

Research Article

A Study to Explore the Attitude and the Perception of the Health Care Recipients Towards Health Care Services Provided By the CHO's At Selected Health and Wellness Centers of Krishna Dist. Andhra Pradesh

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ABSTRACT

Introduction: Community Health Officers (CHOs) are a cornerstone of the Ayushman Bharat-Health and Wellness Centres (AB-HWC) initiative, designed to expand access to Comprehensive Primary Health Care (CPHC) across India. Positioned at sub-centres and primary care facilities, CHOs are trained mid-level health providers responsible for delivering promotive, preventive, curative, and rehabilitative services. In rural and underserved regions like Krishna District, Andhra Pradesh, their role is critical in reducing disparities in health service delivery. Understanding the attitudes and perceptions of the community toward CHO-led services is vital for assessing service effectiveness, identifying gaps, and planning targeted improvements. This study aimed to explore the attitudes and perceptions of health care recipients toward CHO services at selected Health and Wellness Centres (HWCs) in Krishna District.

Methodology: A descriptive cross-sectional survey design was adopted to capture a snapshot of current community opinions. A total of 200 health care recipients attending selected HWCs were recruited using convenience sampling. Data were collected using a structured questionnaire consisting of: Socio-demographic details (age, gender, educational status, occupation, distance from health facility, awareness about CHO services). Attitude scale (Likert - based) assessing agreement with CHO roles, responsibilities, approachability, and clinical skills. Perception scale assessing service quality, accessibility, trust, and satisfaction. Statistical analysis involved descriptive statistics (mean, standard deviation, frequency distribution) to assess overall levels, and Chi-square tests to identify associations between socio-demographic variables and attitudes/perceptions. Pearson's correlation coefficient was used to examine the relationship between attitude and perception scores.

Results: Attitude: 48% of respondents agreed and 12% strongly agreed with the effectiveness of CHOs in fulfilling their roles. The mean attitude score (3.66 ± 0.63) suggested a moderately positive orientation toward CHO services. Perception: 42% of participants demonstrated a positive perception, and 14% had a very positive perception toward CHO-led healthcare. The mean perception score (89.5 ± 8.2) reflected a favourable community outlook. Associations: Occupational status and distance from the PHC were significantly associated with attitude ($p < 0.05$), suggesting that employment demands and geographic accessibility influence opinions toward CHOs. Awareness of CHO services was significantly associated with perception ($p < 0.05$), indicating a direct link between information dissemination and favorable service impressions. A moderate positive correlation ($r = 0.64, p < 0.01$) was found between attitude and perception, meaning that individuals with a more positive attitude toward CHOs consistently held more favorable perceptions of their services. **Conclusion:** Overall, the community demonstrated positive attitudes and perceptions toward CHO services at HWCs in Krishna District, reflecting approval of their role in the Ayushman Bharat initiative. To sustain and enhance these outcomes: The study provides evidence that CHOs are a promising workforce innovation for primary care strengthening in India and should be supported through strategic training, policy reinforcement, and community engagement measures.

Keywords: Attitude, Perception, Health Care Recipients, Health Care Services CHO.

INTRODUCTION

Primary health care is globally recognized as the most equitable, cost-effective and people-centred strategy for achieving universal health

coverage (UHC). UHC emphasizes that all individuals should receive needed promotive, preventive, curative, rehabilitative and palliative services without financial hardship

[1,2]. In India, the National Health Policy 2017 strengthened this vision by recommending comprehensive primary health care through Health and Wellness Centres (HWCs), with greater public investment and prioritization of primary care [3]. In 2018, Ayushman Bharat introduced HWCs, now known as Ayushman Arogya Mandirs, as the foundational platform for delivering comprehensive primary health care closer to the community [4,5].

The HWC model expanded the scope of primary care beyond maternal and child health and communicable diseases to include non-communicable diseases, mental health, palliative and elderly care, oral health, ENT care, basic emergency care, health promotion, free essential medicines and diagnostic services [5,6]. A key feature of this model is the placement of a trained Mid-Level Health Provider or Community Health Officer (CHO) at Sub-Health Centre-level HWCs, supported by ANMs, MPWs and ASHAs [6]. As per recent national reporting, 1,81,873 Ayushman Arogya Mandirs were operationalized in India, with 494.71 crore footfalls and 41.93 crore teleconsultations by November 2025 [7]. Andhra Pradesh has also shown substantial implementation, with 11,871 Ayushman Arogya Mandirs reported in the state [8].

Although infrastructure expansion and service statistics indicate programmatic progress, the success of CHO-led primary care ultimately depends on community acceptance, trust, perceived accessibility, respectful communication, perceived quality and satisfaction. Recent studies have shown encouraging beneficiary responses; for example, a Tamil Nadu study reported that 97.7% of beneficiaries perceived health-care providers as having a positive attitude, while overall treatment satisfaction was 79.3% in rural HWCs and 62.8% in urban HWCs [9]. Therefore, exploring the attitude and perception of health-care recipients towards CHO-provided services in Krishna district is important for understanding the community-level effectiveness of HWCs.

NEED OF THE STUDY

The transformation of Sub-Health Centres and Primary Health Centres into HWCs represents a major health-system reform in India. However, the availability of centres, staff and services alone does not ensure effective utilization. Health-care recipients' attitude and perception influence whether they accept services, follow advice, return for follow-up, comply with

treatment and recommend the facility to others. Positive community perception strengthens trust in public primary health care, while negative perception may result in underutilization, delayed care-seeking or preference for private providers despite availability of free services [5,10].

Evidence from recent studies indicates that HWCs have improved access to primary care and have addressed a sizeable share of rural acute and chronic health needs when staff, medicines, training and teleconsultation linkages are adequate [11]. A qualitative assessment also reported that communities found HWC services useful, especially for common curative primary care needs [10]. However, studies have also identified operational and service-delivery challenges faced by CHOs, including workload, telemedicine-related barriers and the need for better system support [12]. These findings show that community-level evaluation remains essential to understand whether services are being experienced as accessible, acceptable, respectful and effective.

The need for the present study is further strengthened by the continued importance of public primary care in reducing financial hardship. Although India's out-of-pocket expenditure declined from 62.6% of total health expenditure in 2014–15 to 39.4% in 2021–22, household spending on health remains a significant concern [13]. Strengthening trust in free, accessible and comprehensive CHO-led services can improve early care-seeking and reduce unnecessary expenditure. Krishna district, Andhra Pradesh, requires local evidence because perceptions may vary according to demographic profile, service exposure, accessibility, communication and facility-level functioning. Therefore, assessing both attitude and perception among 200 health-care recipients at selected HWCs will provide useful empirical evidence for administrators, nursing professionals and public-health planners. The findings may support quality improvement, community participation, CHO training, patient-centred communication and better utilization of comprehensive primary health-care services.

OBJECTIVES OF THE STUDY

The Study Has the Following Objectives:

1. To identify attitude of health care recipients towards the health care services provided by CHO'S

2. To assess the perception of health care recipients towards the health care services provided by CHO'S
3. To find association between the attitude with selected demographic variables of health care recipients towards the health care services provided by CHO'S
4. To find association between the perception with selected demographic variables of health care recipients towards the health care services provided by CHO'S
5. To find the correlation between attitude and perception of health care recipients towards the health care services provided by CHO'S

HYPOTHESES:

The Following Null Hypotheses (H0) Are Taken:

1. There is no significant correlation between attitude and perception of health care recipients towards services provided by the CHO'S at selected health and wellness centers of Krishna dist, AP
2. There is no association between the attitude with selected demographic variables of the health care recipients
3. There is no association between the perception with selected demographic variables of the health care recipients

METHODOLOGY

The explorative survey approach aligns well with the objectives of this study. This study

employs a descriptive cross-sectional research design, which is highly suitable for examining the attitudes, perceptions, and satisfaction levels of healthcare recipients at a specific point in time. The questionnaire comprises:- Likert-scale items to measure perceptions, satisfaction, and attitudes toward CHO services and Closed-ended questions to capture demographic information, accessibility, and perceived quality of care. The total 200 healthcare recipients who have accessed services provided by Community Health Officers (CHOs) at selected Health and Wellness Centres (HWCs) in Krishna district, Andhra Pradesh through convenience sampling technique. The primary method of data collection is Attitude and Perception Scale, which aims to assess the views, opinions, and experiences of healthcare recipients regarding the quality, accessibility, and effectiveness of services provided by CHOs. For the present study, the reliability of the tool was assessed using the test-retest method, which is a well-established approach to evaluating the temporal stability of a measuring instrument. The coefficient obtained was 0.94, which falls well within the range indicating very high reliability. The data collection for this study was conducted systematically over a period of approximately six weeks, from 5th December 2024 to 20th January 2025, ensuring thorough engagement with the target population and meticulous adherence to research protocols. The study was conducted at selected Health and Wellness Centres (HWCs) in Krishna District, Andhra Pradesh.

RESULTS

Table No. 1: Frequency and Percentage of Subjects According to Their Socio-Demographic Variables

Sr. No.	Socio-demographic Variables	Frequency	Percentage
1.	Age		
	a. <30 year	19	9.5%
	b. 31-40 year	31	15.5%
	c. 41-50 year	19	9.5%
	d. 51-60 year	40	20.0%
	e. >60 year	91	45.5%
2.	Gender		
	a. Male	171	85.5%
	b. Female	29	14.5%
3.	Religion		
	a. Hindu	131	65.5%
	b. Muslim	36	18.0%
	c. Christian	23	11.5%
	d. Other	10	5.0%
4.	Educational status		
	a. No formal education	3	1.5%
	b. Primary education	1	0.5%
	c. Secondary education	102	51.0%

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	d. Higher Secondary education	13	6.5%
	e. Graduate	16	8.0%
	f. Post-graduate	50	25.0%
	g. Any other	15	7.5%
5.	Occupational status		
	a. House wife	34	17.0%
	b. Daily wage workers	8	4.0%
	c. Farmer	11	5.5%
	d. Self-employee	33	16.5%
	e. Private employee	23	11.5%
	f. Government employee	54	27.0%
	g. Any other	37	18.5%
6.	Marital status		
	a. Single	10	5.0%
	b. Widow	23	11.5%
	c. Widower	33	16.5%
	d. Married	71	35.5%
	e. Divorced	48	24.0%
	f. Separated	15	7.5%
7.	Type of family		
	a. Nuclear family	76	38.0%
	b. Joint family	52	26.0%
	c. Extended family	72	36.0%
8.i.	Distance to PHC		
	a. 0–10 kms	75	37.5%
	b. 11–20 kms	125	62.5%
8.ii.	Distance to Sub-centre		
	a. 0–1 kms	135	67.5%
	b. More than 1 kms	65	32.5%
9.	Awareness of CHO at sub-centre		
	a. Yes	108	54.0%
	b. No	92	46.0%
9.	If yes, specify source of information		
	a. Health personnel	39	19.5%
	b. Family members	29	14.5%
	c. Relatives	26	13.0%
	d. Neighbours	26	13.0%
	e. Mass media	51	25.5%
	f. Any other	29	14.5%

The table no. 1 revealed that The majority of participants (45.5%) were above 60 years of age, a substantial majority of respondents were male (85.5%), study population was predominantly Hindu (65.5%), more than half of the participants (51%) had completed secondary education, largest group of participants were government employees (27%), most participants were married

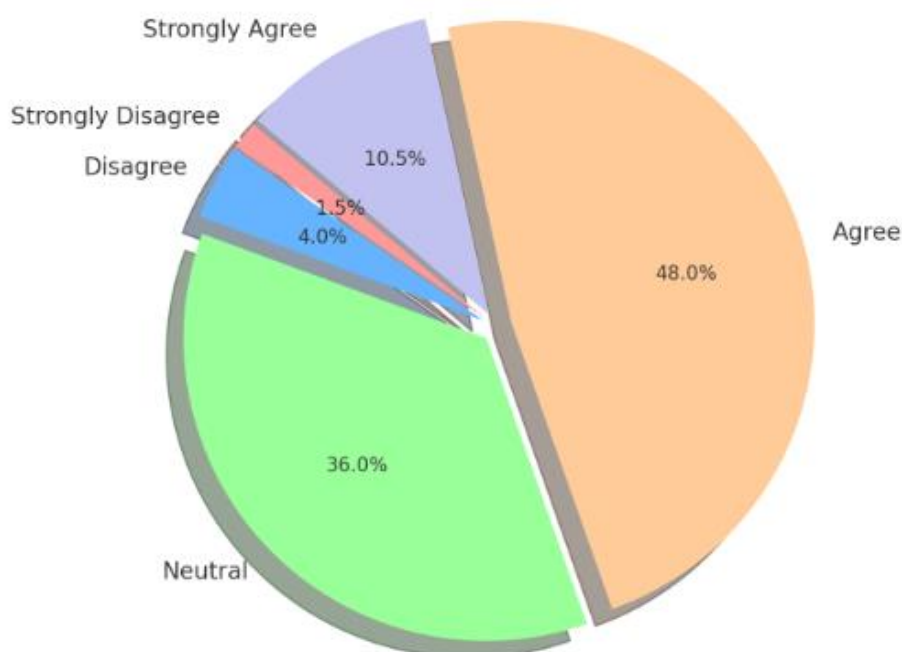
(35.5%), Nuclear families constituted 38% of the sample, majority of participants (62.5%) lived 11–20 km from the Primary Health Centre (PHC). Regarding sub-centres, 67.5% lived within 1 km, approximately 54% of respondents were aware of CHOs and those aware, mass media was the primary source of information (25.5%),

Table No.: 2: Frequency, Percentage, Mean and Standard Deviation on Attitude of Health Care Recipients Towards Health Care Services Provided by the Chos At Selected Health and Wellness Centers

Sr. No.	Score Range	Interpretation	Frequency	Percentage	Mean ± Standard Deviation
1	161–200	Strongly agree	21	10.5%	3.66 ± 0.63
2	121–160	Agree	96	48.0%	

3	81–120	Neutral	72	36.0%	
4	41–80	Disagree	8	4.0%	
5	1–40	Strongly disagree	3	1.5%	

Attitude of Health Care Recipients toward CHO Services (n=200)



The table no. 2 and figure no. 1 show the findings on the attitude of health care recipients toward the health care services provided by CHOs at selected Health and Wellness Centres revealed that:

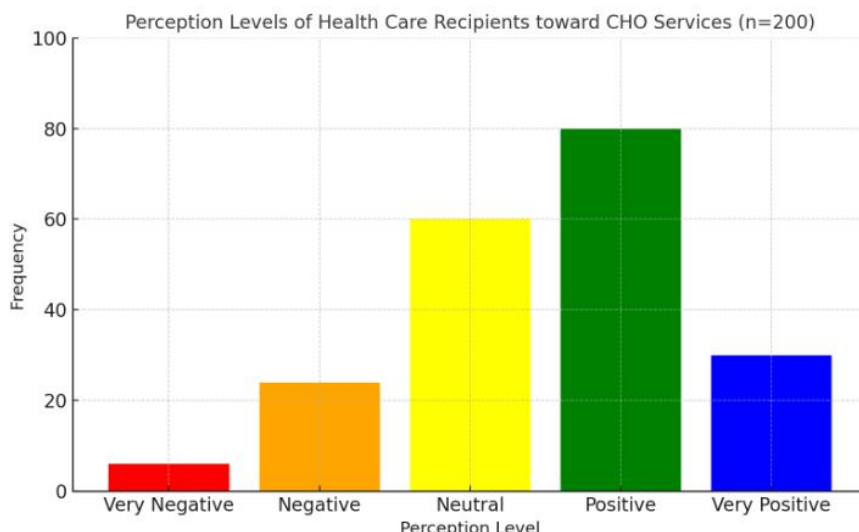
- A majority of participants (48%) agreed with the positive statements regarding CHO services.
- 36% of respondents had a neutral attitude, indicating neither positive nor negative leaning.

- 10.5% strongly agreed, reflecting a highly positive attitude.
- A small proportion of participants disagreed (4%) or strongly disagreed (1.5%) with the statements.

The mean attitude score was 3.66 ± 0.63 , which falls in the "agree" category, indicating that on average, the participants had a favorable attitude toward the CHO services

Table No. 3: Frequency, Percentage, Mean and Standard Deviation of Level of Perception toward CHO Services

Sr. No.	Score Range	Interpretation	Frequency	Percentage	Mean $\pm$ SD
1	106–125	Very Positive Perception	30	15.0%	3.84 ± 0.57
2	86–105	Positive Perception	80	40.0%	
3	66–85	Neutral/Moderate Perception	60	30.0%	
4	46–65	Negative Perception	24	12.0%	
5	25–45	Very Negative Perception	6	3.0%	



The table no. 3 and fig. no. 2 represent analysis of the level of perception of health care recipients toward CHO services at selected Health and Wellness Centres showed the following:

- The highest proportion of participants (40%) had a positive perception of CHO services.
- 30% demonstrated a neutral/moderate perception, suggesting a balanced or mixed opinion.

- 15% expressed a very positive perception, reflecting strong appreciation of the services provided.
- A smaller group of participants reported negative perceptions: 12% had a negative perception, and 3% had a very negative perception.

The mean perception score was 3.84 ± 0.57 , which falls in the "positive perception" category, indicating that on average, the respondents viewed CHO services favorably.

Table no. 4: Association of Perception of Health Care Recipients toward CHO Services with Their Socio-Demographic Variables

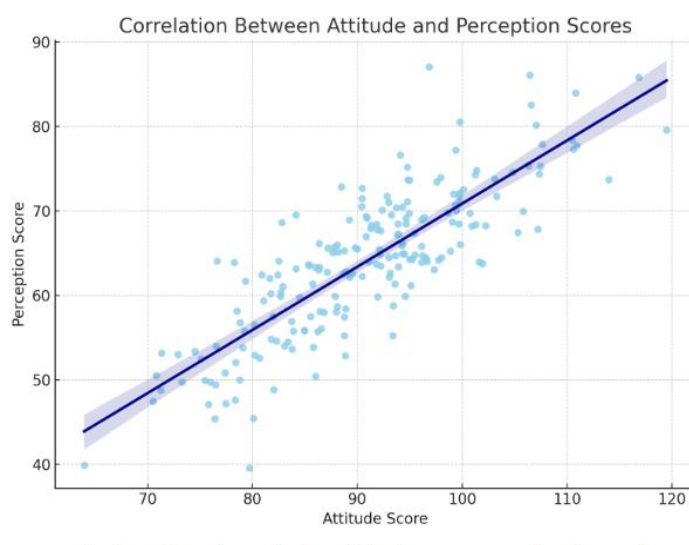
Sr. N o.	Socio-demographic variables	Very Negative	Negative	Neutral	Positive	Very Positive	Chi-square	df	Significance
1	Age	1212	2122	5102520	10203020	57810	$\chi^2=9.42$	df=12	NS
2	Gender	33	34	3030	4040	2423	$\chi^2=1.76$	df=4	NS
3	Religion	1210	2100	302055	403055	151022	$\chi^2=4.89$	df=8	NS
4	Education	1211	3310	10251510	20301515	51085	$\chi^2=7.61$	df=9	NS
5	Occupation	1121	2321	1520105	20252015	71053	$\chi^2=6.84$	df=9	NS
6	Marital Status	131	231	53510	106010	5256	$\chi^2=5.44$	df=6	NS
7	Type of Family	121	231	103010	204015	8126	$\chi^2=4.92$	df=6	NS
8	Distance to PHC	24	33	2020	4030	1510	$\chi^2=3.42$	df=4	NS
9	Awareness of CHO	24	33	4020	5030	306	$\chi^2=8.63$	df=4	S*

The Chi-Square Test Results Indicate the Following:

1. Age: There was no statistically significant association between age and perception of CHO services ($\chi^2 = 9.42$, $df = 12$, $p > 0.05$).
2. Gender: No significant association was found between gender and perception levels ($\chi^2 = 1.76$, $df = 4$, $p > 0.05$).
3. Religion: Religion did not show a significant association with perception ($\chi^2 = 4.89$, $df = 8$, $p > 0.05$).
4. Education: No significant association was found between educational status and perception ($\chi^2 = 7.61$, $df = 9$, $p > 0.05$).
5. Occupation: The occupation of participants was not significantly associated with perception levels ($\chi^2 = 6.84$, $df = 9$, $p > 0.05$).
6. Marital Status: No significant association was observed ($\chi^2 = 5.44$, $df = 6$, $p > 0.05$).
7. Type of Family: Perception levels did not differ significantly by type of family ($\chi^2 = 4.92$, $df = 6$, $p > 0.05$).
8. Distance to PHC: There was no significant association between distance to the Primary Health Centre and perception ($\chi^2 = 3.42$, $df = 4$, $p > 0.05$).
9. Awareness of CHO: A statistically significant association was found between awareness of CHOs and perception levels ($\chi^2 = 8.63$, $df = 4$, $p < 0.05$). Participants who were aware of CHO services tended to have more positive perceptions compared to those who were not aware.

Table No 5: Correlation between Attitude and Perception of Health Care Recipients toward CHO Services

Variables	Mean	SD	r-value (Pearson correlation)	Significance (p-value)	Interpretation
Attitude Score	91.2	10.4			
Perception Score	88.6	11.2	$r = 0.64$	$p < 0.01$	Moderate positive correlation



The table no. 5 and fig. no. 3 represent Pearson correlation coefficient ($r = 0.64$) indicates a moderate positive correlation between attitude and perception scores among health care recipients. This means that individuals who have a more positive attitude toward CHO services also tend to have a more favorable perception of those services. The p-value ($p < 0.01$) confirms that this relationship is statistically significant.

DISCUSSION

The present study revealed that most health care recipients had a favourable attitude towards services provided by Community Health Officers (CHOs), as 48.0% of respondents agreed and 10.5% strongly agreed with the service-related statements. Similarly, perception was largely positive, with 40.0% of respondents reporting positive perception and 15.0% reporting very positive perception. These findings indicate that CHO-led services at Health and Wellness Centres (HWCs) are generally accepted by the community and are

perceived as useful, accessible and supportive for primary health-care needs.

The findings are consistent with the study conducted by Sivakumar et al. in Tamil Nadu, where a majority of beneficiaries attending HWCs reported favourable experiences with health-care providers, and 97.7% perceived that providers had a positive attitude towards them [9]. In the same study, overall treatment satisfaction was higher among rural HWC beneficiaries than urban beneficiaries, supporting the present finding that community-level primary care services can generate positive responses when services are accessible and provider behaviour is acceptable [9]. Similarly, Abhishek et al. reported that communities found HWCs useful for common curative care needs and appreciated the availability of services closer to their homes [10]. This supports the present study, where a considerable proportion of respondents had positive perception towards CHO services.

The present study showed no significant association of perception with most demographic variables, indicating that CHO services were perceived similarly across different socio-demographic groups. However, awareness of CHO at the sub-centre was significantly associated with perception. This finding is supported by Lahariya, who emphasized that community awareness and trust are essential for effective utilization of HWC services [14]. The significant moderate positive correlation between attitude and perception ($r = 0.64$, $p < 0.01$) further suggests that favourable attitude increases the likelihood of positive perception. Similar evidence from Chhattisgarh and West Bengal studies showed that effective service delivery, teleconsultation support, provider availability and beneficiary satisfaction are interrelated components influencing acceptance of HWC services [11,12]. Thus, the present findings reinforce the need to strengthen community awareness, CHO visibility and patient-centred communication at HWCs.

CONCLUSION

The present study concluded that health care recipients had a generally favourable attitude and positive perception towards the health care services provided by Community Health Officers (CHOs) at selected Health and Wellness Centres of Krishna district, Andhra Pradesh. The majority of respondents either agreed or strongly agreed with the attitude-related statements, indicating acceptance and

satisfaction with CHO-led primary health care services. Similarly, most participants reported positive or very positive perception, suggesting that CHO services were viewed as accessible, useful and beneficial for meeting basic health care needs at the community level.

The study also found that perception was not significantly associated with most socio-demographic variables such as age, gender, religion, education, occupation, marital status, type of family and distance to PHC. However, awareness regarding CHO services showed a significant association with perception, highlighting the importance of community awareness in improving service utilization and acceptance. A moderate positive correlation between attitude and perception indicated that respondents with a favourable attitude were more likely to have a positive perception of CHO services.

Thus, the study emphasizes the need to strengthen awareness activities, improve visibility of CHOs, and promote patient-centred communication to enhance community trust and utilization of Health and Wellness Centre services.

RECOMMENDATIONS

Based on the findings of the present study, the following recommendations are proposed to enhance the effectiveness and community acceptance of services provided by Community Health Officers (CHOs) at Health and Wellness Centres (HWCs):

1. Enhance Community Awareness and Outreach Activities
2. Strengthen Training and Skill Development for CHOs
3. Improve Infrastructure and Logistics at HWCs
4. Increase Availability of Support Staff
5. Expand Working Hours and Appointment Systems
6. Promote Regular Feedback and Grievance Redressal Mechanisms
7. Strengthen Supervision and Monitoring
8. Enhance Intersectoral Coordination
9. Facilitate Digital Health Integration
10. Recognize and Incentivize CHO Performance

Conflict of Interest: The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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