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## **EDITORIAL**

# Capacity Building Efforts on Viral Hepatitis under National Viral Hepatitis Control Program

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## ABSTRACT

The "National Viral Hepatitis Control Program" (NVHCP) was launched in India as a stepping stone towards combating viral hepatitis as a public health threat. The program was launched on the occasion of world hepatitis day 2018 with the target of eliminating viral hepatitis by the year 2030. The program has provisions for developing infrastructure, nominating human resources, and building their capacity for successful service delivery. A time-bound cascade of training approaches is being adopted by the program to orient the designated healthcare workers on the standard operating protocols. The training is being conducted following a top-to-bottom approach, where master trainers are first identified and sensitized at the national level under the mentorship of the National Center for Disease Control (NCDC), the master trainers then sensitize the designated healthcare workers at the state level in collaboration with the state National Health Mission (NHM). Here is an outline of the Capacity-building efforts on Viral Hepatitis under NVHCP in Uttarakhand State.

#### **KEYWORDS**

National Viral Hepatitis Control Program; Capacity Building; Tele-mentoring; ECHO-India

## **INTRODUCTION**

The Sustainable Development Goal (SDG) 17 incorporates targets for "capacity-building", in the form of increasing technology and innovation in resource-scarce countries along with improving data collection and monitoring for the accomplishment of transformation from within. (1) The United Nations defines Capacity-building as "the process of

developing and strengthening the skills, instincts, abilities, processes, and resources that organizations and communities need to survive, adapt, and thrive in a fast-changing world." (2) "Capacity-building" constitutes actions to improve health at multiple levels, it not only includes imparting knowledge and skills among practitioners but also encourages the development of purposeful cohesive

partnerships for promoting health and well-being in defined communities. (3) A capacity-building session is a purposeful engagement of providers and seekers to attain knowledge and skills to ultimately achieve a particular goal. (4) A Capacity-building session can be conducted in the form of facilitated training, consultations, technical assistance, web-based learning, and blended online and offline learning. (5, 6)

One of the leading organizations contributing to the field of capacity building is The "Extension for Community Healthcare Outcomes" (ECHO), a non-profit trust. ECHO is a tele-mentoring platform that was developed with a vision to provide better access to care for underserved populations. ECHO follows a "hub and spoke" model, where the hub is in the form of experts at an apex center, and spokes are non-specialist healthcare providers at the periphery. The ECHO model which was conceptualized with regards to management of hepatitis C in the United States (US) has now expanded to include many other health-related conditions and is well-accepted internationally. In the ECHO model of learning experts at the hub connect to numerous spokes via simultaneous videoconferencing links and facilitate case-based learning. This model was established to be productive for training Primary Care Physicians concerning managing hepatitis C cases. ECHO India has been operational in India since 2008 and is working in collaboration with the "Ministry of Health and Family Welfare" (MoHFW), the state "National Health Mission" (NHMs), and various other healthcare institutions. ECHO has launched more than 250 hubs and put in place around 800 "capacity-building" programs that include over30 disease areas with close to a million attendees. (7,8,9,10,11)

India launched the "National Viral Hepatitis Control Program (NVHCP)" in the year 2018 with the ambitious goal of eliminating viral hepatitis as a public health threat by the year 2030. For the program to be opportunely implemented Capacity building of the designated personnel on the Standard Treatment Protocols (SOPs) was vital. The

NVHCP has adopted a time-bound cascade training approach where the training material and SOPs were developed by the experts, and master trainers were nominated and upskilled on the SOPs at the national level, master trainers then had to conduct state-level training for healthcare workers and enable them to conduct district level capacity building sessions, thus providing standard viral hepatitis-related services till the primary care level. The program has the provision of annual capacity building for all cadres of health care workers including physicians, and paramedical staff in the form of nurses, laboratory technicians, data entry operators, pharmacists. (12)

The state of Uttarakhand began to put in efforts for the operationalization of NVHCP soon after the program launch at the national level. As per the program's operational guidelines, the state had identified three Model Treatment Centres (MTCs), namely, "All India Institute of Medical Sciences" (AIIMS) Rishikesh, "Government Medical College", Dehradun, and "Government Medical College" Haldwani, Nainital along with thirteen treatment centers, one in each district. (13) The first in-person annual capacity-building session for physicians and laboratory technicians was conducted in the year 2019 at AIIMS Rishikesh, where both the master trainers and participants had congregated for an induction training on NVHCP. In the threeday workshop for physicians, a wide range of viral hepatitis-related topics were discussed including basic sciences in the form of Pathophysiology, Epidemiology, Anatomy, preventive, screening, diagnostic, treatment, and follow-up protocols as per the program operational guidelines, the session was also augmented with case-based discussions. The five-day-long capacity-building workshop for laboratory technicians was focused virology, pathogenesis, and applied aspects concerning NVHCP such as enzyme-linked immunoassay (ELISA), Chemiluminescent **Immunoassay** (CLIA), External assessment, sample management, equipment management, inventory management, biomedical management, spill waste

management, and post-exposure prophylaxis. The cohort of physicians and laboratory technicians had further enrolled in ECHObased tele-mentoring sessions scheduled every fortnight for six months. In this follow-up capacity-building initiative, experts at AIIMS Rishikesh constituted the hub, and the physicians and laboratory technicians at various peripheral health centers were the spokes, there was a series of follow-up lectures and case discussions to consolidate the learning of the induction session. The followup session for lab technicians concluded with a post-test assessment where the participants performed satisfactorily. The subsequent annual training for the year 2020 was conducted online as gatherings prohibited given the COVID protocols. This workshop was conducted by the State Viral Hepatitis Management Unit (SVHMU) in collaboration with AIIMS Rishikesh and ECHO India where ECHO provided a seamless online training platform, the master trainers at the MTCs were the hub, and healthcare workers including physicians and laboratory technicians from the peripheral health centers were the spokes, the online platform provided an opportunity to impart virtual training on viral hepatitis despite ongoing pandemic. With the support of the SVHMU, AIIMS Rishikesh and master trainers in the state of Uttarakhand are continuously putting in efforts to develop skills among the designated health care personnel for viral hepatitis management, the in-person capacity building session was offered only to physicians and laboratory technicians in the initial phase of the program, however, in the year 2022, the training session was organized for pharmacists as well. The ECHO-based hub and spoke follow-up training was also expanded to include physicians and nursing officers. (14)

## **CONCLUSION**

A successful program implementation relies on a multitude of factors, the skills of the designated personnel being one of them. NVHCP has acknowledged this fact and imparted the responsibility of capacity building of the healthcare workers to the SVHMUs and master trainers under the guidance of the National Center for Disease Control (NCDC) as the nodal agency. In Uttarakhand, the SVHMU is productively collaborating with the master trainers at AIIMS Rishikesh and has conducted a series of physical trainings for a wide range of HCWs. in addition to offline training, the hub at AIIMS Rishikesh along with ECHO India has mentored primary care providers to manage viral hepatitis through cases regular handholding sessions employing videoconferencing. Such collaborative capacity-building initiatives aid in developing skills and delivering services to a larger population

#### **REFERENCES**

- UN General Assembly, Transforming our world: the 2030 Agenda for Sustainable Development, 21 October 2015, A/RES/70/1, Available at: <a href="https://www.refworld.org/docid/57b6e3e44.html">https://www.refworld.org/docid/57b6e3e44.html</a> [Accessed 20 Dec. 23]
- United Nations. United Nations Academic Impact.
  [Online]. Available at:
   https://www.un.org/en/academic-impact/capacity-building#:~:text=Capacity%2Dbuilding%20is%20defined%20as,in%20a%20fast%2Dchanging%20world.

   [Accessed 20 Dec. 23]
- 3. Smith BJ, Tang KC, Nutbeam D. WHO health promotion glossary: new terms. Health promotion international. 2006;21(4):340-5.
- Rod MH. What is health promotion capacity? A relational perspective. Journal of Health Organization and Management. 2015;29(2):170-84.
- Leeman J, Calancie L, Kegler MC, Escoffery CT, Herrmann AK, Thatcher E, et al. Developing theory to guide building practitioners' capacity to implement evidence-based interventions. Health Education & Behavior. 2017;44(1):59-69.
- Sharma D, Sood AK, Darius PS, Gundabattini E, Darius Gnanaraj S, Joseph Jeyapaul A. A Study on the Online-Offline and Blended Learning Methods. Journal of The Institution of Engineers (India): Series B. 2022;103(4):1373-82.
- Arora S, Thornton K, Jenkusky SM, Parish B, Scaletti JV. Project ECHO: linking university specialists with rural and prison-based clinicians to improve care for people with chronic hepatitis C in New Mexico. Public health reports. 2007;122(2\_suppl):74-7.
- Arora S, Thornton K, Murata G, Deming P, Kalishman S, Dion D, et al. Outcomes of treatment for hepatitis C virus infection by primary care providers. New England Journal of Medicine. 2011;364(23):2199-207.
- Zhou C, Crawford A, Serhal E, Kurdyak P, Sockalingam S. The impact of project ECHO on participant and patient outcomes: a systematic review. Academic Medicine. 2016;91(10):1439-61.
- Komaromy M, Duhigg D, Metcalf A, Carlson C, Kalishman S, Hayes L, et al. Project ECHO (Extension

- for Community Healthcare Outcomes): A new model for educating primary care providers about treatment of substance use disorders. Substance abuse. 2016;37(1):20-4.
- 11. ECHO. ECHO India about us [Online]. Available at: https://www.echoindia.in/about . [Accessed 20 Dec. 23]
- 12. National Viral Hepatitis Control Program.
  Operational Guidelines. New Delhi: Ministry of
  Health and Family Welfare; 2018. Available at:
  https://main.mohfw.gov.in/?q=documents/progra
  m-guidelines. [Accessed 20 Dec. 23]
- 13. Official Website of the Department of Medical Health and Family Welfare Government of
- Uttarakhand. National Viral Hepatitis Control Programme (NVHCP) Uttarakhand [Online]. Available at: https://health.uk.gov.in/pages/display/145-national-viral-hepatitis-control-programme-(nvhcp)-uttarakhand. [Accessed 20 Dec. 23]
- Pandey P, Kumar P, Gupta R, Sharma A, Gupta P. Kalita D, et al. Capacity Building Workshops for Physicians and Laboratory Technicians under National Viral Hepatitis Control Programme, Uttarakhand. Journal of Medical Evidence. 2021. 2(3):276-277.