

Strengthening Primary Healthcare: ASHA Workers' Role in Service Delivery and Quality

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Abstract

Purpose: This study examines the role of ASHA workers in enhancing rural healthcare services and assesses the impact of ASHA schemes in selected villages. The study hypothesised that acceptability, counselling, availability and support services are significantly contributing to service delivery. further service delivery has significant impact on quality of health services. Furthermore the mediating role of service delivery between four drivers and quality of health services is also assessed to develop various strategies that can contribute to strengthening primary healthcare.

Methodolgy: Both primary and secondary data sources were utilized, with primary data collected through a self-structured questionnaire and in-depth interviews. Using purposive sampling, 90 respondents from ten villages participated, with responses measured on a five-point Likert scale. Data analysis was conducted using the PLS technique.

Findings: The findings reveal that acceptability and counselling significantly influence service delivery, while availability and support services do not. Additionally, service delivery significantly impacts the quality of healthcare services. To assess the mediating role of service delivery, Baron and Kenny's (1986)¹ procedure was applied. The results indicate that service delivery mediates the relationships between counselling and healthcare quality, as well as between acceptability and healthcare quality. However, no mediating effect was found between availability and healthcare quality, nor between support services and healthcare quality.

Implications: By identifying these key factors, the research provides valuable insights for policymakers and healthcare administrators to refine ASHA training programs, prioritize counselling initiatives, and strengthen community engagement strategies, ultimately enhancing the effectiveness of rural healthcare services.

Keywords: Accredited Social Health Activists (ASHAs), Health Services, Rural healthcare.

Introduction

In low and middle-income countries (LMICs), the Community health workers (CHWs), a type of front-line health worker (FLHWs), have been widely recognised as vital part of primary healthcare teams². Health systems in both LMICs (low- and middle-income countries) and high-income countries

(HICs) are progressively employing community health workers (CHWs) services to meet population health needs, enhance service access, reduce health inequities, and improve health system performance and efficiency. In the economic planning of India, the rural development programmes occupy prominent position, as nearly three - fourth of its population resides in villages which represents

real India³. One of the substantial component that contribute to development of rural people is good health, provision for health should be considered a fundamental human right, and attainment of highest level of health is a most important social goal⁴. Despite significant progress in recent decades, public health challenges in India remain vast, evolving, and growing at an unprecedented rate. Following the implementation of various health programs and policies, the Government of India launched the National Rural Health Mission (NRHM) on April 12, 2005. This initiative was later expanded into the National Health Mission (NHM) to provide accessible, affordable, and accountable healthcare facilities, particularly to the poorest households living in remote rural areas. The NHM aims to deliver comprehensive and integrated primary healthcare, with a special focus on the rural poor, women, and children. A key strategy of the mission was the introduction of Accredited Social Health Activists (ASHAs) at the village level. The Ministry of Health and Family Welfare defines ASHAs as community health activists whose primary role is to raise awareness, mobilize communities for health planning, and promote accountability in healthcare services⁵.

ASHA workers are the initial point of contact between the health officials and the community women, the primary responsibilities performed by community health workers include encouraging women to give birth in the hospitals, inspiring family planning through surgical sterilization, treating basic illness, keeping demographic records, improving village sanitation⁵. The functioning of ASHA workers works both as a paramedical staff and social engineers for the rural and urban marginalized communities work from the past few years and emerged as a non-market arrangements⁶ and has been involved in diverse health plans and not confined them to only motherly and child health-care services^{7,8} (GoI, 2021). Health care workers play an important part is very important in building health capacity in context to health communication, so to get the better results it is necessary that the ASHA workers are strengthened through the training programs to improve communication skills⁹.

The Accredited Social Health Activists (ASHAs) were among the six recipients of the World Health Organization Director-General's Global Health Leaders Award in May 2022, recognized for their significant contributions to protecting and promoting health¹⁰. As of 2020, India had approximately 980,000 ASHA workers, achieving a ratio of one ASHA per 979 rural residents. These workers serve as a crucial link between communities and the public health system, providing vital health services. ASHAs play a pivotal role in connecting marginalized communities to these health facilities, thereby enhancing the reach and effectiveness of healthcare services in rural areas. This study aims to examine the role of ASHAs in enhancing the quality of health services for rural populations through sub-centres, assess the effectiveness of ASHA initiatives, and raise public awareness about these programs.

Hypothesis Development

Acceptability, Counselling, Availability, Support Services and Service Delivery

Governments today are making extensive efforts to provide personalized healthcare services to the general population through ASHA workers. While designing, assessing, and implementing healthcare interventions, **acceptability** is a key factor that must be given due consideration, as most healthcare programs are multifaceted in nature. It refers to the degree to which a service is considered appropriate, socially acceptable, or tolerable by individuals and communities. It also signifies the alignment between clients' attitudes toward healthcare providers' personal and professional characteristics and the actual attributes of those providers^{11,12}. In the context of ASHA workers, acceptability is influenced by factors such as their gender, language, and cultural background, which play a crucial role in fostering trust, dignity, and effective healthcare service delivery.

Counselling is another critical aspect of ASHA workers' roles. Counselling skills—both verbal and nonverbal—enhance communication and the ability to provide effective guidance¹³. From a healthcare

perspective, counselling plays a crucial role in both physical and psychological well-being. Healthcare counselling aims not only to treat medical conditions but also to improve individuals' overall quality of life. It encompasses promoting good health, preventing diseases, addressing mental health challenges, and encouraging healthy behaviors and lifestyles. ASHA workers build this trust by connecting communities to functional healthcare services, thereby strengthening their role as key health advisors^{14,15}.

Availability of ASHA workers is essential in ensuring continuous access to healthcare. By actively involving local communities in health planning and service utilization, ASHA workers help decentralize healthcare services, empowering people to take charge of their well-being⁸. To enhance service delivery, it is vital to involve communities in the recruitment process and in defining ASHA workers' responsibilities. This engagement strengthens the link between communities and formal healthcare systems, improving healthcare outcomes¹⁶.

Support services and **service delivery** further shape the impact of ASHA workers. To meet the growing healthcare demands of the population, adequate resources, workforce availability, and appropriate skill development are necessary. Healthcare benefits must be provided promptly, ensuring that recipients can access services when needed. Special attention should be given to individuals with disabilities, travellers, and those residing in remote, disaster-prone, or conflict-affected areas.

H1: Acceptability (H1a), Counselling (H1b), Availability (H1c) and Support Services (H1d) contribute significantly to Service Delivery

Service Delivery and Quality of Health Services

In the era of globalization, healthcare service providers face intense competition due to the industry's shift toward managing healthcare systems and addressing challenges such as overcapacity¹⁷. Service quality and patient satisfaction have become critical concerns, with research confirming the

significant impact of perceived service quality on the success or failure of healthcare organizations.^{18,19, 20}

The perception of service quality is a key determinant of healthcare organizations' success, as it directly influences patient satisfaction^{21,22} and hospital profitability^{23,24}.

Donabedian (1996)²⁴ defines healthcare service quality as "the application of medical science and technology in a manner that maximizes its benefit to health without correspondingly increasing the risk." Studies have also indicated that ASHA workers provide better services to beneficiaries with education up to or below the secondary level compared to those who are either illiterate or more highly educated. However, challenges remain, as ASHA workers are not always fully adherent to new service-related norms. Despite this, most ASHA workers remain committed to their roles, particularly when incentivized, such as through institutional deliveries²⁵.

Healthcare quality is characterized by the provision of effective and safe care, embedded in a culture of excellence, and aimed at achieving optimal health outcomes²⁶. However, accessibility remains a crucial factor—without adequate availability of health workers, service utilization cannot be ensured. Additionally, even when healthcare workers are present, the acceptability of their services determines whether communities will seek care.

H2: Service Delivery has Significant Impact on Quality of Health Services

Service Delivery and Quality of Health Services

The effectiveness of healthcare service delivery is influenced by various factors, including acceptability, counselling, availability, and support services. Service delivery plays a mediating role in determining the overall quality of healthcare services, as it bridges the gap between community needs and healthcare accessibility. Acceptability refers to the extent to which healthcare services align with the cultural, social, and personal preferences of the community. A higher level of acceptability leads

to greater trust and utilization of healthcare services. However, effective service delivery is necessary to translate acceptability into measurable improvements in healthcare quality. If healthcare services are widely accepted but not efficiently delivered, their impact remains limited. Therefore, service delivery is expected to mediate the relationship between acceptability and quality of health services. Counselling, particularly in areas such as maternal health, family planning, and disease prevention, is a critical component of community healthcare programs. ASHA workers play a significant role in educating individuals about health risks, available treatments, and preventive measures. However, for counselling to enhance healthcare quality, effective service delivery mechanisms must be in place to ensure that individuals can access the necessary healthcare resources. Hence, service delivery mediates the relationship between counselling and quality of health services. Availability refers to the presence of healthcare infrastructure, medical staff, and essential supplies. While availability is a fundamental aspect of healthcare provision, it does not automatically ensure improved health outcomes. The efficiency of service delivery mechanisms, such as streamlined patient referrals, reduced waiting times, and proper utilization of resources, determines whether healthcare quality improves. Therefore, service delivery is expected to mediate the relationship between availability and quality of health services. Support services such as transportation, referral networks, and emergency medical care, enhance healthcare accessibility. However, the presence of support services alone is insufficient; they must be effectively integrated into the healthcare system through efficient service delivery mechanisms. For instance, even if ambulance services are available, delays or inefficiencies in deployment may reduce their impact on healthcare quality. Thus, service delivery mediates the relationship between support services and quality of health services. Based on the above discussions, the study hypothesizes that service delivery acts as a mediator between acceptability, counselling, availability, and support services, and the overall quality of healthcare services.

H3: Service Delivery mediates the relationship between Acceptability (H3a), Counselling (H3b), Availability (H3c) and Support Services (H3d) and Quality of Health Services

Research Methodology and Data Analysis

Measurement items Development

The scale items were developed in order to measure the role of ASHA for the upliftment of health services under NHM, with a detailed discussion with the academicians and investigation from the past review of literature and hence, the language was modified. Four main dimensions i.e. support services (7), Acceptability (5), Availability (8) and Counselling (18). were identified and Five point Likert scale has been used for the sake of uniformity ranging from strongly disagree (1) to strongly agree (5). A pilot testing has been done in order to maintain consistency, easiness of understanding, questions sequence and context suitability in the questionnaire and interviewed with ASHA workers, FMPW and villagers. Hence, refined and finalised the scales for all variables based on their feedback.

Sample and Data Collection

Keeping in view the objectives of the research, purposive sampling technique were adopted in collection of primary data from the ten villages of Garnai; Garnai is a large village located in Udhampur Tehsil of Udhampur district, Jammu and Kashmir with total 530 families residing. The Garnai village has population of 2916 of which 1532 are males while 1384 are females as per Population Census 2011. The women villagers who visit to the sub - centre on 1st and 4th Wednesday of the month were contacted. The data collection was done by investigator himself with the help of semi - structured questionnaire. The 90 respondents are selected for final survey on the basis of pretesting. The demographic profile of the samples is shown in Table 1.

Table 1. Demographic Profile of the Respondents

Particulars	Name	Frequency	Percentage(%)
Village	Gangal	10	11.11
	Lota Garnai	15	16.67
	Upper Garnai	9	10.00
	Kriya	4	04.44
	Dela	9	10.00
	Nagallia	7	07.78
	Bishora	8	08.89
	Padder	10	11.11
	MulgalBai	8	08.89
	TundayTlay	10	11.11
	Total	90	100.0
Age	Below 25	41	45.55
	25 - 30	29	32.23
	30 - 35	10	11.11
	35 above	10	11.11
	Total	90	100.0
Qualification	Primary	18	20.00
	Secondary	17	18.88
	Higher Secondary	30	33.33
	Graduate	20	22.22
	Post Graduate	15	16.66
	Total	90	100.0
Income	Below 5000	36	40.0
	5001 -2000	36	40.0
	2001 -3000	9	10.0
	3000 above	9	10.0
	Total	90	100.0
Asha Visit to Eligible Women After Delivery	Immediate after delivery	52	57.80
	Twice a Week	26	28.90
	After a Week	7	07.80
	Within a month	5	05.60
	Total	90	100.0
Asha Visit to Eligible Women After Delivery	Twice	25	27.80
	Thrice	27	30.00
	4 - 5 times	27	30.00
	More than 7 times	11	12.20
	Total	90	100.0

Source: Authors' Findings

Data Analysis and Results

Cronbach alpha and composite reliability values are examined in order to find the dimension and factor wise reliability.

Cronbach alpha: The recorded alpha values as 0.679 (Acceptability) and 0.899 (Counselling), 0.897 (Availability), 0.888 (Support Services), 0.719 (Quality of health services) and 0.9 (Service delivery) which are above the threshold value of 0.6.

Measurement model analysis: The measurements and structural model area assessed by using partial least squares (PLS). PLS can ensure more theoretical parsimony and less model complexity²⁷ and is flexible in handling both reflective and formative constructs²⁸. The smallest sample size to be required by PLS should be at least 10 times the number of items present in the largest construct²⁹. Our sample size of 90 was sufficient for the use of the PLS technique. The number of statements retained in each dimension was support services (4), Acceptability (3), Availability (3), Counselling (6), Quality of health services (2) and Service delivery (4).

Item factor loadings, average variance extracted (AVE), composite reliability (CR), and Cronbach's alpha are used to evaluate convergent validity. The commonly accepted cut-off values are 0.50 for AVE and 0.60 for factor loadings, CR, and Cronbach's alpha. Table 2, exhibit that convergent validity is acceptable for all constructs in the present study. The CR values and Cronbach's alphas for all constructs exceed 0.7, factor loadings for all items are above 0.7, and the AVE for each construct surpasses 0.5. The degree to which different constructs are distinct from one another is measured by discriminant validity. To assess this, we examined factor correlations and verified that the correlation between each pair of constructs was lower than the square root of their respective AVE²⁹ (Chin et al., 2003). The variance inflation factors (VIFs) in Table 2, all of which are below the threshold of 10³⁰, suggesting that multicollinearity is not an issue in this study. Acceptability, counselling, accessibility, support services, and service delivery can therefore be thought of as formative constructs.

Table 2. Measurement Model Results

Dimensions	Indicators Loadings	VIF	Psychometric Properties
Acceptability			Mean = 4.05, S.D = 0.673, SKEWNESS = -2.532, KURTOSIS = 7.720 AVE = 0.609 CR =0.823 Cronbach’s Alpha = 0.679
ASHA cooperative and easily approachable to community	0.768	1.282	
ASHAs sharing cordial relation with village community	0.772	1.338	
Rural Community listening and taking ASHA seriously	0.8	1.344	
Availability			Mean = 4.24, S.D =.766, SKEWNESS = -1.593, KURTOSIS = 3.997 AVE= 0.829 CR=0.936 Cronbach’s Alpha = 0.897
Free availability of medicines during pre/post pregnancy	0.899	2.463	
Availability of medicines for child care	0.893	2.851	
Pregnancy Registration by the ASHA Workers	0.939	3.881	

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Counselling			Mean = 4.19, S.D = 0.680, SKEWNESS = -2.538, KURTOSIS = 7.938 AVE = 0.665 CR = 0.922 Cronbach's Alpha = 0.899
Immunization to child	0.784	2.167	
Health problems of Teen agers and solutions	0.844	2.67	
Meeting with of newly married women	0.767	1.877	
Keeping the baby warm	0.88	3.34	
Counseling by ASHA for institutional delivery	0.808	2.413	
Counseling on breastfeeding from ASHA	0.804	2.154	
Support Services			Mean = 4.15, S.D = 0.673, SKEWNESS = -2.851 KURTOSIS = 9.591 AVE = 0.665 CR = 0.888 Cronbach's Alpha = 0.832
Accompanying women for institutional delivery	0.849	1.964	
Visiting newborn for advice/care	0.853	2.021	
Transport facilities	0.809	1.895	
Women met by ASHA (≥3 times) during antenatal period	0.744	1.491	
Service Delivery			Mean=4.22, S.D = 0.655, SKEWNESS = -3.209 KURTOSIS =11.040 AVE = 0.770 CR = 0.930 Cronbach's Alpha = 0.900
Dispensing of Vitamin a Pills	0.851	2.604	
Selection of health centres for delivery	0.899	3.173	
Post delivery care	0.883	3.069	
Birth registration	0.876	3.051	
Quality of Health Services			Mean = 4.45, S.D = 0.831, SKEWNESS = -2.327, KURTOSIS = 6.221 AVE = 0.663 CR = 0.797 Cronbach's Alpha = 0.499
providing quality health services	0.755	1.124	
good services	0.869	1.124	

The scale's discriminant validity is demonstrated by the fact that the square roots of the AVEs for each construct are greater than their correlations with other constructs, as shown in Table 3. The

heterotrait-monotrait (HTMT) ratio of correlations was examined to further assess discriminant validity. The results indicate that all construct values meet the threshold of 0.85³¹ or 0.95³².

Table 3. Discriminant Validity

Dimensions	Acceptability	Availability	Counselling	Quality of Health Services	Service Delivery	Support Services
Acceptability	-	-	-	-	-	-
Availability	0.912	-	-	-	-	-
Counselling	0.989	0.92	-	-	-	-
Quality of Health Services	1.229	0.784	0.806	-	-	-
Service Delivery	1.011	0.816	0.943	0.889	-	-
Support Services	0.976	0.844	0.929	0.946	0.901	-

Testing Structural model analysis: To assess the statistical significance of the weights of first-order constructs and path coefficients, the bootstrapping procedure was performed²⁹. All path coefficients are significant at the 1% level, as shown in Table 4, substantiating the hypothesized relationships. The results indicate that acceptability has a significant direct relationship with service delivery (SRW = 0.095, $p = 0.004$), as does counselling (SRW = 0.145,

$p = 0.001$) leading to the acceptance of H1a and H1c. However, availability, (SRW = 0.088, $p = 0.959$) and support services (SRW = 0.119, $p = 0.107$) do not significantly contribute to service delivery, resulting in the rejection of H1b and H1d. Additionally, service delivery has a significant impact on the quality of healthcare services (SRW = 0.155, $p = 0$), confirming H2.

Table 4. Hypothesis testing results (Direct effects)

Hyp	Relationships	R ²	f ²	SRW	T statistics	P values	Class Interval	
							LLCI	ULCI
H1a	Acceptability -> Service Delivery	0.274	0.269	0.095	2.871	0.004	0.077	0.442
H1b	Availability -> Service Delivery	0.005	-0.006	0.088	0.052	0.959	-0.168	0.18
H1c	Counselling -> Service Delivery	0.478	0.447	0.145	3.3	0.001	0.221	0.757
H1d	Support Services -> Service Delivery	0.192	0.222	0.119	1.61	0.107	0.011	0.451
H2	Service Delivery -> Quality of Health Services	0.605	0.586	0.155	3.91	0	0.214	0.788

Source: Authors' Findings

Testing of the mediating effect: We followed Baron and Kenny's¹ (1986) procedure to test the mediating role of service delivery. First, we examined the direct effects of acceptability, counselling, availability, and support services on the quality of healthcare services. Next, we tested the indirect effects of these factors by considering service delivery as a mediator.

As shown in Table 5, the results indicate that service delivery mediates the relationship between counselling and quality of healthcare services ($p = 0.002$) and acceptability and service delivery ($p = 0.025$). Hence hypothesis 3b & 3c is accepted. However, service delivery does not mediate the relationships between availability and quality of healthcare services ($p = 0.959$), nor between support services and quality of healthcare services ($p = 0.182$). Hence hypothesis 3a & 3d are rejected.

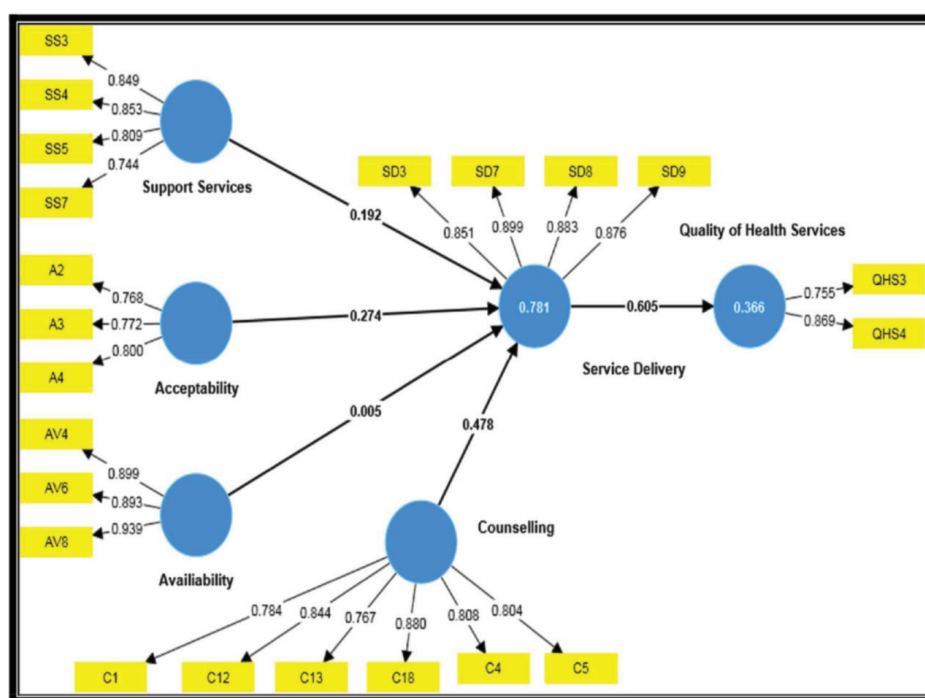
Table 5. Indirect Effect

Hyp	Relationships	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
H3a	Availability -> Service Delivery -> Quality of Health Services	0.003	-0.002	0.053	0.052	0.959

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H3b	Counselling -> Service Delivery -> Quality of Health Services	0.289	0.257	0.093	3.121	0.002
H3c	Acceptability -> Service Delivery -> Quality of Health Services	0.165	0.163	0.074	2.249	0.025
H3d	Support Services -> Service Delivery -> Quality of Health Services	0.116	0.135	0.087	1.336	0.182

Source: Authors' Findings



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Discussion and Implications

The study highlights the need for continuous monitoring and improvement in healthcare services to ensure effective delivery. ASHA (Accredited Social Health Activist) workers play a pivotal role in implementing healthcare programs and have the potential to contribute significantly to a more efficient and improved healthcare system in the country.

The research findings indicate that ASHA workers have achieved a high level of acceptability in the study area. A growing number of residents

are seeking their assistance and guidance for various health concerns. This acceptance is attributed to their ability to bridge the gap between communities and formal healthcare institutions, making healthcare more accessible, affordable, and approachable for rural populations. According to Nair et al. 2010³³ ASHA workers act as mediators, ensuring that healthcare services reach the most vulnerable sections of society, especially women and children.

One of the key reasons for the high acceptability of ASHA workers is their deep integration within the community. As local residents themselves,

they understand the cultural, social, and economic dynamics of the people they serve. This familiarity fosters trust and encourages community members to approach them for healthcare advice and services³⁴.

The study further establishes that ASHA workers are key contributors to improving the quality of healthcare services. Their presence has enhanced healthcare accessibility at the grassroots level, fostering greater community engagement and participation in healthcare programs. Their efforts in health awareness, preventive care, and maternal-child health services underscore their indispensable role in strengthening rural healthcare systems.

Research stated that ASHA workers serve as first points of contact for healthcare in many remote areas where medical facilities are scarce. ASHA workers act as intermediaries between communities and healthcare systems, improving maternal and child health service delivery and ensuring the inclusion of marginalized populations³⁵.

Despite their commendable efforts, ASHA workers face several challenges, including work overload, inadequate incentives, safety concerns, and resistance from traditional beliefs in some communities. Addressing these challenges through better training, increased financial support, and policy interventions can enhance their effectiveness.

Managerial Implication

The ASHA workers are playing a very vital role in the reproductive and child health care and creating the awareness about better health services in the study area. The ASHA workers playing a crucial role during the immunization drive and by emphasizing on the role immunization on child survival, promoting reproductive health, safe motherhood, ensure the birth of the healthy child, birth spacing and family planning of the child.

The study reveals that there is a need of family counselling centre at each sub - centre. Also appointing gynecologists at sub - centre level will also help for rural women. According to Gopi and Rozario (2015)³⁶ it is important to equalize the targeted population of all the ASHA workers, if

possible revise the targeted population according to the density of the respective communities. ASHA should conduct more medical camps and seminars to make people more aware.

A medicine kit to ASHA must be provided at the earliest to help the village people better and promptly. Training should be provided to ASHA's to enhance their knowledge and skill ³⁷

ASHA are assisting women for immunization and supplementary nutrition, counselling on eating food, maintain cleanliness, provide escort to pregnant women for delivery in hospital, and refer TB, malaria, leprosy cases to sub centre. But the primary role of registration& encouraging the women for availing institutional delivery was largely missed by the ASHA.

The study affirms that ASHA workers are indispensable to the rural healthcare system, playing a transformative role in maternal and child healthcare, immunization programs, and overall health promotion. Their high level of acceptability and trust within communities underscores their effectiveness in improving public health outcomes. By addressing healthcare disparities, promoting preventive care, and acting as vital links between communities and healthcare institutions, ASHA workers contribute significantly to India's public health framework.

However, to maximize their impact, there is a pressing need for continuous monitoring, training, financial support, and policy improvements. Investing in ASHA workers' capacity-building and addressing the challenges they face can further strengthen rural healthcare and enhance the quality of life for millions of people. By doing so, ASHA workers can continue to play a crucial role in bridging healthcare gaps and ensuring equitable healthcare access for all.

The study underscores the importance of continuous monitoring and support for ASHA workers to further enhance healthcare service delivery. The study recommend continuous skill development programs can equip ASHA workers with updated medical knowledge and enhance their service delivery capabilities. Providing timely

payments, incentives, and recognition for their contributions can boost their motivation and efficiency. Improved coordination between ASHA workers and higher-level healthcare facilities can ensure timely medical interventions for severe cases. Encouraging local community members to actively participate in healthcare initiatives can strengthen the acceptability and effectiveness of ASHA workers. The use of mobile health (mHealth) applications for record-keeping, tracking immunization schedules, and patient monitoring can streamline healthcare delivery.

Limitation and Future Research

To conclude, this study identifies the various dimensions such as acceptability, counselling, availability and support services which impact the service delivery of ASHA Workers. The study also empirically validates the effects of acceptability, counselling, availability and support services on Quality of health services and also exhibit about the important role of service delivery for the understanding the relationship. The results provide theoretical precision about the quality of health services in context to the rural areas. The findings of the study also provide an insight problems and challenges faced by the ASHA workers in providing services to the rural people as well as the obstacles faced by the rural people in receiving the services of the ASHA workers. The present study has several limitations that can be addressed in future research. The study is limited to villages covered by one sub centre of Garnai, the validity of our findings may be limited. In future more sub centers can be contacted for future research with increased sample size and can replicate the study replicate the with different groups and also can be extended across various regions, states to establish the validity of NHRM schemes. Presently only villagers are contacted in future ANM, FMPW and workers. Our study does not consider the factors that may moderate the relationship among acceptability, counselling, availability and support services on Quality of health services.

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Conflict of Interest: There is no conflicts of interest, financial or otherwise.

Ethical Clearance: We affirm that this research adheres to the highest ethical standards.

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