care centre. None of the driver had any specific dress code. None of the ambulance had oxygen kit, stretcher and PPE kit inside it. Majority of the ambulances had unavailability of curtains, emergency kits. Almost half of the ambulances had periodic maintenance and half of them had emergency maintenance. None of the ambulance had availability of nursing staff. While interviewing various stakeholders of JE program, few themes were extracted under headings- Benefits of 104 JE Yojna, Gaps in JE Yojna, Challenges from beneficiary side, Challenges from provider side and Suggestions regarding JE program.

Conclusion - The JEY is India's first emergency transportation concept designed specifically for pregnant women, moms, and sick children. The Janani Express Yajna is an extension of the Rajasthan state government's effort to reduce maternal mortality. The initiative has made it possible to deliver important medical services closer to the community, particularly to the underprivileged and rural populations. The JEY documentation has enhanced the role of ICT in rural India's services. Every day, JEY saves the lives of hundreds of women and infants thanks to superior technical aid. The rate of institutional deliveries has increased to an impressive 81% due to the availability of prompt transport facilities.

Keywords- 104 Janani Express, Ambulance, Referral Service, Janani express Yojna.

Abstract Id	Efi_155_207_MISC
Title	**Attitude of undergraduate medical students towards learning communication skills in a medical college, Haryana**
Authors	Dr. Jitesh Satija

Introduction: Effective communication serves as a "central function in building a doctor-patient relationship which plays a dominant role in the treatment. The two main challenges facing the medical profession are a need for effective communication between patients and doctors; and other is the rapidly rising demands from patients for active participation in medical decision making rather than being a passive listener. Since Attitude forms the basis for the behavior, the attitude of the undergraduate students towards learning communication skills have major impact on developing effective communication skills.

Material & Methods: A cross sectional study was conducted to assess attitude of undergraduate medical students towards learning communication skills in a medical College of Haryana using communication skills attitude scale (CSAS) which consists of 26 items, 13 indicative of positive attitude and 13 indicatives of negative attitude toward learning communication skills. Data regarding the attitude and various socio-demographic profile were collected through self-administered questionnaire and entered in MS Excel sheet and analyzed using SPSS version 20 and appropriate statistical tests were applied.

Results: The mean age of the participants was 19.09 (SD=.900). Male and female students accounted for 68 % and 32 % of the participants respectively. The mean scores for positive attitude was 54.12 (SD=6.76) out of 65, and the mean scores for negative attitude was 37.26 (SD=7.541) out of 65.

Conclusion: It is recommended that communication skills training programs would be designed and incorporated into the medical curriculum so that undergraduate medical students learn as well as pay more attention to communication skills.

Keywords: Attitude, Communication skills, Undergraduate medical students, Doctor patient relationship

Abstract Id	Efi_42_115_MISC
Title	**Health problems distribution and its effect on professional work, satisfaction among health care professionals working across Vadodara city- a cross-sectional study.**
Authors	Dr Mital Bambhava

Introduction: Health care workers have a busy schedule because of which sometimes they became ignorant about their health. So, it is important to know their perspective about health.

Objectives: are To know the distribution of various health problems among participants and their effect on professional work.To assess professional and financial satisfaction levels among participants.

Method: A Google form questionnaire-based cross-sectional study was conducted among health care professionals in Vadodara. Google form was circulated by email and WhatsApp groups. The form consisted of questions related to demographic details, health problems, and job satisfaction. All the responses were recorded and analyzed in MS Excel 2019. The percentage was calculated and graphical representation was done.

Results: Among the total of 122 participants, 89(72.95%) were male and 33(27.04%) were female and 101(82.78%) participants were on the treatment of any ailment. 86.9% of participants regularly opt for a health check-up. Among reported health problems by participants most common health issue was related to the musculoskeletal problem (72.13 %.). followed by Hypertension(28.9%), Diabetes(17.2), Cardiac (12.3%), Endocrine(10.65%),Eye (9.01), Mental(6.55), respiratory (6.5%), Gynecological (5.73), Hearing loss(4.91%), allergic (4.91%), surgical(3.27%), Gastro-intestinal (2.45 %), malignancy (0.81) and autoimmune disorder(0.81%).37.70% of participants answered that health problems temporarily affect their work; 5.53% of participants felt the need to modify their work pattern. About 91.80% of participants were satisfied by their profession. 108(88.52%) participants were financially satisfied with their work.

Conclusion: More than half of the professionals complained of musculoskeletal problems. The majority of health care professionals were professionally and financially satisfied.

Keywords: Health problem, Health care professional, professional and financial satisfaction, cross-sectional study

Abstract Id	Efi_40_118
Title	**Air Pollution and its impact over Health**
Authors	Dr. Swati Sharma

Introduction- Any kind of pollution imbalances the environment and effects our health adversely. Outdoor air pollution is one of the most harmful risks for our health. Control and prevention measures for outdoor air pollution are the prime concern of various governments across the world. An attempt to bridge the gap between various research papers on effects of air pollution with the latest data obtained from Central Pollution Control Board (CPCB) site. Also we have analyzed the worst affected locations at Delhi for October to December months of the past five years from 2016 to 2020. Objective of the study is to evaluate the adverse effect of air pollution in New Delhi and to study the impact on health with results obtained.

Methodology- A Cross-sectional observational study design was employed for carrying out the study in Delhi, India. The secondary data was taken from various sources including research papers and government sites. Results- All the studies universally, indicated that there has been an increasing trend of air pollution in our environment. The results are clearly visible on health outcomes with increasing cases of Asthma especially in children.

Conclusion- We propose on the experience of our research that the time frame of the included studies, their disease definitions and individual exposure to outdoor air pollution of the population should be taken into consideration in any future research. This review provides researchers and the Delhi government with the prevalence of outdoor air pollution and its adverse effects on health outcomes.

Keywords: Keywords: air pollution; chronic obstructive pulmonary disease; health Delhi.

THEME: NATIONAL HEALTH PROGRAMME

Abstract Id	**Efi_156_205_NHP**
Title	**AWARENESS FOR NATIONAL DIGITAL HEALTH MISSION (NDHM) AMONG YOUNG DOCTORS OF DELHI, NCR**
Authors	Dr. Prateek Kishor

Introduction: National digital health mission (NDHM) has a major role to play in India's public health system. It will bridge the gap between different health infrastructures which already exists in the country. It has a major role in the future of the medical ecosystem of the country therefore it is important for young medical doctors to be aware of the agency. As it has started recently we wanted to assess the awareness among young medical doctors.

Methods: This was a Cross sectional study conducted among the interns and 1st year Residents of Private Medical College, Delhi, NCR. The purpose of study was to assess the knowledge regarding the NDHM. Data was collected on a structured Questionnaire. And the respondents were divided into two groups based on their performance.

Results: Out of 100 young doctors 32% were interns, 68% were junior residents. Gender wise 44% were males, 56% were females. Respondents were divided into two groups based on the scores. People who scored 7 or higher in the questionnaire were put into high performing group and people who scored 6 or less were put into low performing group. Interestingly 100% interns came out to be in high performing group while 86.8% of junior residents performed same.

CONCLUSION: According to our study awareness regarding NDHM came out to be pretty high among young doctors; more so among interns than junior residents.

Keywords: National Digital health Mission, Young Doctors, Awareness.

Abstract Id	Efi_128_237_NHP
Title	**Knowledge, attitudes and practices of male partners and its association with Family Planning uptake among couples in rural Aligarh**
Authors	Dr. Asra Saqib, Dr. Tabassum Nawab, JNMCH,Prof. Anees Ahmad, JNMCH, Dr. Uzma Erum, JNMCH.Prof. Najam Khalique, JNMCH,Prof. MA Ansari, JNMCH

Introduction: Family planning is one of the most cost-effective investments for achieving the Sustainable Developmental Goals. Males are the dominant decision makers in an average Indian household pertaining to all matters including family planning (FP), and their choices can affect FP uptake by their partners. This study aims 1) to assess the knowledge, attitudes and practices of male partners towards family planning and 2) to determine association of the same with FP uptake among couples in rural Aligarh

Methodology: Community- based, cross sectional study was conducted in 5 villages in Jawan Block. district Aligarh. 380 currently married males were selected by systematic sampling and interviewed using structured and pre-tested proforma. Descriptive statistics and Chi-square test applied using SPSS 20

Results: Mean age of participants was 35.4±7.3 years (range 20-54 years). Majority were Hindus, educated up to 8th class, labourers by occupation and belonged to low social class. 98.7% had heard about any modern contraceptive method (MCM) and 93.7% knew it was available free-of-cost. Majority were aware about male condoms (97.4%) and male sterilization (49.5%), but knowledge about other MCM was poor. Only 5.3% were aware about their side effects correctly. 56.1% of males believed that FP leads to infertility and 53.7% males did not approve of male sterilization. 78.2% were willing to motivate others for using FP and 73.9% discussed FP matter with their wives. About 66.5% were having more than 2 children and most common reason for the same was desire for a male child (46.6%).FP uptake was present in 79.2% of couples with 75.3% using male condom. FP uptake was higher in those males who knew about at least 2 methods of FP. Knowledge about 3 or more methods did not lead to increased FP uptake. FP uptake was significantly higher in those couples in whom males believed frequent pregnancies lead to health problems in females and males who believed they should discuss FP matters with their wives and was lower among those who think FP is responsibility of females only

Conclusion: Knowledge about MCM among male partners was not adequate but did not affect FP uptake significantly, whereas attitudes towards FP was adequate and it increased FP uptake among the couples. So, concerted efforts to improve attitude of male partners can increase FP uptake.

Keywords: Family Planning uptake, Male Partner, KAP

Abstract Id	Efi_2_159_NHP
Title	**Awareness among the beneficiaries on the features of Tamil Nadu Chief Minister's Comprehensive Health Insurance Scheme – A community based study**
Authors	Dr. S. Sakthipriyan. Mahatma Gandhi medical College and research institute

Abstract: Background: Health insurance is considered as one of the mechanisms to ensure access to health care and a means of achieving universal health coverage. The growth of health insurance in India not only requires a better understanding among the healthcare providers and the stakeholders, but also an increased awareness among the general public.

Objectives :Among the beneficiaries of Tamil Nadu Chief Ministers Comprehensive Health Insurance Scheme (TN-CMCHIS) visiting a tertiary care hospital.

To assess the awareness on the features of the scheme. To study the relationship between socio-demographic variables and awareness on the features of the scheme.

Methodology: It's a Community based Cross-sectional analytical study. All the beneficiaries visiting Mahatma Gandhi Medical College from Januray 2021 to march 2021 were recruited into the study. Consecutive sampling method was used to recruit the beneficiaries into the study Semi-structured, pre-designed and pre validated interview schedule was administered.

Results: The majority of the beneficiaries were in the age group of 21 to 40 years. The level of education was associated with their awareness on the empaneled hospital ad awareness of the insurance amount per family per year. Also the employment status were significantly associated with level of knowledge related to the empaneled hospital.

Conclusion: Education and occupation of the beneficiaries was significantly associated with their low levels of awareness about the empaneled hospitals nearby their location. Awareness about the insurance amount under the scheme was found out to be low and also significantly associated with socio-demographic characteristics of the beneficiaries.

Keywords: Cmchis ,awareness and health insurance

Abstract Id	Efi_17_141_NHP
Title	**Change in haemoglobin concentration with increasing altitude among women aged 15–49 years in India: evidence from National Family Health Survey (NFHS-4), 2015-16**
Authors	Zahid Ali Khan, Government Medical College Baramulla

Background: High altitude induces a lot of physiological changes in the human body of which an increase in haemoglobin concentration is one of them. This study aims to study the effect of altitude among women aged 15 – 49 years of India on their haemoglobin concentration.

Methods: This was a cross-sectional survey of 684913 women aged 15 – 49 years selected from the fourth round of the National Family Health Survey (NFHS-4), 2015-16, the Indian version of Demographic and Health Survey. Association between various variables under study and haemoglobin concentration among study subjects was determined by students independent t-test and one way ANOVA. Factors found to be significantly associated with haemoglobin level were entered into a linear regression analysis to find any independent association of altitude with haemoglobin concentration.

Results: Mean haemoglobin concentrations increased significantly (p<0.001) from 11.62 g\/dl in women residing at altitudes of below 500 meters to 12.54 g\/dl at the altitude of above 1000 meters. Age, Educational level, Rural\/urban residence, Wealth index, marital status, Pregnancy, Body mass index and tobacco smoking were found to be significantly associated (p<0.001) with haemoglobin concentration. Regression analysis revealed that an increase in altitude was independently associated with an increase in the haemoglobin concentration among women.

Conclusion: High altitude is an independent determinant of increased haemoglobin concentration among women.

Keywords: Hemoglobin, women, altitude, India, NFHS4

Abstract Id	Efi_225_NHP
Title	**Do patients on treatment for TB in Jodhpur know about and utilise NPY Cash Incentive as intended**
Authors	Arathi P., Dr. Prassanna, AIIMS, Jodhpur

Background: Government of India launched the 'Nikshay Poshan Yojana (NPY)' a nationwide Direct Benefit Transfer (DBT) scheme, to address the comorbidity of undernutrition in TB through the course of treatment as a form of patient support. It is pertinent to explore the knowledge about scheme and utilisation among the patients with TB.

Objectives To study the awareness and perspectives about NPY and the utilization of the cash benefit received among those registered for Tuberculosis treatment in Jodhpur.

Methods: This study was a triangulation mixed methods study with Quantitative Cross-sectional study and Qualitative exploratory study conducted between 1st June 2021 to 31 July 2021 among 256 randomly selected patients with drug sensitive TB enrolled in Nikshay Portal between July and September 2020 at Jodhpur district. Telephonic interviews with semi structured questionnaire including capture of open comments wherever provided. Key informant interviews were conducted with the health care providers dealing with NPY using an interview guide. Data analysis was done using SPSS version 23. Chi-square(x2) was used. Manual content analysis of transcripts of interviews was carried out.

Results: Among the 256 patients interviewed, 228 (89%) heard about the scheme and 98.2% got information about the scheme from health workers. Over one third (88, 38.6%) knew the exact purpose of the scheme as nutrition. Majority were aware of the amount to be received (187, 82%) and the frequency of payment (192, 84.4%). Among 138 who had received the incentive, only a quarter of them 26.8% (37) utilized the money for their own nutritional needs. Patients and providers opined that Rs.500 is inadequate to meet the dietary requirements and sought additional nutritional supplements

Conclusion: While overall awareness of the scheme is there, the only over one third had the key knowledge about the purpose (nutrition) of the scheme and end utilisation is inadequate, highlighting the need for efforts to further strength and modify the scheme to meet the end goals of NPY.

Keywords: Nikshay Poshan Yojana, Nutritional support scheme, telephonic interview, Knowledge, utilization, TB patients

Abstract Id	Efi_223_2945_NHP
Title	A PERSPECTIVE ON INDIA'S TOBACCO REVENUE AND ECONOMIC BURDEN OF TOBACCO RELATED DISEASES.
Authors	Dr. Megha Mohanan, AIIMS, Jodhpur

Introduction: India today is the second largest producer and exporter of tobacco making the Indian tobacco industry worth $12 billion. India is also the 2nd largest consumer of tobacco products after China with 29% adults consuming tobacco. The tobacco industry is ever growing but at the cost of an inevitable and unparallel economic burden of tobacco related diseases.

Method: Literature supporting this perspective was collected and reviewed from search engines PubMed and Google Scholar as well as from grey literature between 2011-2021.

Result: The economic burden of diseases and premature deaths attributable to smoking and smokeless tobacco use in India is 1% of India's GDP which is approximately USD 27.5 billion (INR 1,773.4 billion). Tobacco related cancers itself account for 27% of the country's cancer burden. The tax revenue from tobacco in 2016-2017 was only 12.2% of its economic costs and for every Rs 100 received as excise taxes from tobacco products the Indian economy loses Rs 816. The 3 main categories of cost incurred includes, direct cost of medical expenditure due to tobacco attributable diseases (approximately USD 5.8 billion), indirect morbidity costs of household income due to hospitalization and hospital visits (approximately USD 957 million) and indirect mortality costs due to premature death due to tobacco use (approximately USD 20.5 billion).

Conclusion: It is important to realise that the tobacco revenue is at odds with the public health initiatives and is not a sustainable economic growth strategy and the total private and public health spending in India due to tobacco related diseases is so high that it is a drain on both public health system and the economy.

Key words: Tobacco related diseases, direct costs, indirect costs

THEME: NON - COMMUNICABLE DISEASE

Abstract Id	Efi_22_136_NCD
Title	**A cross-sectional study of knowledge regarding rabies among attendees of anti-rabies clinic of Jaya-Arogya group of hospital, Gwalior (MP)**
Authors	Dr. Divyani Aharwal, Dr. Nishant Gupta, Dr. Neha Saxena, G.R. Medical college, Gwalior

Introduction: Rabies is a fatal and 100% preventable disease; efforts must be made by the health system to prevent rabies, for that, we can make plans and policies for its prevention. The aim of this study was to assess the knowledge regarding rabies among attendees of anti-rabies clinic.

Methods: This observational cross-sectional study was conducted among attendees of anti-rabies clinic of JAH, Gwalior (MP) from June 2021 to August 2021. Data was collected from 250 participants using preformed questionnaire. Results were expressed in mean and standard deviation and expressed in proportion.

Results: In our study population, only 48% respondents had good knowledge, 20% fair, and 30% poor knowledge. Fatality of rabies was known to 75% of participants. 25 % participants knew that rabies is not curable, however, 85% knew that it is preventable. Fifty percent of the participants were aware about washing the bite wound with soap and water. Approximately 20% of the participants knew that it is an infectious disease, however, only 12% knew that saliva, vomitus, tear, and urine of rabies patient may have rabies virus. Approximately 30% of the attendees had a wrong concept that a single injection is sufficient for immunization.

Conclusion: Although this study was done at a teaching hospital, lack of knowledge is still a big issue in urban population as well. This study concludes that knowledge regarding rabies should be highlighted in national programs of India to acknowledge Indian population regarding fatal rabies.

Keywords: Animal bite, anti-rabies clinic, dog bite, rabies

Abstract Id	Efi_25_133_NCD
Title	**Correlation between food habits and appendicitis in Indian students' study in China: A questionnaire-based study.**
Authors	Dr. SAHJID MUKHIDA, Dr. Bimcle Riji, Dr. Paras Shingadiya ,Dr. Li Mei Xiu Jiamusi University

Background: food habit depends on the environment, country and community. As long as any change, people's health come in danger. Many Indians are going abroad to study medical science but their food habits cause trouble like vomiting, diarrhoea, abdominal pain and so on. In our university, numbers of appendicitis diagnosis and their surgery in Indian students suddenly increased. The main objective of this study, to understanding the correlation between food habits and appendicitis in Indian who are studying medicine in our university.

Methods: Study was conducted between April to June 2018 in Chinese University. Total 627 Indian studying were covered and their responses were notified in designated questionnaire. Infographic details related to their dietary habits and lifestyle at their home and changes in it after coming to China and also after staying few months in China. Results: 83% students belonged to age group between 21-26 years. 58% students were eaten only vegetarian foods at their home but only 36% students remain vegetarian even after staying more than a year in China. 82% students were cocking their food by themselves but only 61% students are satisfied by their foods. Majority unsatisfied from food students belonging from the student's group who eat outside. Only 20% students were used fruits in their diet. 81.97% students doing too less exercise on their routine life. More than 26% students were suffering from gastric trouble but only 6% students need hospital care. Out of 27 appendicitis operated students, 26 students were changed their lifestyle and adopt the Chinese lifestyle very early.

Conclusion: Diet and lifestyle both are the key of good health. Whenever you change it suddenly, it will impact their health. In order to prevent any disease, the etiology and risk factors need to be avoided. Awareness is very useful in disease prevention and change in your dietary habits as required can help your avoid disease.

Keywords: Appendicitis, Food habits, life style

Abstract Id	Efi_30_128_NCD
Title	**Cross sectional study to assess risk of type 2 diabetes mellitus using Indian diabetes risk score in an urban field practice area Rajapur Kalaburagi-Karnataka.**
Authors	Dr Shivanand, Dr Shweta, Mahadevappa Rampure Medical College Kalaburagi, Karnataka, India

Introduction: Diabetes is one of the largest global health emergencies of the 21st century. Diabetes is among the top 10 causes of death globally and together with the other three major noncommunicable diseases (NCDs) (cardiovascular disease, cancer and respiratory disease) account for over 80% of all premature NCD deaths. Diabetes prevalence has been rising more rapidly in middle and low-income countries. By 2045, 629 million or 10.6% of people 20-79 years, will have diabetes. It has been acknowledged that diabetic screening can add quality of life years. Madras Diabetes Research Foundation gave the countrymen the Indian Diabetes Risk Score (IDRS) which effectively screens for those at high risk of developing diabetes. This score is based on an extremely large population base study on diabetes in India (Chennai Urban Rural Epidemiology Study). This screening score has a sensitivity of 72.5% and specificity of 60.1% in the Indian community. The advantages of this tool encompass it is no cost, non-invasive, simple, and easy applicability by the target population during mass screening programmes.

Method: A community-based cross-sectional study was conducted for a period of 3months from June 2021 to August 2021 after obtaining Intuitional Ethical Clearance from the Ethical Committee. Study Area: Urban Field Practice Area Rajapur Kalaburagi.Inclusion Criteria: ≥ 20 year of age, either of gender and resident (≥1year). Exclusion Criteria: Known diabetic population, Pregnant and lactating up to 12 weeks and those who are seriously ill.Sample Size: The sample size was calculated using the formula, n=z2 p (1-p) \/d2, where: z=1.96, p=prevalence=11%, q=1-p=89%, d=absolute precision: 5%, n=sample size=150, we have taken 200 as sample size. House to house visit was done, houses were selected by systematic random sampling.

Results: Out of total 200 participants, 48 (24%) were in high-risk category (IDRS≥60), whereas majority of participants 82 (41%) were in the moderate-risk category (IDRS 30–50) and 70 (35%) participants were found to be at low-risk

Conclusions: It is essential to implement IDRS which is a simple tool for identifying subjects who are at risk for developing diabetes so that proper intervention can be carried out at the earliest to reduce the burden of diabetes.

Keywords: Diabetes, IDRS, Urban Area

Abstract Id	Efi_139_226_NCD
Title	**Socio clinical profile of osteoarthritic patients residing in urban slums of Berhampur, Odisha- A Cross-Sectional Study**
Authors	Dr Trupti Dash, Dr Sangeeta Das, Dr D. M. Satapathy- MKCG MCH Berhampur

Introduction: Osteoarthritis (OA) is the most common joint disorder and a major cause of disability in the adult population. Osteoarthritis is not given due importance in terms of public health. The present study was conducted with the following

Objectives: To study the socio-demographic characteristics of the study population.To determine the risk factors associated with osteoarthritis .

Materials & Methods: A cross-sectional study was conducted among 100 patients(≥50yrs) diagnosed with osteoarthritis residing in urban slums of Berhampur,Odisha during April 2021 to July 2021. Socio-demographic characteristics and risk factors of osteoarthritis were obtained using a semi-structured questionnaire.

Results: The study population included 67% women & 33% men . The mean age in women was 58.9 years & in men was 62.2years. Family history of osteoarthritis was present in 25 % of cases, 57 % belonged to social class-1 as per BG Prasad's classification, 38% had trauma history,44% had associated comorbid conditions, 79% did not do any exercise & most of them were overweight. The mean BMI was 25.11 .

Conclusion: The findings suggest that osteoarthritis is more common in women with co-morbidity and sedentary lifestyle . Measures should be taken to improve physical activity & reduce comorbidity through geriatric counselling.

Keywords: Osteoarthritis,socio demographic,co-morbidity

Abstract Id	Efi_207_NCD
Title	**Cardiovascular risk estimation among adults aged 30-59 years using updated WHO-CVD risk charts in rural Haryana.**
Authors	Dr. Ananda Selva Das

Introduction: Drug therapy and counselling for individuals with high risk of developing fatal and non-fatal cardiovascular disease (CVD) is a World Health Organization (WHO) best-buy intervention. Risk prediction charts help identify high risk individuals. The aim of the study is to estimate the level of CVD risk among adults using WHO CVD risk charts and to determine the concordance between the laboratory and non-laboratory risk charts.

Methodology: A community based cross-sectional study conducted in two villages under Comprehensive Rural Health Service Project, Ballabgarh, among 400 participants aged 30-59 years, selected by simple random sampling from Health Management Information System (HMIS). A semi-structured questionnaire based on the National Non-communicable disease Monitoring Survey (NNMS) questionnaire was used to collect information followed by anthropometric measurements and laboratory investigations. Proportion of people with different risk levels is estimated using WHO CVD risk prediction charts and concordance between laboratory- and non-laboratory based WHO CVD risk charts was determined.

Results: The mean age of the subjects was 43.9 (8.4) years and 55.5% subjects were women. 27.5% and 32.7% of the participants had >5% CVD risk using laboratory- and non-laboratory based risk charts respectively. Among various CVD risk factors, highest prevalence was of overweight (37.8%) while current smoking (26%), smokeless tobacco (4.5%), alcohol use (19.8%), salt consumption more than the recommended amount (91.1%), obesity (16.3%) and hypercholesterolemia (13.8%). The sensitivity and specificity of non-laboratory based risk charts was 91.8% and 89.7% considering laboratory-based charts as the gold standard with 5% risk as cut-off while concordance between the two was 83.7% with kappa value of 0.64.

Conclusion: The study finding indicates the low CVD risk among the study population and substantial agreement between the laboratory-based and non-laboratory based risk charts indicates non-laboratory based risk charts can be used in resource limited settings.

Abstract Id	Efi_120_245_NCD
Title	**A Randomized Controlled Trial to assess the effectiveness of group-based Diabetes Self-Management Education (DSME) program in improving the quality of life amongst type-2 diabetics.**
Authors	Farishta Hannah D. Singh , Hamdard Institute of Medical Sciences and Research

Introduction: Diabetes has become a major health problem worldwide. Globally, an estimated 422 million adults were living with diabetes in 2014 compared to 108 million in 1980, as reported by the World Health Organization (WHO). The quality of life among these individuals is affected due to the development of complications. Episodes of hypoglycemia, fear of developing hypoglycemia, making lifestyle changes, and fear of long-term consequences may lead to reduced health-related quality of life (HRQoL). This study was conducted to assess the effectiveness of group-based DSME in improving the quality of life among type 2 diabetics as against the usual care. Clinical trial registration: CTRI\/2019\/02\/017589.Funding: Indian Council of Medical Research MD\/ MS Thesis grant.

Methodology: A Randomized Controlled Trial was conducted among adults (≥ 30 years) diagnosed with Type-2 DM diagnosed at least 6-months before enrollment and they attended the outpatient clinic at Hakeem Abdul Hameed Centenary Hospital or the Urban and Rural Health training centres, under the Department of Community Medicine, Hamdard Institute of Medical Sciences and Research, New Delhi. The study was conducted from March 2019 to May 2020. Written informed consent was taken and a patient information sheet was given to each patient before enrollment. The sample size was estimated based on the formula given for equivalence design, for an RCT and came out to be 85 in each arm. A total of 169 individuals were randomly allocated into the intervention (n=84) and control arm(n=85) using a random number table. Usual care was given to the control arm while the intervention group received the usual care along with group-based Diabetes Self-Management Education (DSME) sessions at a convenient time. The program had 6 sessions of 30 minutes each, delivered once a month by a single educator in a group of 6-7 members. Each session had a guided discussion to emphasize key messages towards diabetes management, self-care activities, and prevention of long-term complications of diabetes. At the end of 6 months, the change in the quality of life was assessed using the Diabetes Mellitus Quality of Life scale. which has a set of 20 questions which was scored 1-5, where 1 represents not satisfied at all and 5 represents extremely satisfied.

Results: At end-line a total of 139 individuals (intervention =69; control =70) were analyzed. The mean age of the respondents was found to be 50.0 years± 9.9 years and had a higher proportion of females (62.1%) as compared to males (37.9%). The mean duration of diabetes among the study participants was found to be 4years 8 months. The study participants were equally distributed in the intervention and control arms, as there was no statistically significant difference between the two arms, based on the socio-demographic variables. At baseline, the mean score of the quality of life among the study participants was found to be 3.15 ±0.44, there

was no statistically significant difference found between the intervention and control arms. However, at the end-line, the intervention arm had a score of 3.47 ± 0.25, while the control arm had a score of 3.31 ± 0.31. In the study, the quality-of-life score increased from 3.12 to 3.47 in the intervention arm, and from 3.19 to 3.31 in the control arm. The change from baseline to end-line was found to be statistically significant (p<0.001) in both arms. Further, it was also found that the intervention arm showed a greater change in the quality of life by 0.22 as compared to the control arm. This difference was found to be statistically significant (p<0.001). on further analysis, we found that males had a higher change in the quality of life after DSME, i.e., 0.44 as compared to 0.26 in females. This difference was found to be statistically significant (p=0.018). In comparison to the change in the quality of life after DSME, based on education, it was found that those with no formal education showed a change of 0.28 while those with formal education showed a change of 0.40. Similarly, the change in the lower-income group was 0.34 and in the upper-income group was 0.36. The difference in the improvement of quality of life, after DSME, based on education and income was not found to be statistically significant (p=0.136, p=0.792 respectively).

Conclusion: This study showed that group-based diabetes self-management education enables to improve the quality of life of type-2 diabetics. The education provided enables them to achieve better glycemic control and further better manage their diabetes. It develops their confidence and thus improves their quality of life. Thus, diabetes self-management education can prove to be an effective tool to improve the quality of life of type=2 diabetics.

Keywords: Diabetes Self-Management Education (DSME), Type-2 Diabetes, Quality of life

Abstract Id	Efi_114_22_NCD
Title	**Study prevalence of peripheral arterial disease in diabetics with coronary artery disease at a large tertiary care teaching hospital in North India**
Authors	Dr Sajad Hussain Bhat, Skims medical college, Srinagar, J & K

Background: Peripheral arterial disease and coronary artery disease have similar factors. The extent and severity of PAD is significantly associated with presence and severity of CAD.

Methods: Patients were interviewed and clinical profile of patients including risk factors of coronary artery disease like diabetes, hypertension, smoking, dyslipidaemia, obesity and family history of coronary artery disease were assessed and recorded in the proforma. Information regarding demographics, co morbidity, past history and family history was collected. Physical examination of each patient was carried and basic anthropometric data: height, weight, BMI and blood pressure, peripheral pulses calculated. Investigations both non-invasive and invasive including peripheral angiography were recorded.

Results: In this prospective study fifty (50) type 2 diabetes patients admitted with CAD were studied whose mean age was 55.6+8.2 and mean duration of diabetes was 6.8+8.4. In this study none of the patients with PAD had single atherosclerosis risk factors including diabetes. 30% patients were having two risk factors. PAD in in patients with CAD is particularly enhanced by the concomitant occurrence of two or more of these risk factors (p=0.016). Hypertension as a predictor of PAD was statistically significant (p=0.0037). In this study the duration of diabetes was 10 years in 40% of patients with angiographically proven PAD.

Conclusions: It was observed that presence and severity CAD was significantly associated with PAD.

Keywords: Ankle brachial index, Body mass index, Coronary artery disease, Percutaneous intervention, Peripheral arterial disease

Abstract Id	Efi_108_36_NCD
Title	**Assessing the Knowledge, Attitude and Practice of Tobacco use among Employees of Jamnagar Medical College in order to quit tobacco.**
Authors	Dr Swati Misra, Dr Dipesh Parmar, Shah Government Medical College Jamnagar Gujarat

Introduction: Tobacco use is one of the major preventable causes of death and disability worldwide. Working in a Medical College can be demanding and exceedingly stressful. Trends in tobacco use among employees are important to document because these findings will help inform the development of appropriate preventive methods for people who are willing to quit tobacco.

Aims and Objectives: Our aims and objective of the study is to assess the knowledge, attitude and practice of employees of Shri MP Shah Govt. Medical College, Jamnagar, Gujarat towards tobacco use and its cessation; identify reasons for initiation and continuation of tobacco use

Methods: A cross-sectional study was conducted among 307 employees (Class 3 & Class 4) of medical college, Jamnagar, Gujarat using simple random sampling technique from March 2021 to May 2021. The data was collected using pre-tested close ended questionnaire. Informed Consent was taken. Descriptive and inferential statistics will be used to summarise data and to examine the relationship between variables and also appropriate statistical tests will be applied.

Result: 95% of study respondents knew that tobacco leads to bad outcome. 23% of the study respondents knew about tobacco control act. 40% told that passive smoking\/second hand smoke is harmful to their body. 96% believed that smoking should be banned from public places. Majority of current tobacco users want to quit their habit of tobacco consumption.

Conclusion: Majority of study respondents were aware of health hazards due to tobacco consumption, knew that it is illegal in public places and wanted to quit.

Keywords: Knowledge; Attitude; Practice; Tobacco addiction; Employees

Abstract Id	Efi_139_226_NCD
Title	**Socioclinical profile of osteoarthritic patients residing in urban slums of Berhampur,Odisha- A Cross-Sectional Study**
Authors	Dr Trupti Dash, Dr Sangeeta Das ,D. M. Satapathy- MKCG MCH Berhampur

Introduction: Osteoarthritis (OA) is the most common joint disorder and a major cause of disability in the adult population. Osteoarthritis is not given due importance in terms of public health .The present study was conducted with the following objectives:To study the socio-demographic characteristics of the study population.To determine the risk factors associated with osteoarthritis .

Materials & Methods: A cross-sectional study was conducted among 100 patients(≥50yrs) diagnosed with osteoarthritis residing in urban slums of Berhampur,Odisha during April 2021 to July 2021. Socio-demographic characteristics and risk factors of osteoarthritis were obtained using a semi-structured questionnaire.

Results: The study population included 67% women & 33% men . The mean age in women was 58.9 years & in men was 62.2years. Family history of osteoarthritis was present in 25 % of cases, 57 % belonged to social class-1 as per BG Prasad's classification, 38% had trauma history,44% had associated comorbid conditions, 79% did not do any exercise & most of them were overweight. The mean BMI was 25.11 .

Conclusion: The findings suggest that osteoarthritis is more common in women with co-morbidity and sedentary lifestyle . Measures should be taken to improve physical activity & reduce comorbidity through geriatric counselling.

Keywords: Osteoarthritis,socio demographic,co-morbidity

Abstract Id	Efi_4_157_NCD
Title	**Association between prolonged exposure to PM 2.5 and increased risk of Type2 Diabetes Mellitus**
Authors	Dr Manasvee Chopra Saluja, Dr Nitin K Joshi, Dr Prasanna T. Dr Pankaj Bhardwaj, AIIMS Jodhpur

Introduction Air pollution is the world's biggest environmental health risk with PM2.5 being among major pollutant causing diseases. Our knowledge regarding association between long term exposure to PM2.5 and increased risk of T2DM is very limited specially for low- and middle-income countries who are facing serious air pollution problems. Therefore, study undertaken to assess the effect of prolonged exposure to PM2.5 and risk of T2DM.

Method Study was conducted in two phases using secondary data. In first phase, internet-based search of peer-reviewed and non-peer-reviewed literature was conducted for past decade. The search was focused on relationship between PM2.5 and T2DM including incidence, prevalence and ecological studies. In second phase, we conducted exploratory study and compared data of different states in context to prevalence of T2DM and PM2.5 levels to find out if any relationship exists.

Results Our review identified 17 relevant studies. Three studies from US and Europe including one study each from Switzerland, Belgium, Italy suggest a positive association between exposure to PM2.5 and increased risk of T2DM. While two US experimental trial confirms exposure to PM2.5 induces vascular insulin resistance and affects beta cell function. Three studies each from Taiwan and China reported positive association between exposure to PM2.5 & risk of developing T2DM in Asian population. One study each from Saudi Arabia and Iran also reported the association. Only one study done in India so far and reports positive relationship between exposure to PM2.5 and prevalence of T2DM. In second phase, after comparing data of diabetes prevalence from ICMR INDIAB study with average maximum levels of PM 2.5 from CPCB we found weak positive association between PM 2.5 and prevalence of T2DM.

Conclusion Epidemiological evidence supporting relationship between prolonged exposure to PM 2.5 and development of T2DM is established globally but is very limited in India therefore suggests a strong need for robust study designs to assess relationship of PM 2.5 and risk of T2DM.

Keywords: Diabetes Mellitus Type 2, Particulate Matter, Air pollutants

Abstract Id	Efi_126_239_NCD
Title	**Association of pre-hospitalization factors in prediction of road traffic injury outcomes**
Authors	Neeraj Sharma, D K Mangal: SD Gupta School of Public Health, IIHMR University, Jaipur

Objective: The objective of this study was to determine the pre-hospitalization factors associated with road traffic injuries (RTI) outcome among the patients of the IRIS study.

Methods: National Taskforce study on Establishment of Comprehensive Surveillance System for Road Traffic Injuries in India" (IRIS) study was conducted in 2017-18 among three cities (Chennai, Delhi, and Jaipur) and two rural areas (Chittoor and Tehri-Garhwal). The IIHMR University, along with the Trauma Centre, SMS Medical College, Jaipur, conducted the study in Rajasthan. The IRIS study data for Jaipur center was further analyzed to assess the prehospitalization factors as determinants of RTI outcome. The injury outcome was classified into three categories: Alive, Alive with rehabilitation, Death. Understanding the polychotomous nature of the outcome variable, a multinominal logit modeling framework was used to determine the pre-hospitalization factors associated with the RTI outcome.

Results: A total of 4354 cases were recorded, of which 61.21 percent were alive, 36.01 percent were alive with rehabilitation and 2.78 percent were death-related. Our estimated results indicated that if an accident had the following characteristics, it had the probability of facing severe outcomes (alive with rehabilitation\death): gender (male), education (high school\ illiterate), occupation (student\ unskilled manual), patient reached during golden hour, accident with a pedestrian, injured person type (passenger\ pedestrian\pillion rider), traffic rules followed, road surface condition (rutted), vehicle (overtaking\ slowing\ turning), vehicle type (government\ public transport), time for rescue, number of body parts injured, and injured status. The accuracy score of our model was 0.78 (CI – 0.77 – 0.80) and Nagelkerke's PseudoR2 value was 51.88.

Conclusion: Our study could identify several important factors as a unit that contribute to estimating the road traffic injury outcome. It also emphasizes the role of multisectoral factors and their implication in policy advocacy."

Keywords: Road Traffic Injuries, Pre-hospitalization, Injury severity, Multinomial logistic regression model

Abstract Id	Efi_71_84_NCD
Title	**Prevalence and determinants of obesity and hypertension among medical students- A cross sectional study."**
Authors	Dr. Purushottam Kumar, AIIMS Patna.

INTRODUCTION : India is experiencing a rapid health transition, with large and rising burdens of chronic diseases, which were estimated to account for 53% of all deaths in 2005. Earlier estimates projected that the number of deaths attributable to chronic diseases would rise from 3·78 million in 1990 (40·4% of all deaths) to 7·63 million in 2020 (66·7% of all deaths).(1)Overweight and obesity are the fifth leading risk for global deaths. At least 2.8 million adults die each year as a result of being overweight or obese. (2)The prevalence of obesity has nearly doubled between 1980 and 2008. 65% of the world's population lives in a country where overweight and obesity kills more people than underweight. In 2011, more than 40 million children under the age of five were overweight.(3) According to the Indian Council of Medical Research-India Diabetes study 2015, the prevalence of obesity and central obesity among adults ranges from 11.8% to 31.3% and 16.9% to 36.3%, respectively.(4)World Health Organization (WHO) defines overweight as a BMI equal to or more than 25, and obesity as a BMI equal to or more than 30.(2)Kerala ranks second among Indian states with the increased prevalence of obesity in females. Medical students are more prone for obesity, due to their sedentary lifestyle, lack of exercise, disordered eating habits due to lack of leisure time, increased stress and vast topics to learn. Thus, they are prone to overweight\/obesity-related complications such as hypertension, dyslipidemia, and impaired glucose tolerance. Overweight and obesity are defined as excessive fat accumulation that may impair health. Obesity is a complex multifactorial disease. It develops from the interaction of several factors such as social, behavioral, genetic, psychological, and metabolic. The causes of adult obesity include a variety of factors such as diet, genetic predisposition, lack of physical activity, and other behavioral factors. The sedentary lifestyle includes watching television, playing computer games, using mobile phones for long time, reading, talking over phone, and listening to music. Obesity is a risk factor for hypertension, type II diabetes mellitus, infertility, hyperlipidemia, coronary artery disease, stroke, and arthritis. Evidences have suggested that atherosclerosis also begins early, when cardiovascular risk factors also begin. Moreover, the social implications of obesity are often neglected. The obese, do less well academically, has poorer job prospects and lower self-esteem. This study was aimed at estimating the prevalence of overweight\/obesity among medical students, determining the contributing\/ associated factors and assessing the risk of comorbidities in them.

STUDY OBJECTIVES:

1. To estimate the prevalence of obesity in medical students.
2. To estimate the prevalence of hypertension in medical students.
3. To determine the association between demographic factors, obesity and hypertension.

MATERIALS AND METHODS A cross-sectional study was conducted among 330 medical

students aged 18–25 years from 1st April to 31st may at AIIMS, PATNA. The sample size was calculated by using online open Epi 3 software using prevalence= 30.6% with confidence interval 95%.(4) The calculated sample size was 327. So, it was rounded off to 330. The final sample size was 330.Simple random sampling technique was used in the study. 83 students were selected from first and second year batch each respectively while 82 from third and fourth year batch.

METHODOLOGY: A cross sectional study was done among 330 medical students. Each student would be given a pre-tested questionnaire, which included name, age, sex, year of admission, type of diet (vegetarian\/non-vegetarian), family history of non-communicable diseases and history of physical exercise. Anthropometric measurements includes weight, height, waist circumference, hip circumference and middle upper arm circumference were taken. The height was measured on a vertical scale with heels, buttocks, and occiput against the wall. The weighing machine was checked with known weights every day before starting the survey. The participants were made to stand still on the weighing machine, and the weight in kilograms was recorded. For waist circumference, the subject was made to stand with feet 25–30 cm apart, weight evenly distributed. Measurement was taken midway between the inferior margin of the last rib and the crest of the ileum in a horizontal plane. BMI was calculated using Quetelet's index (BMI = Weight in kg\/ Height in m2). The participants were categorized on the basis of BMI (criteria for Asian people) into underweight (BMI 23). waist circumference (<90 cm [men] and 90 cm [men] and >80cm[women]) taken as increased to assess the risk of comorbities. The blood pressure was measured with the help of sphygmomanometer. Two readings were taken.

Inclusion and exclusion criteria

Inclusion:

1.Students of all years of MBBS Batch

2.Those who were willing to participate in the study.

Exclusion:

Those who were absent during the time of study

2.Those who were physically challenged

STUDY TOOL: The information will be collected with the help of a pre-designed pre-tested questionnaire through a google form. The investigator itself will measure the Height, Weigh, HC, WC, Blood Pressure etc and enter in Google Form.

Bio-statistical analysis: The information collected will be entered in MS Excel and analysis will be done using SPSS version20.

ETHICAL ISSUES: Written informed Consent of the study participants will be obtained. Only those participants will be included in the study who give consent for participation.

RESULTS- The BMI (Body Mass Index) categories taken were underweight (23 kg). The total prevalence of overweight\/obesity in the present study was found to be 98 (29.7%) [Table 1]There were total 330 students included in the study. Out of them, 266 were males and 64

were females. In case of total males, 48.5% were underweight, 20.7% were normal, and 30.8% were overweight\/obese while in case of females, 53.1% were underweight, 21.9% were normal, and 25.0% were overweight\/obese. The percentage of overweight\/ obesity was found to be more in males in comparison to females. This increase was found to be statistically insignificant (p value = 0.654) [Table 2]. According to the waist circumference (WC) measured, 254 (76.9%) had normal waist circumference while 76 (23.1%) had increased waist circumference. In case of normal waist circumference, 16.1% were overweight while 75% were overweight with increased waist circumference. This was found to be highly statistically significant (p value < 0.001). This means that there is association between waist circumference and BMI. The students with increase WC had more BMI. [Table 3]. Out of 330 students, inadequate physical activity was present in 211 (63.9%) students. And 119 (36.1%) students were doing adequate physical activity that is 45 min\/day or 5 days\/wk. It was observed from the present study that 49.3% students were underweight, 22.7% were normal and 28.1% students were overweight those who were not doing adequate physical activity. The association was found to be statistically insignificant (p value = 0.463) [Table 4] Family history of non-communicable diseases was present in 145 (43.9%) students. Those who were having positive Family history of non-communicable diseases, 47.6% students were underweight, 22.1% were normal and 30.3% students were overweight. The association was found to be statistically insignificant (p value = 0.463) [Table 5].Majority of the students were having mixed type of diet. In case of vegetarians 25.3% were overweight, in non-vegetarians 38.8% were overweight while in case of mixed diet 29.4% were overweight. The association was found to be statistically insignificant (p value = 0.119) [Table 6].The total prevalence of hypertension in the present study was found to be 23 (7%). In hypertensive students, 26.1% were underweight, 30.4% were normal and 43.5% students were overweight. The association was found to be highly statistically significant (p value < 0.001). [Table 7].Figure 1 shows that 63.6% students have normal BP, 29.4% were pre-hypertensive and 7% students were hypertensive.Figure 2 shows that distribution of study subjects according to BMI categories. 49.4% were underweight, 20.9% were normal and 29.7% students were overweight.Figure 3 shows that Family history of communicable diseases was present in 43.9% students. Figure 4 shows that 28.1% females have increased waist circumference while only 21.8% males have increased waist circumference.

CONCLUSION The prevalence of overweight\/obesity among medical students was nearly one-fourth of the study population which is going to be increasing day by day. The medical students are the future doctors and role models of the community. Therefore, it is of utmost importance to have early intervention programmes to prevent non-communicable diseases among these future doctors. Necessary health promotional activities are suggested to them so they adopt healthy life styles.

Keywords: OBESITY, HYPERTENSION, MEDICAL STUDENTS

Abstract Id	Efi_122_243_NCD
Title	**Community-based study of epidemiology of obstructive sleep apnea and its association with cardiovascular risk factors using STOP BANG questionnaire**
Authors	Vishal Kumar Singh, Dr. Farzana Islam, Dr. Aqsa Shaikh HIMSR

Introduction: Sleep is a blessing that is appreciated only by those who do not get enough and quality sleep. Sleep-related disorders not just affect our quality of life but also increase the risk of other diseases and premature death. Obstructive sleep apnea is one such disorder that is extremely troubling. According to the international classification of diseases (ICD 10), Obstructive Sleep Apnea (OSA) is defined as a disorder characterized by recurrent apnea during sleep despite persistent respiratory efforts. OSA is known to increase the risk of cardiovascular diseases.

The objective of the study was to find out the prevalence and risk for OSA using the STOP-BANG questionnaire in a community residing in South Delhi belonging to the age group 30-69 years and its association with cardiovascular risk factors.

Methods: The study was a community-based cross-sectional study conducted in South Delhi. 700 participants were selected randomly using the multistage random sampling technique. STOP-BANG questionnaire was used to assess the risk of OSA using a cut-off score of 3. Newly diagnosed cases of Hypertension and Diabetes were studied for association with OSA.

Results: The prevalence of OSA in the study population was 9.7%. The risk of OSA increased with increasing age group, Mallam Pati score, and BMI. Male gender was significantly associated with increased risk of OSA. The risk of OSA was also found higher in Hypertensive and diabetics as compared to others.

Conclusion: Obstructive sleep apnea is prevalent in the population and it is significantly associated with Age, Male Gender (19.3%: 6.5%), Mallam Pati score, Hypertension (4.2%:32.6%), and Diabetes (9%:15.1%). Screening for OSA using STOP-BANG Questionnaire should be included in primary health care for the prevention and early identification of cardiovascular diseases.

Keywords: Obstructive Sleep apnea, OSA, cardiovascular disease, metabolic syndrome, Stop-bang, sleep-related disorders.

Abstract Id	Efi_89_63_NCD
Title	**"Awareness of Cigarettes and Other Tobacco Products (COTPA) Act among tobacco retailers in a city of north Karnataka: A community based cross-sectional study."**
Authors	Jagadeep Adhikam, Dr. Yogesh Kumar S, J.N. Medical College, KAHER, Belagavi.

Introduction: Tobacco is a global epidemic killing around 8 million people worldwide. First hand smoke accounts to 7 million deaths, whereas second hand smoke claims 1.2 million innocent lives. Tobacco use is a major public health problem in India. The Cigarettes and Other Tobacco Products Act (COTPA) 2003 was developed to curb this epidemic. It lays out various rules and regulations pertaining to tobacco manufacture, trade & retail, packaging, labelling, selling, and consumption under various sections. Tobacco retailers play a major role in this chain of tobacco use, and hence should be aware of the laws on tobacco use. Not many studies have been conducted on the retailers' knowledge of COTPA act. Hence our study aims to assess their awareness and implementation of various sections under the act, their tobacco consumption pattern and socio-demographic profile.

Methodology: A community based cross-sectional study was conducted in 2020 over a period of 12 months from January to December among 360 tobacco retailers with their point of sales (POS) in the field practice areas of four Primary Health Centres (PHC) namely Ashoknagar, Rukmininagar, Vantamuri and Kinaye under the Department of Community Medicine, J.N. Medical College, KAHER, Belagavi. Universal sampling method was adopted and data was collected using a pre-designed and pre-tested questionnaire by personal interview method.

Results: Only 12% of the tobacco retailers were aware of COTPA act and 69% of them were not aware if a minor can neither sell nor buy tobacco products but none of them claimed that they had ever hired a minor to sell tobacco products. It was observed that 54% of the retailers reported minors buying tobacco products a rare event where as 34% said that it was often seen. Though 92% of the retailers were not aware that it is prohibited to sell tobacco products within 100 metres of any educational institute, 70% of them claimed that their POS is not within 100 metres of any educational institute. It was observed that 80% of the retailers didn't know that health warning boards on smoking should be put up in their shops, and 89% of them ended up not putting any health warning board. Though all of them knew that it is prohibited to smoke in public places, none of them were aware of the punishment if they didn't follow the rules laid down by COTPA. Only 31% were aware of the passive smoking; and out of that 22% of them believed that passive smoking could also be dangerous to health but only 3% knew that it could also cause cancer and heart diseases, and 35% of the retailers would stay quiet concerning about losing customer when he\/she smokes infront of the shop.

Conclusion: Though the tobacco retailers seemed not to know about the COTPA rules per say, most of them abided by it without any significant violations like hiring minors to sell tobacco products or selling within the premises of any educational institute. But large knowledge gaps have to be filled with in the domains of passive smoking, its hazardous effects on health and organ systems, and most importantly to translate knowledge into practice in some areas where they were aware of the good practices but failed to execute.

Keywords: COTPA, tobacco retailers, Implementation of COTPA in India

Abstract Id	Efi_14_144_NCD
Title	**Operationalization of interdisciplinary integration for enhancing satisfaction of cancer ovary patients: An example from PGI Chandigarh**
Authors	Janavi, Dr. Amarjeet Singh, Dr. Bhavana Rai, Dr. Vanita Suri, PGIMER, Chandigarh

Introduction: Cancer patients are often ill prepared for issues related to diagnosis and management of the disease. There are questions\/issues in the mind of patients related to family, financial, social, treatment related problems, survival and many more. Providing proper information for cancer patients can have a range of beneficial effects. Clear, full and prompt information related to disease, treatment as well as psychosocial support must be provided at every stage of treatment. This can be possible only with interdisciplinary approach only where expertise from various disciplines can help the patients and their caregivers in resolving their disease and therapy related issues. This will help to improve their quality of life.

Objective: To ascertain the impact of an educational intervention on the quality of life of patients using an interdisciplinary approach.

Methods: A two group randomized controlled trial was done (n=120) on cancer ovary patients. EORTC tools QLQC30 & OV 28 were used. Accordingly, an educational package was designed catering to their needs with the help of experts from gynaecology, radiotherapy, nursing departments & public health departments. Their issues were sought to be addressed using this approach. Patients were followed up 2 times at interval of 1 month and 3 months after the intervention. Data was then analysed using paired & unpaired t test.

Results: Many patients reported improvement in overall health and overall quality of life score. Majority of the patients felt really positive and good when they were asked about their condition at follow ups and were provided ways to deal with them at home.

Conclusion: Educational package developed using interdisciplinary approach was quite beneficial for the patients.

Keywords: ovarian cancer, interdisciplinary approach, patient centred care

Abstract Id	Efi_186_171_NCD
Title	**Prevalence of Hypertension and its associated risk factors among Police Personnel of Vijayapura.**
Authors	Dr Laxmi Tellur, Dr M C Yadavannavar, Shri B M Patil Medical College, Hospital & Research Centre, Vijayapura

Introduction: Hypertension is a chronic condition which is a major public health challenge due to associated morbidity, mortality and financial burden on the society in both developed and developing countries. According to World Health Organisation, hypertension accounts for one in every third deaths worldwide. Hypertension has been linked to ischemic heart disease, peripheral vascular diseases, stroke, myocardial infarction, and renal failure. There is a twofold higher risk of developing coronary artery disease (CAD) and four times higher risk of congestive heart failure among hypertensives when compared to normotensives. In India, prevalence of hypertension is approximately 13-37% in general population. Non communicable diseases (NCDs) are responsible for 53% of deaths and 44% of disability adjusted life years lost (DALY) in India. Police personnel are backbone for maintaining law and order within their jurisdiction. Police work has been regarded as one of the stressful occupations, who have long duty hours, irregular diet, limited choice of food while on duty, suffer from disrupted sleep patterns and high rates of addiction which are all the risk factors for hypertension. Growing unemployment, increasing violence and rising expectations of the people have caused serious challenges for the police. Several studies done across India have shown prevalence of hypertension ranging from 16-42% among police personnel.

Objectives:1. To study the prevalence of hypertension among police personnel of Vijaya Pura district.2. To find out the socio-demographic and other risk factors influencing hypertension

Material and methods: After obtaining ethical clearance from the Institutional Ethical Committee of Shri. B. M. Patil Medical College, Hospital & Research Centre,Vijayapura and permission from the Superintendent of Police, Vijayapura, the study was carried out in all 24 police stations of Vijayapura district. After informing all the participants about the nature and purpose of the study, informed consent was obtained. A total of 1210 participants were interviewed and examined, others were either on leave or on election duty. Participants were then interviewed using a predesigned, pre-structured questionnaire and examined. Height was measured by using a measuring tape. Weight was recorded using a standardised weighing machine. Body mass index was then calculated. Participants were seated quietly for at least 5 mins on chair, with feet on the floor, and arm supported at heart level. Two readings of blood pressure(BP) were taken 5 minutes apart using mercury sphygmomanometer on right arm in the sitting posture. All the instruments used for the study were calibrated before using them each time.

Results: The overall prevalence of hypertension among the police personnel was 32.5%. Among hypertensives the prevalence was highest among males (96.9%), 51-60 years of age (57.9%), graduates (69.4%), socioeconomic class I & II (60.5% & 60.1%), police constables

(49.5%), 21-30 years of service (44.7%), shift duty(16.6%), alcoholics (76.3%), tobacco users (60.5%) and this was statistically significant(p<0.05). Also, a positive association was found between body mass index(BMI) and hypertension (p<0.05).

Conclusion: Hypertension is more prevalent among police personnel in their fifth decade of life. This has been found to be influence by some of the modifiable and non-modifiable risk factors due to lifestyle changes and their profession. Therefore, it is necessary to create awareness about hypertension and its complications by health education programmes. Vijayapura is one of the district headquarters in North Karnataka which is undergoing rapid socioeconomic transition & lifestyle modifications. As data regarding NCDs among police personnel is very sparse, hence the present study is undertaken to know the prevalence of hypertension and associated risk factors among police personnel of Vijayapura.

Keywords: Hypertension, police personnel, prevalence, risk factors.

Abstract Id	Efi_72_83_NCD
Title	**Prediction of Type 2 Diabetes Mellitus using Artificial Intelligence: Evidence from a developing country.**
Authors	Limalemla Jamir, AIIMS, Guwahati, Assam

Introduction: India is battling with a high burden of diabetes mellitus amidst resource constraints and region-specific challenges. Healthcare services can be efficiently optimized using assistive technologies such as artificial intelligence-machine learning. This study aimed to assess the accuracy and feasibility of a machine learning algorithm in predicting type 2 diabetes mellitus.

Methods: A dataset of adult persons (18 years and above) were drawn from electronic medical records of a Family Medicine Out Patient Department. Machine learning (ML) classification models were run using variables as predictors (age, gender, body mass index (BMI), systolic blood pressure (SBP), diastolic blood pressure (DBP), number of visits, presenting complaints, medications prescribed per visit). A Siamese deep neural network with shared weights was used to learn to discriminate between patients with and without diabetes. Pairs were created for similar patients (having diabetes) and dissimilar patients (one patient with diabetes, one without diabetes). In total, 40,000 such pairs were created for training the network. At test time, only one network was used with the individual patient encoded as a one hot vector as input.

Results: A total of 7513 patient visits were studied with 4253 unique patients. Of the 4253 unique patients, 631 patients were finally recorded as having diabetes mellitus and 59 as hypertension. The 631 patients with diabetes mellitus had 1102 visits in total. Of this, medications were prescribed to 534 patients. The mean (SD) age of the patients was 49.6 (14) years; mean (SD) weight was 70 (30) kg; mean (SD) SBP and DBP were 132 (17) mmHg and 80 (10) mmHg, respectively. Most common presenting complaints were burning and tingling sensation, increased frequency of urination and giddiness. Most prescribed medication was Glimepiride (1 mg)+Metformin (500 mg). The best-performing model was siamese deep neural network with balanced accuracy (average of sensitivity and specificity) of 92.67%. A sensitivity analysis indicated that BMI, weight and pulse rate were the strongest predictors where perturbing these values with random gaussian noise resulted in drop of 4.2%, 3.23% and 1.6%, respectively in balanced accuracy. The balanced accuracy for the first visit was 91.3% and that for the subsequent visits was 94.04%.

Conclusion: Hospital management information systems can optimize services with the use of machine learning-enabled prediction of type 2 diabetes mellitus.

Keywords: Diabetes mellitus, artificial intelligence, machine learning, decision support systems, prediction.

Abstract Id	Efi_16_142_NCD
Title	**Aging with Hypertension, Pinpoint for a rethink in health care, treatment, and Control.**
Authors	NARENDRA SINHA, Preethi John, Chitkara Institute of Global Health Chitkara University Panjab, Ranjana Gayakwad, Society for Public Health Research and Development Chhattisgarh

Introduction - Globally population is going to a new peak day by day. The globe is on the borderline of a demographic transition wherein it's expected that the elderly will be higher than the number of children under age. An increasing trend of elderly persons Indian population is highly significant. Hypertension is identified as a chronic condition worldwide As hypertension is highly prevalent in developing countries. In the year 2015, In the globe, a major cause of premature death is hypertension. Aging has also associated a person having many disorders at the same duration (multimorbidity). Worldwide in low-income and middle-income nations more than half of the elderly are affected by it . The relation between one and more diseases as well as in their therapeutic intervention, the adverse reaction is observed in the treatment of multiple diseases at the same time, Multimorbidity affects functioning and quality of life. in the future large number of people suffering from multiple chronic conditions is an examination of the health system in the country in terms of care support and treatment. now need for a rethink in the strengthening of health system performance fulfillment of gap provision of need-based care support and treatment.

Method -Systematic review done for worldwide literature related to aging hypertension with multimorbidity

Result- In the aging population risk of mortality is higher in multi-morbidity than the individual disorders. Predictably, due to multimorbidity healthcare use increases and increased expenditure for health services. people affected with Hypertension commonly suffer from multi-morbidity and require long-term, frequent life-long, care, support with a compound set of needs of treatment.

Conclusion -in the future Answering the care demands of a large number of people suffering from multiple chronic conditions is an examination of the health system in the country in terms of care support and treatment. now need for a rethink in the strengthening of health system performance fulfillment of gap, provision of need-based care support and treatment.

Keywords: ageing elderly hypertension

Abstract Id	Efi_184_173_NCD
Title	A Cross Sectional Study To Determine The Sociodemographic Profile And Study Prevalence Of Chronic Noncommunicable Diseases In An Urban Slum Of Mumbai.
Authors	Dr Priyanka Dnyanoba Chate, Dr Priyanka Dnyanoba Chate

Introduction: Mumbai is the economic capital of India. According to the 2011 census, 41.84% of the total population of Mumbai city resides in slum areas; thereby highlighting the fact that huge section of the population is concentrated in the slum area of Mumbai making it the area of choice to assess the burden of health problems in the community. Chronic non-communicable diseases (NCDs) are the major cause of morbidity and mortality worldwide especially in developing countries where it has a greater impact on the socio-economic dynamics of the country and the quality of life of its people. Hence assessment of the prevalence of chronic non-communicable diseases is essential to plan effective control measures so as to improve the health status of the population.

Material and Methods: This is a retrospective cross-sectional community-level study based on family assessment survey records filled by undergraduate medical students as a part of their curriculum. The survey was conducted over the period of 3 years from 2015 to 2018 on 300 families residing in 3 slums in the field practice area of tertiary care hospital in Mumbai. The data was analyzed using Microsoft Excel.

Results: The total population was 1533, 720 were female and 813 were male. Out of these 8.023% were under-5, 14.35% were school-age children and 17.15% population were adolescents. 6.84% of the total population were above the age of 60. The literacy rate was 85.85 % and 74.86% for males and females respectively. About 70% and 16.66% of families belonged to socio-economic status upper-lower (class IV) and lower-middle (class III) according to modified Kuppuswami classification. Only 5% of the population used sanitary methods for solid waste disposal. 66.66% of families were using toilets for excreta disposal, of which 91.6% used a common public toilet, while only 8.4% of the households had their own self-contained toilet. 417out of 1533 individuals were known cases of chronic noncommunicable diseases and were on treatment for the same, thus prevalence of chronic non-communicable disease was 27.20%. There is significant association between age & prevalence of chronic non-communicable disease (The P-Value is < 0.00001,r score is 0.461, N is 97 .The result is significant at p < 0.05)in the given population. However no significant correlation was found between socioeconomic status (The r score is -0.01809, N is 97 hence p-value is 0. 8610. The result is not significant at p<0.05) & sex (The r score is -0.007, N is 97. The result is not significant at p<0.01.) on the prevalence of the chronic non-communicable disease.

Conclusion: The slum areas are a symbol of poverty which will continue to expand along with economic and industrial development. A growing number of slums constitutes a major challenge to the development of the community. The result emphasizes the need to implement measures to improve sanitation and hygiene, the physical environment of the dwelling places,

along with basic amenities of toilets, proper drainage, sewage & garbage disposal, water supply. There is a huge need to plan the slum dwellings in such a way that adequate ventilation, lighting of the houses can be done. Health care in these slum areas is extremely complex driven by poverty which can be improved by organizing routine camps at these places. There is a huge need to establish mobile health vans and slum clinics at this underprivileged section of society so as to improve the health care coverage which will in turn help in early diagnosis and treatment of chronic non-communicable disease, improve adherence to treatment in already detected cases; thereby reducing morbidity & mortality from NCD in slums. Government should also implement new programs & strengthen the existing programs so as to facilitate the health-seeking behaviour of people residing in slums.

Keywords: Metropolitan city, Urban slums, Socio-economic, Socio-demographic, Chronic non communicable disease.

Abstract Id	Efi_97_53_NCD
Title	**Recalibrating the Non-Communicable Diseases risk prediction tools for the rural population of Western India**
Authors	Sridevi G

Background: The present study was conducted to recalibrate the effectiveness of Indian Diabetes Risk Scores (IDRS) and Community-Based Assessment Checklist (CBAC) by opportunistically screening for Diabetes Mellitus (DM) and Hypertension (HT) among the patients attending health centres, and to estimate the risk of fatal and non-fatal Cardio-Vascular Diseases (CVDs) using WHO\/ISH chart

Methods: All the people of age ≥30 years attending the health centers were screened for DM and HT. Weight, height, and waist and hip circumferences were measured and BMI and Waist Hip Ratio (WHR) were calculated. Risk categorization of all participants was done using IDRS, CBAC, and WHO\/ISH risk prediction charts. Individuals diagnosed with DM or HT were started on treatment. The data was recorded using Epicollect5 and was analyzed using SPSS v.23 and MedCalc v.19.8. ROC curves were plotted for DM and HT with the IDRS, CBAC score and anthropometric parameters. Sensitivity (SN), specificity (SP), Positive Predictive Value (PPV), Negative Predictive Value (NPV), Accuracy and Youden's index were calculated for different cut-offs of IDRS and CBAC scores.

Results: A total of 942 participants were included for the screening, out of them, 6.42 % (95% CI: 4.92-8.20) were diagnosed with DM. Hypertension was detected among 25.7% (95% CI: 22.9-28.5) of the participants. A total of 447 (47.3%) participants were found with IDRS score ≥ 60, and 276 (29.3%) with CBAC score >4. As much as 26.1% were at moderate to higher risk (≥10%) of developing CVDs. Area Under the Curve (AUC) for IDRS in predicting DM was 0.64 (0.58-0.70), with 67.1% SN and 55.2% SP (Youden's Index= 0.22). While the AUC for CBAC was 0.59 (0.53-0.65). For hypertension the both the AUCs were 0.66 (0.62-0.71) and 0.63 (0.59-0.67), respectively.

Conclusions: Instead of CBAC, the present study emphasizes the usefulness of IDRS as an excellent tool for screening for both DM and HT. This is the time to expose the hidden part of the NCDs iceberg by having high sensitivity of non-invasive instruments (like IDRS), so, we propose a cut-off value of 50 for the IDRS to screen for diabetes in the rural Indian population.

Keywords: NCD, Diabetes, Hypertension, CVD, IDRS, CBAC, BMI, Waist Hip Ratio

Abstract Id	Efi_185_172_NCD
Title	**Breast Cancer Risk Assessment of women aged 30 years and above visiting the non-communicable disease clinic, South Delhi**
Authors	Dr Sunom M. Lepcha, Dr Anita Khokhar, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Introduction Breast cancer is the world's most commonly-diagnosed cancer and is responsible for 15% of all cancer related deaths among women. India alone accounts for 27.7% of all cancer cases among women while Delhi accounts for 28.6%. This study identifies women at risk for breast cancer using the Augustine -Jose model breast cancer risk assessment tool at the non-communicable disease clinic at an Urban Primary Health Centre, South Delhi.

Methods This interview based cross-sectional descriptive study was conducted among 110 women aged 30 years and above visiting the NCD clinic at UPHC, Fatehpur Beri using the A-J model breast cancer risk assessment tool. The sample size was calculated using prevalence of 50%, 95% confidence interval, 10% error and 10% non-response rate. Data was entered and analysed using SPSS 21. Descriptive analysis was done.

Results: The mean age of the study participants was 50.5 ±10.8. According to this tool, 2(1.8%) participants were at moderate risk (score >0.5-0.65) of developing breast cancer while 9(8.2%) were in the high-risk category (score >0.65).

Conclusion The tool can be used in primary care settings to calculate the risk of developing breast cancer and thus magnify the screening practices for prompt detection of breast cancer.

Keywords Breast cancer, Non-communicable disease, Breast cancer risk assessment.

Abstract Id	Efi_159_202_NCD
Title	**Time to Switch to 'Rule of Three-Quarters' from 'Rule of Halves' in Hypertension. A Descriptive Study from Dakshina Kannada, South India**
Authors	Dr Imaad Mohammed Ismail, Subhashree Nandy, Shubhankar Adhikari, Revathi TM, Dhruv Gupta, Deeptha M, Awnish Ranjan, Aslaha Aboobacker, Department of Community Medicine, Yenepoya Medical College, Mangaluru, Karnataka

Introduction 'Rule of halves' depicts the overall picture of hypertension that prevails in a community. This study was taken up to understand if the traditional 'rule of halves' of hypertension still prevails or is it time to shift to the proposed 'rule of three-quarters'. The objectives of the study were: to estimate (i) the prevalence of hypertension among adult residents of Madani Nagar rural community in the Dakshina Kannada district of Karnataka state in southern India, (ii) the proportion who are aware of their disease among hypertensive patients, (iii) the proportion who are on treatment among those who are aware of their disease, and (iv) the proportion having adequate blood pressure control among those on treatment.

Methods This was a cross-sectional study carried out in Madani Nagar, Dakshina Kannada from February to April 2020. Complete enumeration method was followed and all adults aged ≥ 18 years who consented were included in the study. Data collection was done using a pre-validated questionnaire and blood pressure was recorded as per World Health Organization guidelines.

Results A total of 661 individuals were enrolled in the study. The prevalence of hypertension was 29.2%. Only 55.4% of hypertensive patients were aware that they had the disease, and among them, 96.3% were on treatment. Among those on treatment, 58.3% had adequate control of blood pressure.

Conclusion The hypertension pattern of the community leans more towards the traditional 'rule of halves' of hypertension and it is still a long way ahead until the proposed 'rule of three-quarters' can be achieved.

Keywords: rule of halves, hypertension, prevalence, aware, treatment, adequate control, rule of three-quarters

Abstract Id	Efi_36_122_NCD
Title	**Cardiovascular risk assessment using updated WHO risk assessment chart among men residing in an urban slum.**
Authors	Neeraj Pawar, Vikram Ashok Kumar, Tagore Medical College And Hospital, Chennai, Tamil Nadu

Introduction: Among Non-communicable diseases, cardiovascular diseases (CVDs) are the leading cause of death globally, taking an estimated 18 million lives each year. More than 80% of the CVD deaths are due to heart attacks and strokes, and one third of these deaths occur prematurely in people under 70 years of age. The four major behavioral risk factors of heart disease and stroke that account for 80% of the total risk are unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol. Tobacco cessation, salt reduction in the diet, regular physical activity, and avoidance of harmful use of alcohol have been shown to reduce the risk of cardiovascular disease. Early identification of these factors can help in early initiation of treatment and ensuring they receive appropriate treatment can prevent premature deaths. This is particularly important in slum population where the hidden burden is even more.

Objectives: To find out the cardiovascular risk among men residing in an urban slum

Methods: A community based cross-sectional study was carried out in an urban slum area. Multistage cluster random sampling was used to select the study participants. A total of 300 men were selected and a questionnaire was used to collect the details regarding sociodemographic and behavioral risk factors. Height and weight of the participants were recorded, and BMI was calculated. Blood pressure of each participant was recorded using Dial Type Aneroid Sphygmomanometer following standard protocol. The collected data were entered in MS Excel spread sheet and analyzed using SPSS software version 20.0. An updated WHO cardiovascular risk assessment chart was used to analyze the cardiovascular risk. Inclusion criteria: Men aged 40-75 years residing in the study area for at least 6 months

Results: Mean age of the study participants was 57 ± 10.2 years. Mean BMI of the study participants were 25.6±4.3 kg\/m2. Mean systolic B.P was found to be 138±19 mm of hg with minimum being 102 mm of Hg and maximum 172 mm of Hg. Around one fourth (23%) were smokers. The prevalence of WHO\/ISH “moderate to high CVD risk” (≥10% chance of developing a cardiovascular event over 10 years) was found to be 11 %. Conclusion and recommendation: High burden of cardiovascular risk is prevalent in men residing in urban slum and active screening to

Keywords: CVDs, Slum, NCDs, WHO Chart

Abstract Id	Efi_70_85_NCD
Title	DETERMINANTS OF STROKE - A HOSPITAL BASED CASE-CONTROL STUDY IN VADODARA, GUJARAT
Authors	ANITA MEENA, Dr. Bhavesh Shroff, Medical College Baroda

INTRODUCTION: Stroke is second leading cause of death worldwide with an annual mortality of 5.5 million. Sad part is that it is not causing mortality only but significant morbidity also resulting in 50% survivors being chronically disabled (3.5% DALY in India). It is not limited to old age only as it starting gripping young people also. Incidence has increased almost 100% in past few decades in India while developed countries have witnessed a 42% drop. As public health burden of stroke is set to rise over future decades, public education and spreading mass awareness are key steps to preventing a stroke. Recognizing symptoms and early diagnosis can save more lives per day.

Aim of this study was to explore the various determinants of stroke.

METHODS: A case control study was done among patients of stroke admitted to medicine ward of Sir Sayajirao General Hospital (June 2019 to December2019). Sample size of 296 was calculated assuming power ratio of number of controls same as control i.e. 1:1, specifying values for error=5% and power= 80%.

RESULTS: In a fully adjusted multivariate logistic analysis, we found chance of getting stroke was six times higher among patients with high waist hip ratio (OR-5.89, 95% CI- 2.16 to16.07, p-0.0005), four times higher among smokers (OR- 3.55, 95% CI-1.66 to 7.60, p-0.001), three times higher among patients having family stress (OR- 3.39, 95% CI-1.79 to 6.42, p-0.0002) and three times higher among hypertensives (OR- 2.79, 95% CI-1.38 to 5.66, p-0.004) and two times higher among obese patients(OR- 2.20, 95% CI-1.14 to 4.24, p-0.02).

CONCLUSION: Our study established a strong association between stroke and modifiable risk factors like high waist to hip ratio, smoking, mental stress, hypertension, obesity, oral contraceptive pills etc. and non-modifiable risk factors like age, gender and family history..

KEY WORDS- Case-Control study, Stroke, Hypertension, Smoking, Diabetes.

Abstract Id	Efi_186_171_NCD
Title	**Prevalence of Hypertension and its associated risk factors among Police Personnel of Vijayapura.**
Authors	Dr Laxmi Tellur, Dr M C Yadavannavar, BLDE(DU), Shri B M Patil Medical College, Hospital & Research Centre, Vijayapura

Introduction: Hypertension is a chronic condition which is a major public health challenge due to associated morbidity, mortality and financial burden on the society in both developed and developing countries. According to World Health Organisation, hypertension accounts for one in every third deaths worldwide. Hypertension has been linked to ischemic heart disease, peripheral vascular diseases, stroke, myocardial infarction, and renal failure. There is a two fold higher risk of developing coronary artery disease (CAD) and four times higher risk of congestive heart failure among hypertensives when compared to normotensives. In India, prevalence of hypertension is approximately 13-37% in general population. Non communicable diseases (NCDs) are responsible for 53% of deaths and 44% of disability adjusted life years lost (DALY) in India. Police personnel are backbone for maintaining law and order within their jurisdiction. Police work has been regarded as one of the stressful occupation, who have long duty hours, irregular diet, limited choice of food while on duty, suffer from disrupted sleep patterns and high rates of addiction which are all the risk factors for hypertension. Growing unemployment, increasing violence and rising expectations of the people have caused serious challenges for the police. Several studies done across India have shown prevalence of hypertension ranging from 16-42% among police personnel.

Objectives: To study the prevalence of hypertension among police personnel of Vijayapura district. To find out the socio-demographic and other risk factors influencing hypertension.

Material and methods: After obtaining ethical clearance from the Institutional Ethical Committee of Shri. B. M. Patil Medical College, Hospital & Research Centre,Vijayapura and permission from the Superintendent of Police, Vijayapura, the study was carried out in all 24 police stations of Vijayapura district. After informing all the participants about the nature and purpose of the study, informed consent was obtained. A total of 1210 participants were interviewed and examined, others were either on leave or on election duty. Participants were then interviewed using a predesigned, pre-structured questionnaire and examined. Height was measured by using a measuring tape. Weight was recorded using a standardised weighing machine. Body mass index was then calculated. Participants were seated quietly for at least 5 mins on chair, with feet on the floor, and arm supported at heart level. Two readings of blood pressure(BP) were taken 5 minutes apart using mercury sphygmomanometer on right arm in the sitting posture. All the instruments used for the study were calibrated before using them each time.

Results: The overall prevalence of hypertension among the police personnel was 32.5%. Among hypertensives the prevalence was highest among males (96.9%), 51-60 years of age (57.9%), graduates (69.4%), socioeconomic class I & II (60.5% & 60.1%), police constables

(49.5%), 21-30 years of service (44.7%), shift duty(16.6%), alcoholics (76.3%), tobacco users (60.5%) and this was statistically significant(p<0.05). Also, a positive association was found between body mass index(BMI) and hypertension (p<0.05).

Conclusion: Hypertension is more prevalent among police personnel in their fifth decade of life. This has been found to be influence by some of the modifiable and non-modifiable risk factors due to lifestyle changes and their profession. Therefore, it is necessary to create awareness about hypertension and its complications by health education programmes. Vijayapura is one of the district headquarters in North Karnataka which is undergoing rapid socioeconomic transition & lifestyle modifications. As data regarding NCDs among police personnel is very sparse, hence the present study is undertaken to know the prevalence of hypertension and associated risk factors among police personnel of Vijayapura.

Keywords: Hypertension, police personnel, prevalence, risk factors.

Abstract Id	Efi_184_173_NCD
Title	A CROSS SECTIONAL STUDY TO DETERMINE THE SOCIODEMOGRAPHIC PROFILE AND STUDY PREVALENCE OF CHRONIC NONCOMMUNICABLE DISEASES IN AN URBAN SLUM OF MUMBAI.
Authors	Dr Priyanka Dnyanoba Chate, Dr.Sophia Fernandes, Dr.Anita Shenoy, Mrs.Vidula Patil, HBT & DR RN Cooper Hospital Mumbai

Introduction: Mumbai is the economic capital of India. According to the 2011 census, 41.84% of the total population of Mumbai city resides in slum areas; thereby highlighting the fact that huge section of the population is concentrated in the slum area of Mumbai making it the area of choice to assess the burden of health problems in the community. Chronic non-communicable diseases (NCDs) are the major cause of morbidity and mortality worldwide especially in developing countries where it has a greater impact on the socio-economic dynamics of the country and the quality of life of its people. Hence assessment of the prevalence of chronic non-communicable diseases is essential to plan effective control measures so as to improve the health status of the population.

Material and Methods: This is a retrospective cross-sectional community-level study based on family assessment survey records filled by undergraduate medical students as a part of their curriculum. The survey was conducted over the period of 3 years from 2015 to 2018 on 300 families residing in 3 slums in the field practice area of tertiary care hospital in Mumbai. The data was analyzed using Microsoft Excel.

Results: The total population was 1533, 720 were female and 813 were male. Out of these 8.023% were under-5, 14.35% were school-age children and 17.15% population were adolescents. 6.84% of the total population were above the age of 60. The literacy rate was 85.85 % and 74.86% for males and females respectively. About 70% and 16.66% of families belonged to socio-economic status upper-lower (class IV) and lower-middle (class III) according to modified Kuppuswami classification. Only 5% of the population used sanitary methods for solid waste disposal. 66.66% of families were using toilets for excreta disposal, of which 91.6% used a common public toilet, while only 8.4% of the households had their own self-contained toilet. 417out of 1533 individuals were known cases of chronic noncommunicable diseases and were on treatment for the same, thus prevalence of chronic non-communicable disease was 27.20%. There is significant association between age & prevalence of chronic non-communicable disease (The P-Value is < 0.00001,r score is 0.461, N is 97 .The result is significant at p < 0.05)in the given population. However no significant correlation was found between socioeconomic status (The r score is -0.01809, N is 97 hence p-value is 0. 8610. The result is not significant at p<0.05) & sex (The r score is -0.007, N is 97. The result is not significant at p<0.01.) on the prevalence of the chronic non-communicable disease.

Conclusion: The slum areas are a symbol of poverty which will continue to expand along with economic and industrial development. A growing number of slums constitutes a major challenge to the development of the community. The result emphasizes the need to implement

measures to improve sanitation and hygiene, the physical environment of the dwelling places, along with basic amenities of toilets, proper drainage, sewage & garbage disposal, water supply. There is a huge need to plan the slum dwellings in such a way that adequate ventilation, lighting of the houses can be done. Health care in these slum areas is extremely complex driven by poverty which can be improved by organizing routine camps at these places. There is a huge need to establish mobile health vans and slum clinics at this underprivileged section of society so as to improve the health care coverage which will in turn help in early diagnosis and treatment of chronic non-communicable disease, improve adherence to treatment in already detected cases; thereby reducing morbidity &mortality from NCD in slums. Government should also implement new programs & strengthen the existing programs so as to facilitate the health-seeking behavior of people residing in slums

Keywords: Metropolitan city, Urban slums, Socio-economic, Socio-demographic, Chronic non communicable disease.

Abstract Id	Efi_185_172_NCD
Title	**Breast Cancer Risk Assessment of women aged 30 years and above visiting the Non-communicable disease clinic, South Delhi**
Authors	Dr Sunom M. Lepcha, Dr Anita Khokhar, Vardhman Mahavir Medical College and Safdarjung Hospital,New Delhi

Introduction: Breast cancer is the world's most commonly-diagnosed cancer and is responsible for 15% of all cancer related deaths among women. India alone accounts for 27.7% of all cancer cases among women while Delhi accounts for 28.6%. This study identifies women at risk for breast cancer using the Augustine -Jose model breast cancer risk assessment tool at the non-communicable disease clinic at a Urban Primary Health Centre, South Delhi.

Methods: This interview based cross-sectional descriptive study was conducted among 110 women aged 30 years and above visiting the NCD clinic at UPHC, Fatehpur Beri using the A-J model breast cancer risk assessment tool .The sample size was calculated using prevalence of 50%, 95% confidence interval, 10% error and 10% non-response rate. Data was entered and analyzed using SPSS 21. Descriptive analysis was done.

Results: The mean age of the study participants was 50.5 ±10.8. According to this tool, 2(1.8%) participants were at moderate risk(score >0.5-0.65) of developing breast cancer while 9(8.2%) were in the high risk category(score >0.65).

Conclusion: The tool can be used in primary care settings to calculate the risk of developing breast cancer and thus magnify the screening practices for prompt detection of breast cancer.

Keywords: Breast cancer, Non-communicable disease, Breast cancer risk assessment.

Abstract Id	Efi_159_202_NCD
Title	**Time to Switch to 'Rule of Three-Quarters' from 'Rule of Halves' in Hypertension? A Descriptive Study from Dakshina Kannada, South India**
Authors	Dr Imaad Mohammed Ismail, Yenepoya Medical College, Mangaluru

Introduction: 'Rule of halves' depicts the overall picture of hypertension that prevails in a community. This study was taken up to understand if the traditional 'rule of halves' of hypertension still prevails or is it time to shift to the proposed 'rule of three-quarters'.

The objectives of the study were: to estimate (i) the prevalence of hypertension among adult residents of Madani Nagar rural community in the Dakshina Kannada district of Karnataka state in southern India, (ii) the proportion who are aware of their disease among hypertensive patients, (iii) the proportion who are on treatment among those who are aware of their disease, and (iv) the proportion having adequate blood pressure control among those on treatment.

Methods: This was a cross-sectional study carried out in Madani Nagar, Dakshina Kannada from February to April 2020. Complete enumeration method was followed and all adults aged ≥ 18 years who consented were included in the study. Data collection was done using a pre-validated questionnaire and blood pressure was recorded as per World Health Organization guidelines.

Results: A total of 661 individuals were enrolled in the study. The prevalence of hypertension was 29.2%. Only 55.4% of hypertensive patients were aware that they had the disease, and among them, 96.3% were on treatment. Among those on treatment, 58.3% had adequate control of blood pressure.

Conclusion: The hypertension pattern of the community leans more towards the traditional 'rule of halves' of hypertension and it is still a long way ahead until the proposed 'rule of three-quarters' can be achieved.

Keywords: rule of halves, hypertension, prevalence, aware, treatment, adequate control, rule of three-quarters

Abstract Id	Efi_179_179_NCD
Title	**Identification of factors influencing salt-intake behaviour using Stage of Change model: A qualitative study.**
Authors	Raunaq Nagi, AIIMS Bhopal

Introduction: Dietary salt consumption reduction and restriction remains an active international problem. Daily dietary salt intake in India remains high. We intended to explore the perspective of rural and urban community health workers and patients diagnosed with hypertension into the barriers and facilitators of salt intake.

Methods: We conducted 22 in-depth and key informant interviews and one focus group discussion. We used interpretative phenomenological approach for analysis of verbatim transcribed and translated data. We used the Stages of Change (SOC) model to identify barriers and facilitators encountered at every stage of salt reduction.

Results: The most prominent themes that influence dietary salt intake were lack of or incorrect knowledge, taste-preference and family support. Taste is the prime impediment in reduction of dietary salt, whereas, family support acts as both barrier and facilitator. Patients of hypertension expressed their absolute inability to consume low salt diet which they labelled as "tasteless". Patients contemplating to modify their salt-intake expressed their inability to convince their family members or communicate their low salt dietary requirements. Patients who are prepared to reduce dietary salt lack knowledge regarding the techniques of dietary salt intake reduction. Patients associate reduction in dietary salt and maintenance of reduced dietary salt intake, to family support and cooperation. Additionally, independence of women in terms of cooking identifies gender of the patient an independent facilitator.

Conclusion: We have used stage of change model to identify factors which may influence salt intake behaviour among community-dwelling adults. Interventions aimed to reduce salt should apply health behaviour theories.

Keywords: dietary sodium, qualitative, high blood pressure, behaviour change

Abstract Id	Efi_213_NCD
Title	**"Complementary and alternative medicine (CAM) usage among type 2 diabetes mellitus patients in an urban area of Jodhpur: A cross-sectional study".**
Authors	Dr. Nishant Soni ,Dr. KH Naveen, Dr. Pankaj Bhardwaj, Dr. Prasanna T, Dr. Suman Saurabh , AIIMS JODHPUR

Introduction: Globally, the prevalence of Complementary and alternative medicine (CAM) usage among type 2 diabetes mellitus patients is variable, ranging from 31% to 73%. In India the prevalence was found to be ranging between 29% to 67.7%.

Objectives: To estimate the prevalence and pattern of Complementary and alternative medicine (CAM) usage and to study the factors affecting CAM usage among T2DM patients in an urban field practice area of Jodhpur.

Methods: This was a cross-sectional study among 200 T2DM patients visiting the Urban Health Training Centre (UHTC), Pratapnagar, Jodhpur, Rajasthan. Subjects were selected by convenience sampling. Data was collected by personal interviews after obtaining informed written consent.

Results: In our study 55.5% (N=111) of the diabetics were using CAM. Most preferred CAM were herbal therapy (N=89, 80.2%), yoga (N=22, 19.8%), ayurveda (N=20, 18%) and homeopathy (N=4, 3.6%). Among CAM users 80.2% (N=89) used only one type of CAM treatment modality. Only 16.2% consulted qualified CAM consultant and 8.1% informed the use of CAM to treating clinician. Most common reasons for CAM uses were treating the current illness and for promoting health. On binary logistic regression analysis duration of diabetes mellitus and history of diabetes mellitus in mother was found to be significant predictors of CAM usage.

Conclusion: Majority of the T2DM patients were using CAM but less than one fifth of them consulted a qualified CAM consultant and very few informed their treating clinician about CAM use. Duration of T2DM and history of diabetes in the mother were significant predictors of CAM usage.

Key words: Complementary and alternative medicine (CAM), AYUSH, Diabetes

Abstract Id	Efi_218_NCD
Title	**A Study On Challenges Faced by Cancer Patients in Receiving Health Services During Covid-19 Pandemic in A Tertiary Care Hospital in Jodhpur**
Authors	Prasannajeet Bal, Akhil Dhanesh Goel, AIIMS Jodhpur

Background: Cancer is a large group of illnesses characterised by uncontrolled cell proliferation. It has the ability to spread to other regions of the body and organs, and it is the world's second leading cause of death, with an estimated 9.6 million fatalities per year. On the other hand, COVID-19, is an infectious illness caused by the Coronavirus. When someone with COVID-19 coughs or exhales, small droplets from the nose or mouth might transfer the disease to others. Patients suffered greatly in receiving cancer care during the COVID-19 pandemic and lockdown because of the Coronavirus's high infectivity rate. Unavailability of public transportation and treatment delays also make it more difficult for cancer patients to receive treatment. We wanted to see how difficult it is for a cancer patient to receive care during the COVID-19 pandemic, as well as the positive rate in cancer patients after immunisation. Also it is intended to determine the percentage of cancer patients who have received COVID-19 immunisation and the incidence of Influenza-Like Illness (ILI) in the last one year.

Objectives: To assess the challenges faced by cancer patients in getting care during the COVID-19 pandemic. To assess the positivity rate in cancer patients post-vaccination. To find the percentage of COVID-19 vaccination in the surveyed population of cancer. To find the incidence of Influenza-Like Illness (ILI) among cancer patients in the last one year.

Methodology: A cross-sectional study has done in a tertiary care hospital setting. Study participants are cancer patients attending chemotherapy or radiotherapy session. Sampling is time-bound sampling within a period of 2 months. Patients were surveyed using a semi-structured questionnaire that has already been tested. The patients were asked about the challenges they faced during the pandemic in receiving care for cancer. Only the patients with cancer who approached to Oncology department during the COVID-19 pandemic are included in the study.

Results: In our well-planned healthcare system, despite the overburden of COVID-19, our well-trained doctors and other healthcare providers are able to manage the treatment of various deadly diseases. Out of all fatal diseases, cancer is one of them. In this study, we have observed several aspects, including challenges cancer patients face in getting care during COVID-19. More than 50% of the patients faced transportation problems, whereas more than 70% of the cancer patients got their treatment in daycare. Out of the total patients, only less than 15% faced postponement of surgery; on the other hand, around 50% of the patients faced difficulty to avail (Out Patient Department) OPD facility due to limited OPD intake.

Conclusion: As everybody knows, cancer is a deadly disease and the second-leading cause of death globally, also it needs periodic check-ups and interventions. However, at the time of COVID-19, the healthcare industry was on the edge of collapsing under the weight of COVID-19. Patients with cancer suffer greatly as a result of several constraints, such as the lack of transportation services and the limiting of hospital admissions. Due of the added COVID-19 load, cancer therapy has been delayed in certain situations.

Keywords: COVID-19, Cancer, Vaccination, Influenza-Like Illness

Abstract Id	Efi_47_110_NCD
Title	**Self-care behavior of type 2 Diabetes Mellitus patients at urban field practice area of MR Medical college, Kalaburagi.**
Authors	Roopa R Mendagudali, M R Medical College, Kalaburagi

Introduction: Active participation of the patients in the practice of self-care activities like lifestyle modifications: healthy eating habits, physical exercises, foot care, regular blood sugar monitoring and drug intake has shown better control and prevention of complications. Hence the study was took up to assess Self-care behavior of type 2 Diabetes Mellitus patients in the urban field practice area.

Methods: A cross sectional study was conducted in the urban field practice area of MR Medical college, Kalaburagi, during December 2019- January 2020. Data was collected from a sample of 74 diabetics after obtaining informed consent. Data was collected by personal interviews using diabetes self-management questionnaire (DSMQ). IBM SPSS software version 20.0 was used for data analysis.

Results: Of the total participants, majority (54%) was of the age group 41 – 60 years and women and men patients were equal (50% each) in number. Only 77 % participants took diabetes medication as prescribed and 70 % recorded their blood sugar levels regularly. Avoidance of physical activity was observed in 59.4% patients. Nearly 91.9 % did consistent exercise to accomplish optimal blood sugar stages & 94.6 percent took the dietary advice given by investigator. About 50% of patients have tendency to forget or skip their diabetes medication. Mean score of subscale of healthcare service use was maximum as compared to other subscales.

Conclusions: The practice of Self-care activities like adherence to medication, recording blood sugar levels regularly and avoidance of physical activity was found to be low. As these activities are essential in the management of diabetes more efforts should be made to educate the people on self-care activities and on adoption to lifestyle modifications which is the need of the hour.

Keywords: DSMQ, Diabetes mellitus, Self-Care Activities

Abstract Id	Efi_100_NCD
Title	**A cross sectional study to assess the Modifiable and Non modifiable Risk factors of Hypertension among Medical Students.**
Authors	Dr. Ranjana Tiwari

Introduction: Hypertension or high blood pressure is a chronic medical condition in which the blood pressure in the arteries is elevated, requiring the heart to work harder than normal to circulate blood through the blood vessels.[1,2,3] It has been described as the "silent killer" because initially the disease presents no apparent symptoms, and hence an individual can have hypertension without realizing it.[4,5,6] New BP categories are: 1) normal (<120 systolic and <80 mm Hg diastolic), 2) elevated (120–129 systolic and <80 mm Hg diastolic), 3) stage 1 hypertension (130–139 systolic or 80–89 mm Hg diastolic) and stage 2 hypertension (≥140 systolic or ≥90 mm Hg diastolic)[7].Hypertension can be classified as either primary (essential) or secondary. Over 90% of all cases of hypertension are primary hypertension, with no obvious identifiable cause, although there are recognizable risk factors.[8] The remaining 10% of cases are usually secondary hypertension, and this is hypertension that results from other diseases present in the body such as kidney disease, cardiovascular disease (CVD), coronary heart disease, etc.[9,10] There are several risk factors that have been associated with the condition. These risk factors are also associated with other non-communicable diseases (NCDs) such as diabetes mellitus, cancers, CVD, chronic respiratory disease, asthma, musculo-skeletal disorders, etc. These factors can be categorized into modifiable and non-modifiable risk factors.[11,12,13] The non-modifiable risk factors are attributes or characteristics in the individual that cannot be changed or adjusted, hence they are out of our control and little or nothing can be done to control them; such factors include age, sex, race, family history, genetic composition, etc. On the other hand modifiable risk factors of hypertension are attributes, characteristics, exposures or life style patterns that can be adjusted or changed to prevent the development of the disease. These modifiable risk factors include; obesity, excessive salt intake, inactivity or lack of exercise, high fat diet, tobacco use, alcohol consumption, etc. Hypertension that is sustained elevation of the blood pressure to 140\/90 mmHg is the most common. The prevalence of hypertension varies across regions and countries.

Material and Method-The present study is a cross-sectional study which was carried among the Pre final Year Students (Semester-6) of G.R. Medical College, Gwalior,M.P. A total of 180 students participated in the study for a period of 3 months from April2021 to June2021 by a Pre-Structured, Pre Designed Questionnaire which had been designed digitally in Google form and shared among Pre final year students after taking their consent digitally. They were asked about Modifiable and Non modifiable risk factors of Hypertension and its association with their own B.P., Physical Activity, type and duration of physical activity, food habits, Place of stay, Personal habits and Family history. The Data was collected, entered in Microsoft excel and analysis was performed. The Appropriate statistical tests were applied.

Results-A total of 180 students participated in the study in which 111(61.66%) were Males

& 69(38.34%) were Females .The maximum number of Participants were of the age group of 22(43.88%) years followed by age group of 23 years (29.5%). The blood pressure level of the participants showed 120\/80mmHg to 139\/89mmHg was seen in 33 (18.33%). The family history of hypertension was present in 81(45%) participants and there was significant association which was found among the sex and family history of participants(P<0.0001). There were 31(17.22%) participants were pre obese followed by obese (2.22%).

Conclusion-It can be concluded that the participants should enable health promotion activities of modifiable risk factors of hypertension and should do the preventable aspects for prevention of diseases in their own self. A larger study would enable health promotion activities according to the needs of these age group.

Keywords: Hypertension , Knowledge ,Risk Factors.

THEME: NUTRITION

Abstract Id	Efi_175_185_NUTR
Title	IMPACT OF COVID 19 ON THE NUTRITIONAL STATUS OF THE CHILDREN RESIDING IN THE URBAN SLUMS OF BENGALURU
Authors	Dr Iswarya P, Bangalore Medical College and Research Institute

Introduction: Malnutrition refers to deficiencies, excesses or imbalances in a person's intake of energy and\/or nutrients, it covers both undernutrition and overnutrition. According to Global Malnutrition Report 2020 ,37.9% of children under 5 years are stunted and 20.8% are wasted in India compared to Asia average of 22.7% and 9.4% respectively . With prediction of third wave in about 6-9 months by Sutra model, children are predicted to be affected predominantly. So the present study is intended to assess if the previous two waves had made any impact on nutritional status of the child which was done by assessing the demographic details,risk factors associated.

Objectives: To assess the nutrition status of children (≤ 6 years) residing in the urban slums of Bengaluru.

To assess the possible factors of COVID pandemic resulting in undernutrition status among these children.

Methodology: A Cross-sectional study was conducted among the children belonging to the 9 Anganwadi centres of H Siddaiah road UPHC which covers the urban slums of Bengaluru by purposive sampling method. According to NFHS (National Family Health Survey) -5,the sample size was calculated as 135. Data was collected in a predesigned, self administered questionnaire administered after obtaining consent and anthropometric measurements were obtained and assessed using WHO growth charts. The data collected was analyzed statistically using descriptive statistics by using SPSS software (version 20.0).

Results: Out of the 135 participants, majority were females (40 ,16%), mean age of the study population (SD) 3.45 years. Wasting was significantly present among the 2-3 years age group ($\chi 2=13.037$ P=0.011). Majority of the participants were moderately undernourished 31 (22.5%)

Conclusion: Following lockdown many members faced a decrease in their monthly income Improvement as well as deterioration was seen among the children, however the number of children's nutrition status worsening were more and were statistically significant.

Keywords: Nutrition, Children, COVID-19

Abstract Id	Efi_65_90_NUTR
Title	**Identifying signs and symptoms of patients with Vitamin B 12 deficiency and designing diagnostic algorithm of Vitamin B 12 deficiency- a case control study.**
Authors	Dr. Latika Chugh, . Dr. Alpesh B Makwana, District Quality Medical Officer, Kheda district panchayat, Nadiad,. Dr. Sangita V Patel, Medical College Baroda, Vadodara

Introduction: Vitamin B12 deficiency is one of the most common dietary deficiency which affects health adversely. Malabsorption and inadequate intake lead to hematological and neurological disorders.

Main objective of the study is to determine the symptoms and formulate a diagnostic algorithm of Vitamin B12 deficiency.

Methods: A case control study was conducted at tertiary care hospital between November 2017 to June 2018. Patients visiting hospital with symptoms suggestive of B12 deficiency and serum B12 level below 200 pg\/ml were labelled as cases. Controls were matched for age to minimize confounding. 160 cases and 160 controls were selected. Chi square test was applied for each symptom between cases and control, of which 10 were significant (p0.05) for fatigue, sore swollen tongue, pale skin, insomnia, breathlessness and memory loss.

Conclusion: Presence of knuckle pigmentation, poor memory, tingling-numbness and dizziness can be defined as hallmarks of Vitamin B12 deficiency. These signs and symptoms alone can predict Vitamin B12 deficiency and should be used as a criteria to start Vitamin B12 supplementation.

KEY WORDS- Vitamin B12 deficiency, diagnostic algorithm, tertiary hospital, India

Abstract Id	Efi_73_80_NUTR
Title	**Nutritional status of under-five children and its associated factors: A community based cross-sectional study**
Authors	Dr. Manisha Sarkar, Bankura Sammilani Medical College, West Bengal

Background: Malnutrition among children is one of the biggest problems faced by developing countries like India. Overweight or obesity and undernutrition are the dual challenge faced by our country.

Objective: To assess the nutritional status and its associated factors among the under five children based on the WHO Child Growth Standards in the study area

Methods: A community based cross-sectional, analytical, study was conducted among 150 under-five children in the urban field practice area of a tertiary care centre in West Bengal for a period of 3 months from January to March 2019 by complete enumeration method. Data were collected using semi-structured questionnaire, non-stretchable measuring tape, weighing machine, Mother and Child Protection card etc. Data were analyzed using SPSS (version 16) initially through bivariate analysis using chi-square test and later logistic regression was used to determine the actual predictor(s).

Results: Mean age of the study population was 25.32 ± 17.16 months. The prevalence of underweight, severely underweight, stunted, and severely stunted, at risk of overweight and overweight were as 13.3%, 8.7%, 15.3%, 12%, 12.7%, and 3.3 % respectively. Nuclear family, female, history of Acute respiratory tract infection (ARI) and diarrhoea during last one year were associated with undernutrition in chi-square test. Through Logistic regression model, it was found that history of ARI and diarrhoea in last one year were predictors of undernutrition.

Conclusion: Both undernutrition and overweight or obesity among children should be a focus for prevention of malnutrition.

Keywords: Malnutrition, Overweight, Obesity, Stunting, Undernutrition