ORIGINAL ARTICLE

Assessment of NPHCE in Selected Health and Wellness Centres in Gurugram, Haryana

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CITATION
Magare A, Chauhan K, Subbiah N, Tiwari VK. Assessment of NPHCE in Selected Health and Wellness Centres in Gurugram, Haryana. Journal of the Epidemiology Foundation of India. 2026;4(1):70-78.
DOI: https://doi.org/10.56450/JEFI.2026.v4i01.008
ARTICLE CYCLE
Received: 31/05/2025; Accepted: 12/02/2026; Published: 31/03/2026
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Abstract

Background: Elderly people, aged 60 years and above, form a vital component of our population. The ageing process is associated with biological variations and situational changes. NPHCE was launched to address healthcare needs of elderly and deliver preventive, promotive, and curative services. Health and Wellness Centres (HWCs) offer comprehensive geriatric care, but factors hinder service utilization. **Objective**: To assess availability, utilization pattern, and factors determining uptake of NPHCE services at HWCs, and ascertain satisfaction amongst geriatric beneficiaries. **Methodology**: A cross-sectional study from November 2023 to October 2024 in 4 Gurugram HWCs. Multistage random sampling selected one HWC per block, and 50 elderly patients (≥60 years) per HWC (total 200) were recruited. **Results**: Female majority (62%), aged 60-70 years (79.5%), with chronic illnesses (hypertension 59.5%, diabetes 29.5%). HWCs had adequate basic infrastructure but complete absence of specialized geriatric devices. Patient satisfaction was highest for confidentiality/privacy (72.5%) and timings (72%), but lowest for medicine availability (52.5% dissatisfied) and diagnostic facilities (42.5% dissatisfied). Waiting time exceeded 10 minutes for registration in 20% and for consultation in 27.5%. **Conclusion**: While HWCs demonstrated satisfactory basic infrastructure, critical gaps in geriatric-specific equipment persist—including complete absence of assistive devices. Accessibility guides patient choices, but medicine and diagnostic deficiencies limit comprehensive care. Satisfaction showed positive provider interactions contrasted against systemic deficiencies.

Keywords

Elderly; Geriatric care; Health and Wellness Centres; NPHCE; Patient satisfaction; Service utilization

Introduction

Elderly or old age refers to individuals approaching or exceeding average human life expectancy. In India, those aged 60 years and older are classified as senior citizens. Declining birth rates and increasing life expectancies are driving a demographic shift toward an aging population, a major concern for policymakers globally over the last twenty years.(1)

India's elderly population is rising swiftly—from 104 million in the 2011 Census to a projected 340 million by 2050—posing challenges to healthcare systems. The ageing

process involves biological changes and situational shifts like retirement, loss of partners, and safety concerns. Geriatric syndromes include frailty, delirium, dementia, falls, and common conditions such as diabetes, hypertension, and depression.(1)

In 2018, India established Health and Wellness Centres (HWCs), shifting from selective to comprehensive primary care, offering preventive, promotive, rehabilitative, and curative services including geriatric care.(3,4) The National Programme for Health Care of the Elderly (NPHCE), launched in 2010, aims to deliver preventive, promotive, and curative services through health assessments, chronic disease management, and referrals.(5) NPHCE fosters healthy aging, reduces pressure on healthcare systems, and raises community awareness.(6) However, elderly individuals often face awareness gaps and obstacles in accessing services.(8) Limited empirical evidence exists on NPHCE implementation at primary care level, especially in semi-urban and rural HWCs. This study, guided by the Donabedian model, assesses structure, process, and outcomes of elderly care services and their utilization patterns.

Objectives:

1. To assess the availability, pattern of utilization and factors determining the uptake of health care services under NPHCE at HWCs.
2. To ascertain the level of satisfaction of elderly people with regard to provision of services.

Material & Methods

Study Design: A cross-sectional, descriptive study

Study Duration: Period of one year from November 2023 to October 2024

Study Setting: Gurugram district of Haryana.

Sampling Method: Multistage random sampling method was used to select HWCs from the four administrative blocks in Gurugram. In the first stage, one HWC was randomly selected from each block using a lottery method. In the second stage, from each selected HWC, 50 elderly beneficiaries were recruited using systematic random sampling, where every kth patient visiting the HWC during the study period was approached until the desired sample size of 200 was achieved.

Study Population: Consisted of elderly male and female of age 60 years and above visiting the HWCs. Inclusion Criteria: 200 elderly people (50 from each HWC), who lived in the study area and had been enrolled in the HWC for more than six months were included in the study.

Exclusion Criteria: Elderly people having mental pathologies, such as terminal disease, psychosis, chronic depression etc. (documented in medical records or those identified by the CHO) were excluded from the study. No standardized screening tool was administered specifically for this study, which is acknowledged as a limitation.

Sample Size Calculation: Calculated using formula $n = Z^2pq/d^2$, where Z=1.96 (95% CI), p=50% (estimated proportion of elderly utilizing services, taken as 50% for maximum sample size), q=50%, d=7% absolute precision. Minimum required sample size was 196, rounded to 200 (50 per HWC)."

Strategy for Data Collection: The data for the study included both primary data collected from the elderly beneficiaries and service providers, as well as secondary data which was collected from the records (both manual and digital) maintained at the HWCs using a checklist that captured indicators on number of elderly patients registered in the preceding six months, frequency of visits per patient, types of services availed, referral patterns, and stock status of essential medicines and consumables. The primary data relating to elderly patients was collected using a pre-tested semi-structured interview schedule. Another semi-structured interview schedule was used to collect information from service providers at the HWCs. The participants were given a brief introduction by the principal investigator and a Participant Information Sheet (PIS) and Participant Informed Consent Form (PICF).

The semi-structured interview schedule was pre-tested on 20 elderly patients (10% of sample size) at a non-selected HWC in the same district. Based on pilot findings, questions were rephrased for better clarity, and response options were expanded for

certain items. Data from the pilot were not included in the final analysis.

Data Collection: Conducted in three distinct **phases**: Phase I (November-December 2023): Facility assessment and service provider interviews; Phase II (January-April 2024): Patient interviews and record review at Sirhol and Dundahera HWCs; Phase III (May-October 2024): Patient interviews and record review at Islampur and Kanhai HWCs. This phasing was necessitated by logistical considerations and to minimize disruption to HWC functioning.

Data Analysis: After proper scrutiny, the collected data was entered into IBM SPSS Version 26 and analysed using descriptive techniques. As per the objectives of the study, frequencies, percentages, means, and standard deviations were calculated for quantitative variables. Results were presented using univariate tables (frequency distributions) and bivariate cross-tabulations where applicable.

Ethical Issues and Informed Consent: The study was approved by the IEC. Written informed consent was obtained from all participants after explaining the study objectives and assuring confidentiality. Participants were informed of their right to withdraw at any time without affecting their access to services.

Results

Analysis of the infrastructural facilities revealed that all the four HWCs, except for Islampur (which was situated in rented premises) were located within a designated government building. All centres had seating arrangement for patients and their attendants, adequate lighting and ventilation, toilet and drinking water facilities. None of them had tactile tiles on the floor for visually impaired patients. In terms of availability of human resources, all centres had one community health officer, one ASHA worker and one safai karamchari each, with varying numbers of other supportive staff. The data presented represents the actual staff present and functioning at the HWCs on the days of data collection, not sanctioned positions. [Table 1]

Table 1: Human Resources at HWCs (actual staff present on data collection days)

Characteristic	Sirhol	Dundahera	Islampur	Kanhai
Community Health Officer	1	1	1	1
ANM/Health Worker Female	1	2	2	1
Health Worker Male	0	1	0	1
ASHA	1	1	1	1
Safai Karamchari	1	1	1	1

Assessment of the availability of medical devices at the HWCs revealed that while all the centres had basic apparatus such as glucometer, sphygmomanometer and thermometer, specialized devices were present only at some centres. Sirhol centre did not have Snellen chart, spirometer, nutrition scales like MNA, cognitive scales like MMSE, home safety checklist. Dundahera centre did not have oxygen support equipment, Snellen chart, spirometer, cognitive scales like MMSE, home safety checklist. Kanhai centre did not have haemoglobinometer, oxygen support equipment and nutrition scales. Islampur centre did not have cognitive scales. None of the four HWCs had hand-held dynamometer, hand-held audioscope, affective scales like GDS, functional scales like Katz, tactile tiles, or any assistive medical devices for aid in walking, hearing or vision.

All centres had services for comprehensive geriatric assessment; preventive health check-ups; health promotion and education activities; screening for non-communicable diseases; geriatric care and rehabilitation services; palliative care for pain management; emotional and psychological support; and referral services. All had community engagement in form of social mobilization and support networks being held for the elderly people. None of the centres had any assistive medical devices for aid in walking, hearing or vision.

The patterns of utilization of services by the elderly patients at the HWCs were assessed. The number of patients registered in the last

six months varied at these centres. There were seasonal, urban-rural and socio-economic variation in the footfall of patients at all centres, but no variation based on either age or sex of patients. There were various modes of service provision, depending on the HWC. [Table 2]

The socio-demographic profile of elderly beneficiaries depicted a wide variation in the characteristics. [Table 3]

Table 2: Utilization patterns of services at HWCs

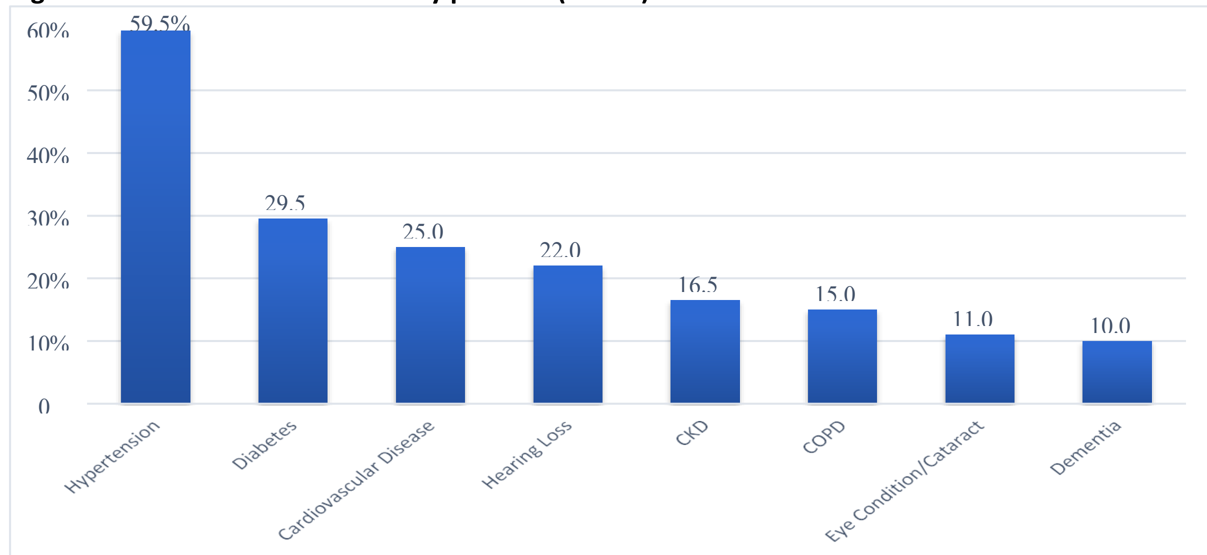
Characteristic	Sirhol	Dundahera	Islampur	Kanhai
Patient Load (in last 6 months)				
Number of registrations	254	301	265	289
Number of visits by each patient	6	8	6	7
Variations in utilization of services				
Seasonal	Yes	No	No	Yes
Age-based	No	No	No	No
Sex-based	No	No	No	No
Urban-Rural	Yes	Yes	Yes	Yes
Socio-economic status based	Yes	Yes	No	Yes
Mode of service provision				
HWC	Yes	Yes	Yes	Yes
Home-based	Yes	No	No	No
Teleconsultation	No	No	Yes	No

Table 3: Profile of the elderly patients (n=200)

Characteristic	Number	Percentage (%)
Sex		
Males	76	38
Females	124	62
Age		
60-70 years	159	79.5
71-80 years	33	16.5
>80 years	8	4.0
Educational Status		
Illiterate	99	49.5
Primary School	57	28.5
Secondary School	23	11.5
Senior Secondary School	12	6
Graduate or beyond	9	4.5
Occupational Status		
Unemployed	178	89
Employed	22	11
Marital Status		
Married	117	58.5
Widowed	73	36.5
Divorced/ Separated	10	5

There were multiple chronic illnesses ailing the elderly. [Figure 1] Gender-wise stratified analysis of chronic illnesses revealed that hypertension was more prevalent among females (64.5%, n=80) compared to males (51.3%, n=39), while COPD was more common among males (21.1%, n=16) than females (11.3%, n=14). These differences were not statistically significant ($p>0.05$).

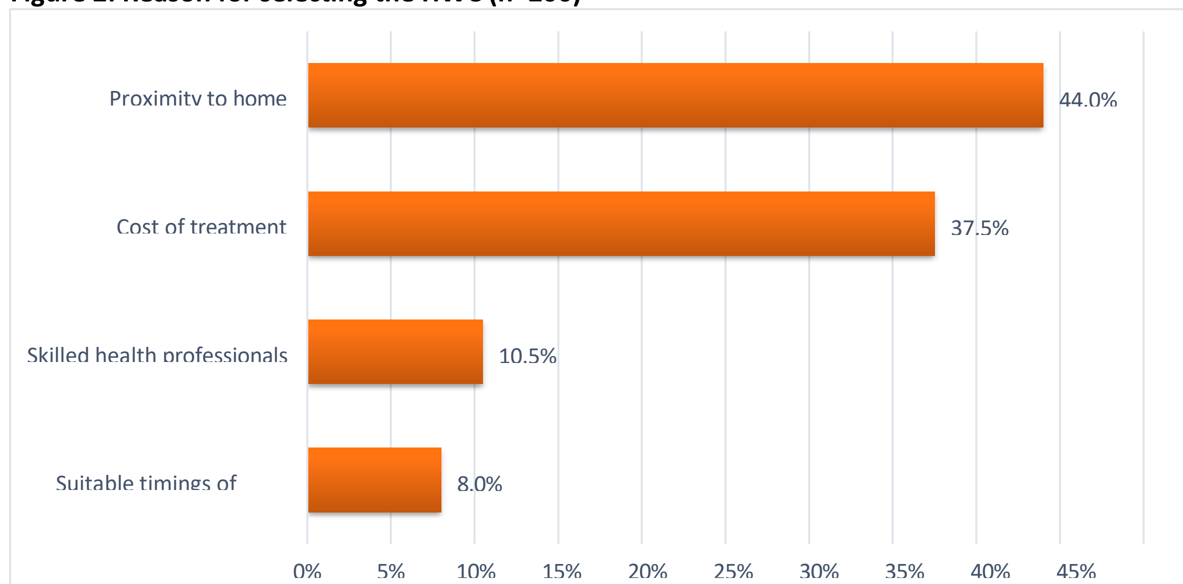
Figure 1: Chronic illnesses in elderly patients (n=200) *



**multiple responses present, hence sum may not be 200*

The reasons behind selecting the particular HWC by the elderly patients were ascertained, which ranged from proximity to their home (44%) to suitable timings of the HWCs (8%). [Figure 2]

Figure 2: Reason for selecting the HWC (n=200)



An assessment was done to determine the various factors which affect the uptake of services of HWCs by the aged patients. [Table 4]

Table 4: HWC services uptake by elderly patients (n=200)

Characteristic	Number	Percent age (%)
Distance of HWC from home		
<2 km	78	39
2-5 km	99	49.5
>5 km	23	11.5
Mode of Transportation to reach HWC		
By Foot	62	31
Public Transport	67	33.5
Personal Vehicle	71	35.5
Other healthcare facility nearby		

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Characteristic	Number	Percentage (%)
Private facility	96	48
Government facility	29	14.5
No facility	75	37.5
Problem in locating the HWC		
Yes	28	14
No	172	86
Awareness about the HWC		
Yes	109	54.5
No	91	45.5
Type of Treatment Sought		
Routine follow-up	90	45
Joint Pain/Weakness	60	30
Acute illness	50	25
Source of Awareness		
ASHA/ANM	110	55
Neighbours	67	33.5
Family members	23	11.5

The waiting time for registration ranged from less than 5 minutes (28%) to 5-10 minutes (52%) to more than 10 minutes (20%), while the waiting time for consultation ranged from up to 10 minutes (35.5%) to 11-20 minutes (37%) to more than 20 minutes (27.5%). [Table 5]

Table 5: Waiting Time at HWCs (n=200)

Characteristic	Number	Percentage (%)
Waiting Time for Registration		
<5 minutes	56	28
5-10 minutes	104	52
>10 minutes	40	20
Waiting Time for Consultation		
Up to 10 minutes	71	35.5
11-20 minutes	74	37
>20 minutes	55	27.5

An analysis of the degree of satisfaction amongst beneficiaries was done, which showed varying levels of satisfaction for different parameters. [Table 6]

Table 6: Degree of Satisfaction (n=200)

Criteria	Not satisfied	Somewhat satisfied	Highly satisfied
Behaviour of Staff			
Listens and understands	38% (76)	39.5% (79)	22.5% (45)
Informs and explains	13% (26)	24% (48)	63% (126)
Confidentiality/Privacy	10% (20)	17.5% (35)	72.5% (145)
Overall interaction	21.5% (43)	22% (44)	56.5% (113)
Accessibility			
Distance from home	22% (44)	25.5% (51)	52.5% (105)
Timings of HWC	13.5% (27)	14.5% (29)	72% (144)
Time Taken			
Waiting Time	35% (70)	39% (78)	26% (52)
Consultation Time	41% (82)	35.5% (71)	23.5% (47)
Services			
Drugs availability	52.5% (105)	27% (54)	20.5% (41)
Diagnostic facility	42.5% (85)	37.5% (75)	20% (40)
Referral services	39% (78)	40% (80)	21% (42)
Treatment			
Relief of symptoms	20% (40)	19% (38)	61% (122)
Health information provision	36.5% (73)	40.5% (81)	23% (46)
Overall satisfaction	21% (42)	46.5% (93)	32.5% (65)

Qualitative analysis of free-text comments recorded during interviews revealed three predominant reasons for dissatisfaction with medicine availability: (1) frequent stock-outs of commonly prescribed medications—particularly antihypertensives and oral hypoglycemics, (2) incomplete courses being dispensed requiring patients to purchase balance from private pharmacies, and (3) inconsistent supply of generic medicines. Regarding diagnostic facilities, patients expressed frustration with non-functional equipment (particularly biochemistry analyzers and haemoglobinometers), long

waiting times for test results, and need for repeated visits due to equipment downtime.

Discussion

In most of the HWCs, facilities such as seating, lighting, ventilation, and sanitation were adequately provided, although the absence of tactile tiles for visually impaired patients indicates a gap in accessibility. All were equipped with essential medical devices such as glucometers and sphygmomanometers. However, a lack of specialized devices like assistive devices (e.g., hearing aids) and specialized scales (e.g., cognitive assessment tools) were evident, which limits the comprehensive assessment and management of elderly patients' health needs. Abhishek et al. (2024) in a study done at HWCs in Chattisgarh found that the services of HWCs matched well with people's needs of curative primary care.(9)

For human resources, each HWC was staffed with essential personnel, including Community Health Officers and ASHA workers, with some variability in the availability of female and male health workers. All the HWCs offered a variety of services, including comprehensive geriatric assessments, preventive health check-ups, and palliative care.

Patient registration numbers indicate a consistent utilization of services, with each elderly patient visiting the centres multiple times within six months. However, variations in patient footfall based on urban-rural and socio-economic factors suggest that accessibility and awareness of services may differ across demographics. A study by Roopani et al. (2023) found that the likelihood of utilizing public health facilities increased with age for OPD and decreased with age for IPD. Healthcare service uptake was higher in the elderly with health insurance in a public health facility.(10)

The study found that the majority of the elderly patients seeking treatment at the HWCs were female (62%) and between 60 to 70 years of age (79.5%). A national-level survey by the Ministry of Statistics and Programme Implementation (2016) on the elderly population in India found that the proportion of elderly females was higher than males, consistent with the findings of this study, attributable to the higher life expectancy of females compared to males in the country.(11)

According to this study, most of the patients were married, unemployed, with low literacy rates and underlying chronic illnesses like hypertension, diabetes and cardiovascular disease. These findings align with previous research indicating higher rates of chronic disease and healthcare dependence in elderly populations, especially among women.

The study found that the primary reasons for selecting the HWCs were proximity to home and low cost of treatment, showing that accessibility played a significant role in choosing HWCs. The distance from home to the HWCs mostly ranged from less than 2 km to 2-5 km, and most patients used public transport or personal vehicles to reach the centres. Majority of visits were for routine follow-ups and rest for acute illness or other conditions.

Community health workers primarily drove awareness about services, with the majority of the patients learning about the HWCs from ASHA/ANM workers and overall limited awareness about available services.

For the degree of satisfaction among elderly patients, majority of them were highly satisfied with the distance from home, timings of the HWCs, overall interaction with the CHOs and confidentiality/privacy. They were less satisfied with the waiting time for registration and consultation, as well as the availability of medicines and diagnostic facilities. In a study by Singh et al. (2022), the participants expressed less waiting time, cashless facility for visits, availability of an accompanying person, behavior of staffs work as facilitators for utilization of services. The authors concluded that a shift from facility to community-based approach may be considered and efforts may be made to create elderly friendly health facilities.(12)

The study also explored the elderly patients' perception of the services provided by the CHOs and other staff at the HWCs. Overall, they had a positive perception of the CHO's and other staff's behaviour. Krishnamurthy et al. (2023) found that 82% of elderly patients were satisfied with clinic hours and privacy

maintained during examinations, but only 41% were satisfied with waiting time, closely mirroring our findings. (13)

CONCLUSION

The study found that in terms of service availability, HWCs demonstrated satisfactory performance in basic infrastructure parameters such as seating, lighting, ventilation, and sanitation. However, there were critical gaps in geriatric-specific infrastructure and equipment. All four HWCs lacked tactile tiles for visually impaired patients, assistive devices for mobility/hearing/vision, and specialized geriatric assessment tools including MNA, MMSE, and GDS scales. This dichotomy between general infrastructure adequacy and specialized geriatric facility deficiency represents a key finding of this study. The complete absence of assistive devices and specialized geriatric assessment tools represents a significant missed opportunity for holistic aging.

The socio-demographic analysis revealed that the majority of elderly patients utilizing HWC services were female, aged 60-70 years, and suffering from chronic illnesses such as hypertension and diabetes. However, the low literacy rates and high levels of unemployment among the elderly underscore the challenges in accessing healthcare information and financial resources, which can impact their overall health outcomes.

The patterns of utilization revealed that most patients relied on physical consultations, with innovative service delivery models such as teleconsultation and home-based care being underutilized. It also demonstrated that accessibility and affordability were the primary factors influencing the choice of HWCs. Community health workers played a significant role in raising awareness about available services but 45.5% of patients remained unaware of available services, indicating the need for targeted outreach programmes to enhance service utilization.

Patient satisfaction levels painted a mixed picture. While many elderly beneficiaries appreciated the accessibility and positive interactions with healthcare providers, dissatisfaction with waiting times (20% waited >10 mins for registration; 27.5% waited >20 mins for consultation), medicine availability (52.5% dissatisfied), and diagnostic facilities (42.5% dissatisfied) emerged as significant concerns. Qualitative insights confirmed that medicine stock-outs, incomplete dispensing, and non-functional diagnostic equipment were primary drivers of dissatisfaction. Beneficiary perceptions of the staff and services were largely positive, with many patients expressing satisfaction with the behaviour and communication of CHOs and support staff. Effective communication and adequate time spent during consultations were critical in fostering trust and confidence in the services provided.

None of the HWCs had a formal feedback mechanism to track referred patients or receive discharge summaries from higher facilities. This lack of a bidirectional referral loop—where patients are referred out but no information flows back—represents a technical flaw in NPHCE implementation. Without such feedback, HWCs cannot ensure continuity of care, monitor outcomes, or learn from specialist management to improve future care.

This study concludes that while the programme has made commendable strides in improving accessibility and affordability, addressing gaps in geriatric-specific infrastructure, medicine supply chains, diagnostic services, and waiting time reduction is crucial for its long-term success.

RECOMMENDATION

Based on the specific findings of this study, the following actionable recommendations are proposed:

Waiting Time Reduction: Implement biometric-based registration systems and expand operational hours to include evening clinics and hire additional support staff for peak hours.

Medicine Availability: Establish a dedicated geriatric medicine kit at each HWC containing 15 essential drugs most commonly prescribed to elderly patients (including amlodipine, metformin, glimepiride, atenolol, salbutamol,

and paracetamol) with automated inventory alerts to prevent stock-outs.

Diagnostic Services: Ensure functionality of all point-of-care diagnostic devices through daily calibration checks and monthly maintenance contracts. Designate a trained technician for each HWC to operate and maintain equipment.

Geriatric-Specific Equipment: Procure and provide training on specialized geriatric assessment tools including MNA, MMSE, and GDS for all HWCs. Install tactile tiles and ramps, and procure assistive devices for elderly with disabilities.

Awareness Generation: Develop targeted IEC materials specifically designed for elderly with low literacy, using pictograms, large fonts, and local language (Hindi). Conduct monthly community-based awareness camps in collaboration with ASHA workers

Telemedicine Expansion: Scale up teleconsultation services, currently available only at Islampur, to all HWCs to provide convenient access for elderly patients with mobility limitations and those residing in remote locations.

Monitoring and Feedback: Establish a robust monitoring and evaluation framework with quarterly patient satisfaction surveys and monthly review meetings. Implement a patient feedback mechanism (suggestion boxes and digital feedback kiosks) with monthly analysis and action taken reporting.

Limitation of the Study

The exclusion of elderly individuals with documented mental pathologies (psychosis, severe dementia) and terminal illness introduces a potential bias, as palliative care and dementia management are core pillars of the NPHCE mandate. Consequently, our findings on service utilization and satisfaction may not fully represent the experiences of this vulnerable subgroup. Future studies should employ adapted methodologies to include these populations.

Authors Contribution

All authors have contributed equally.

Financial Support and Sponsorship

Nil

Conflict of Interest

There are no conflicts of interest.

Declaration Of Generative AI And AI Assisted Technologies In The Writing Process

The authors haven't used any generative AI/AI assisted technologies in the writing process.

References

1. ageing-and-health [Internet]. [cited 2025 May 2]. Available from: https://www.who.int/news-room/fact-sheets/detail/ageing-and-health
2. Elderly in India 2021. [cited 2025 May 2]. Available from: https://mospi.gov.in/sites/default/files/publication_reports/Elderly%20in%20India%202021.pdf
3. HWCs [Internet]. [cited 2025 May 1]. Available from: https://aam.mohfw.gov.in/home/aboutus
4. Ved R, Gupta G, Singh S. India's health and wellness centres: realizing universal health coverage through comprehensive primary health care. WHO South-East Asia J Public Health. 2019;8(1):18.
5. national-programme-for-the-health-care-of-the-elderly.php [Internet]. [cited 2025 May 1]. Available from: https://dghs.mohfw.gov.in/national-programme-for-the-health-care-of-the-elderly.php
6. Vaishnav LM, Joshi SH, Joshi AU, Mehendale AM. The National Programme for Health Care of the Elderly: A Review of its Achievements and Challenges in India. Ann Geriatr Med Res. 2022;26(3):183–95.
7. Joshi NK, Joshi V, Bajaj K. Strengths, Weaknesses, Opportunities, and Threats Analysis of the National Program for Health Care of the Elderly. J Indian Acad Geriatr. 2023 Jan;19(1):54–60.
8. Khan HTA, Addo KM, Findlay H. Public Health Challenges and Responses to the Growing Ageing Populations. Public Health Chall. 2024;3(3):e213.
9. Abhishek S, Garg S, Keshri VR. How useful do communities find the health and wellness centres? A qualitative assessment of India's new policy for primary health care. BMC Prim Care. 2024;25(1):91.
10. Roopani, Dumka N, Ahmad T, Hannah E, Kotwal A. Health facility utilization and Healthcare-seeking behaviour of the elderly population in India. J Fam Med Prim Care. 2023 May;12(5):902–16.
11. Elderly in India 2016. [cited 2025 May 1]. Available from: https://www.mospi.gov.in/sites/default/files/publication_reports/ElderlyinIndia_2016.pdf
12. Singh S, Patra S, Khan AM. Health care services: Utilization and perception among elderly in an urban resettlement colony of Delhi. J Fam Med Prim Care. 2022 Apr;11(4):1468–73.
13. Krishnamurthy B, Ramesh N, Joy M, Sudharsanan S. Patient satisfaction with geriatric services at Health and Wellness Centres in Karnataka: A mixed-methods study. J Family Med Prim Care. 2023;12(8):1562-1569.