



Assessing the Quality of Community-Based Health Services: A Case Study of Integrated Health Posts in Rural Indonesia

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Abstract

Community-based health services play a crucial role in improving maternal and child health outcomes, particularly in rural areas of developing countries. In Indonesia, Integrated Health Posts (Posyandu) serve as a primary platform for delivering basic health services through community participation. However, disparities in service quality remain a major challenge, especially in remote villages. This study aims to analyze the quality of health services provided by Posyandu in Umalo Village, Sanana District, Sula Islands Regency, Indonesia. Using a qualitative descriptive approach, data were collected through in-depth interviews, direct observation, and documentation involving health workers, Posyandu cadres, community leaders, and service users. The analysis is guided by the SERVQUAL framework, which includes five dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy. The findings reveal that while Posyandu services in Umalo Village are generally accessible and supported by strong community involvement, several limitations persist. These include inadequate health facilities, limited cadre training, and low community awareness regarding the importance of routine maternal and child health services. Among the SERVQUAL dimensions, empathy and responsiveness were relatively well perceived, whereas tangibles and reliability showed significant weaknesses. The study highlights the importance of strengthening human resources, improving infrastructure, and enhancing community education to ensure sustainable and high-quality health services. The findings contribute to the literature on public health service quality in rural settings and provide practical recommendations for policymakers and local health authorities to improve the performance of community-based health programs.

Keywords: Health Service Quality, Community-Based Health Care, Posyandu, Rural Health Service, Maternal and Child Health

INTRODUCTION

Health service quality is a fundamental determinant of the effectiveness and sustainability of public health systems, particularly in developing countries where disparities in access and service performance remain prominent. High-quality health services not only contribute to improved health outcomes but also strengthen public trust, increase service utilization, and enhance the accountability of health institutions (Zeithaml et al., 2020; WHO, 2022). Within the framework of primary health care, service

quality plays a crucial role in ensuring that preventive and promotive health interventions reach vulnerable populations, especially mothers and children in rural areas (Starfield, 2012).

Globally, primary health care has been reaffirmed as the cornerstone of universal health coverage and the achievement of the Sustainable Development Goals (WHO, 2020; United Nations, 2023). Community-based health services are central to this approach, as they emphasize community participation, local empowerment, and accessibility. However, empirical evidence suggests that the quality of such services often varies significantly, particularly in rural and geographically isolated settings where infrastructure, human resources, and institutional capacity are limited (Putri et al., 2020; Lestari & Widodo, 2023).

In Indonesia, community-based health services are institutionalized through Integrated Health Posts, locally known as *Pos Pelayanan Terpadu* (Posyandu). Posyandu serves as a frontline mechanism for delivering basic maternal and child health services, including growth monitoring, immunization, nutrition counseling, family planning, and health education. Ideally, Posyandu operates as an accessible, affordable, and community-driven health service platform that complements formal health facilities (Ministry of Health of Indonesia, 2021). Through the involvement of volunteer health cadres, Posyandu is expected to promote preventive care and reduce health disparities between urban and rural populations (Sari & Prasetyo, 2022).

Despite its strategic role, the implementation of Posyandu services across rural Indonesia continues to face persistent challenges. Previous studies indicate that many Posyandu units experience inadequate physical facilities, shortages of trained health personnel, inconsistent service delivery, and declining community participation (Rahmawati et al., 2021; Fitriani et al., 2020). These constraints are particularly evident in rural and island regions, where geographical barriers and limited transportation infrastructure exacerbate existing service gaps (Putri et al., 2020). As a result, the quality of health services delivered at the community level often falls short of national policy expectations.

The concept of service quality provides a useful analytical lens for examining these challenges. Service quality is commonly understood as the gap between service users' expectations and their perceptions of actual service performance (Parasuraman et al., 1988). The SERVQUAL model, which conceptualizes service quality through five dimensions—tangibles, reliability, responsiveness, assurance, and empathy—has been widely applied in health care research to assess perceived service quality and patient satisfaction (Babakus & Mangold, 1992; Al-Haqan et al., 2023). Studies consistently demonstrate that perceived service quality significantly influences user satisfaction, trust, and continued utilization of health services, particularly in primary health care settings (Nugroho et al., 2022).

In rural community-based health services, deficiencies in tangible resources such as facilities and equipment are often compounded by issues related to reliability and assurance, including inconsistent service schedules and limited professional competence among service providers (Lestari & Widodo, 2023). Nevertheless, interpersonal dimensions such as responsiveness and empathy frequently emerge as relative strengths, driven by close social relationships between health cadres and community members (Zulkarnain & Rahman, 2021). This duality highlights the importance of examining service quality not only from a structural perspective but also from a socio-relational standpoint.

In the Indonesian context, several studies have examined Posyandu performance by focusing on utilization rates, nutritional outcomes, or cadre roles (Sari & Prasetyo, 2022; Fitriani et al., 2020). While these studies provide valuable insights, they often rely on quantitative indicators and overlook the subjective experiences and perceptions of service users and providers. Qualitative research grounded in service quality frameworks remains limited, particularly in rural and island regions where contextual factors play a significant role in shaping service delivery.

The Sula Islands Regency represents a rural and geographically isolated area where Posyandu functions as the primary access point for maternal and child health services. In such settings, Posyandu is not merely a health service provider but also a social institution embedded within the local community. Understanding how service quality is perceived and experienced at the village level is therefore essential for identifying context-specific barriers and opportunities for improvement. However, empirical evidence on Posyandu service quality in remote island communities remains scarce.

Based on these considerations, this study aims to analyze the quality of health services provided by Posyandu in Umaloaya Village, Sanana District, Sula Islands Regency, using a qualitative descriptive

approach guided by the SERVQUAL framework. By examining the five dimensions of service quality, this research seeks to identify strengths and weaknesses in service provision and to explore the underlying factors influencing service quality in a rural community-based health setting. The findings are expected to contribute to the literature on public service quality and primary health care, as well as to provide practical insights for policymakers and local health authorities in strengthening Posyandu services in rural and island regions.

METHODS

Research Design

This study employed a qualitative descriptive research design to examine the quality of community-based health services provided by the Integrated Health Post (*Posyandu*) in Umaloya Village. A qualitative approach was chosen because it allows for an in-depth exploration of service processes, stakeholder experiences, and contextual factors that shape public service delivery in natural settings. Qualitative descriptive research is particularly appropriate for studies aiming to capture real conditions and meanings associated with health service quality without imposing rigid theoretical interpretations (Creswell & Poth, 2021).

Research Setting

The research was conducted in Umaloya Village, Sanana District, Sula Islands Regency, Indonesia. This village represents a rural and island context characterized by limited health infrastructure, geographical isolation, and reliance on community-based health services. Posyandu activities in Umaloya Village are held once a month and function as the primary access point for maternal and child health services. The site was selected purposively due to its representativeness of rural health service conditions and preliminary indications of service quality challenges commonly reported in similar settings (Lestari & Widodo, 2023).

Research Focus and Analytical Framework

The focus of this study was the quality of health services delivered through Posyandu. Service quality was analyzed using the SERVQUAL framework, which conceptualizes service quality across five dimensions: tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 1988). The SERVQUAL model has been widely applied in health care research to assess perceived service quality and user satisfaction, particularly in primary and community-based health services (Babakus & Mangold, 1992; Al-Haqan et al., 2023).

In this study, tangibles referred to the availability and condition of physical facilities, equipment, and supporting infrastructure; reliability referred to the consistency and accuracy of service delivery; responsiveness described the willingness and promptness of service providers in assisting service users; assurance encompassed the competence, professionalism, and trustworthiness of health workers and cadres; and empathy referred to the degree of personal attention and care shown to service users.

Participants and Sampling Technique

The participants in this study consisted of individuals directly involved in or affected by Posyandu services in Umaloya Village. Informants were selected using purposive sampling to ensure that participants possessed relevant knowledge and experience related to the research focus. The informants included Posyandu cadres, health workers from the local primary health center, community leaders, pregnant women, and mothers of toddlers who regularly utilized Posyandu services.

Purposive sampling is commonly used in qualitative research to obtain information-rich cases that can provide deep insights into the phenomenon under study (Guest et al., 2020). This approach enabled the researcher to capture diverse perspectives and facilitated data triangulation.

Data Collection Techniques

Data were collected through three main techniques: in-depth interviews, non-participant observation, and document analysis. In-depth interviews were conducted to explore participants'



experiences, perceptions, and assessments of Posyandu service quality across the five SERVQUAL dimensions. Semi-structured interview guides were developed to allow flexibility while ensuring alignment with the research objectives (Creswell & Poth, 2021).

Non-participant observation was carried out during Posyandu service sessions to record physical conditions, service procedures, interactions between service providers and users, and overall service flow. Document analysis was used to review supporting materials such as attendance records, service schedules, and village health reports to complement primary data and provide contextual information. The use of multiple data collection techniques enabled methodological triangulation and enhanced the credibility of the findings (Miles et al., 2020).

Research Instruments

The primary research instrument in this study was the researcher, who was responsible for planning, collecting, and interpreting the data. Supporting instruments included interview guidelines, observation checklists, and document review protocols. The interview guidelines were structured based on the SERVQUAL dimensions to ensure consistency between the research framework and data collection. This approach is consistent with qualitative research principles, which emphasize the central role of the researcher in interpreting social phenomena (Creswell & Poth, 2021).

Data Analysis Procedure

Data analysis followed an interactive model consisting of data condensation, data display, and conclusion drawing. Initially, interview transcripts, observation notes, and documents were reviewed and condensed to identify meaningful units related to service quality dimensions. The data were then organized into thematic categories corresponding to the SERVQUAL framework and displayed in narrative and tabular forms to facilitate interpretation.

The final stage involved drawing and verifying conclusions through iterative reflection and comparison across data sources. This process allowed patterns and relationships to emerge while ensuring that interpretations remained grounded in empirical evidence. The interactive model of qualitative data analysis is widely used in public health and social research due to its systematic and flexible nature (Miles et al., 2020).

Trustworthiness of the Study

To ensure the trustworthiness of the findings, several strategies were employed, including data triangulation, prolonged engagement in the research setting, and peer debriefing. Triangulation was achieved by comparing data from interviews, observations, and documents, as well as across different categories of informants. These strategies enhance credibility, dependability, and confirmability in qualitative research (Guest et al., 2020).

Ethical Considerations

Ethical considerations were carefully addressed throughout the research process. All participants were informed about the purpose of the study and their voluntary participation. Informed consent was obtained prior to data collection, and participants' anonymity and confidentiality were strictly maintained. The study was conducted in accordance with ethical principles for social and health research, emphasizing respect, beneficence, and non-maleficence (Creswell & Poth, 2021).

RESULTS AND DISCUSSION

Results

This section presents the empirical findings of the study on the quality of health services provided by the Integrated Health Post (Posyandu) in Umaloya Village. The results are organized according to the five dimensions of the SERVQUAL framework: tangibles, reliability, responsiveness, assurance, and empathy. Data were obtained through in-depth interviews, non-participant observation during Posyandu activities, and document analysis. The presentation of findings reflects the perspectives of



Posyandu cadres, health workers, community leaders, pregnant women, and mothers of toddlers as service users.

Tangibles: Physical Facilities and Supporting Infrastructure

The tangible dimension refers to the physical evidence of service quality, including facilities, equipment, and supporting infrastructure used in Posyandu service delivery. Observational data revealed that Posyandu Umaloya operates in a multipurpose village hall rather than a dedicated health facility. The room is shared with other village activities, resulting in limited space arrangement for health services, particularly for maternal examinations and counseling sessions.

Basic equipment such as infant weighing scales, height measurement tools, and growth monitoring cards (*Kartu Menuju Sehat / KMS*) were available during service sessions. However, the quantity and condition of these tools were insufficient to support optimal service delivery. The weighing scale used was manual and showed signs of wear, while height measurement boards were limited in number, causing queues during peak service hours. No examination bed was available, and maternal check-ups were conducted while mothers were seated.

Health education media were also limited. Posters related to nutrition and immunization were outdated, and no audiovisual or interactive materials were observed during service sessions. Sanitation facilities, including handwashing stations, were inadequate, as no dedicated handwashing area was provided within the Posyandu service space.

Table 1. Physical Facilities and Equipment at Posyandu Umaloya

Component	Availability	Condition	Remarks
Service room	Available	Moderate	Shared village hall
Infant weighing scale	Available	Poor– Moderate	Manual, old
Height measurement tool	Available	Moderate	Limited quantity
Examination bed	Not available	–	Mothers examined while seated
Health education media	Limited	Poor	Old posters
Sanitation facilities	Limited	Poor	No dedicated handwashing area

Source: Research Results, 2025.

A Posyandu cadre stated:

“We do not have a special Posyandu building, so we use the village hall. The equipment is still usable, but some tools are old and should be replaced” (Cadre 1, Posyandu volunteer, interview March 12, 2025).

Similarly, a health worker emphasized:

“From a health service perspective, the facilities are still far from ideal, especially for maternal examinations” (Health Worker 1, Primary Health Center staff, interview March 18, 2025).

Interview data supported these observations. A Posyandu cadre stated that the lack of a dedicated building and modern equipment limited the effectiveness of service delivery. Health workers also emphasized that inadequate facilities reduced the scope of maternal health examinations that could be conducted. These findings indicate that the tangible dimension of service quality at Posyandu Umaloya

remains limited and below the standards recommended for primary health care services (Ministry of Health of Indonesia, 2021).

Reliability: Consistency and Accuracy of Service Delivery

Reliability refers to the ability of Posyandu to deliver services consistently, accurately, and according to established schedules. Document analysis showed that Posyandu activities in Umaloya Village were scheduled once a month and generally implemented as planned. Attendance records indicated stable participation of mothers and toddlers, suggesting that the community recognizes Posyandu as a routine health service.

Routine services such as child weighing, growth monitoring, and basic nutrition counseling were consistently provided during each session. Cadres demonstrated familiarity with service procedures, including recording child growth data in the KMS. However, several essential services were not consistently available. Immunization services and antenatal check-ups depended heavily on the presence of health workers from the primary health center. When health workers were unable to attend, these services were postponed.

Table 2. Consistency of Posyandu Services

Type of Service	Frequency	Consistency Level
Child weighing	Monthly	High
Nutritional counseling	Monthly	Moderate
Immunization	Irregular	Low–Moderate
Antenatal care	Irregular	Low
Vitamin supplementation	Periodic	Moderate

Source: Research Results, 2025.

A cadre explained:

“We always do the weighing and record it, but for immunization, we depend on the health workers. If they cannot come, the service is postponed” (Cadre 2, Posyandu volunteer, interview March 15, 2025).

A mother of a toddler reported:

“Usually the weighing is always done, but sometimes we are told to come back another day for immunization” (Mother 1, service user, interview March 20, 2025).

Service users reported that although basic services were reliably available, they often needed to return on another day for immunization or maternal health services. Cadres explained that their limited authority and training restricted them to routine activities, reinforcing dependence on professional health workers. These findings reflect partial fulfillment of the reliability dimension, consistent with previous studies on rural community-based health services (Rahmawati et al., 2021; Nugroho et al., 2022).

Responsiveness: Willingness and Promptness of Service Providers

Responsiveness describes the willingness and promptness of service providers in assisting service users and responding to their needs. Observations during Posyandu sessions revealed that cadres were proactive in managing service flow, guiding mothers through service stages, and responding to questions related to child growth and nutrition.

Cadres were observed initiating communication with mothers, explaining weighing results, and providing immediate advice when children showed signs of undernutrition. Waiting times were relatively short, and service providers made efforts to ensure that mothers and children were served efficiently despite limited equipment.

A service user stated:



“When I ask about my child’s weight, the cadre immediately explains and gives advice” (Mother 2, service user, interview March 22, 2025).

Another informant noted:

“The cadres are quick to help, even when many mothers come at the same time” (Community Leader, interview April 2, 2025).

Interview data indicated high satisfaction among service users regarding responsiveness. Mothers reported that cadres were approachable and quick to provide assistance when questions or concerns arose. Community leaders also highlighted the commitment of cadres to serve even under constrained conditions.

These findings indicate that responsiveness is one of the strongest dimensions of service quality at Posyandu Umaloya. The proactive behavior of cadres reflects the community-based nature of Posyandu services, where service providers are socially embedded within the community (Al-Haqan et al., 2023; Zulkarnain & Rahman, 2021).

Assurance Assurance: Knowledge, Competence, and Trust

Assurance refers to the ability of service providers to convey trust and confidence through competence, professionalism, and credibility. Interview findings revealed that Posyandu cadres had received basic training related to child weighing, growth monitoring, and record keeping. However, refresher training and technical guidance were irregular and limited in scope.

Health workers from the primary health center were perceived as highly competent and trustworthy. Their presence increased community confidence, particularly among pregnant women seeking antenatal care. However, their limited attendance reduced opportunities for professional consultation and supervision.

A cadre stated:

“We are confident in weighing and recording data, but for health complaints, we still rely on health workers” (Cadre 3, Posyandu volunteer, interview March 28, 2025).

A pregnant woman explained:

“When the midwife is present, we feel more confident to ask questions” (Pregnant Woman 1, service user, interview April 5, 2025).

Cadres expressed confidence in performing routine tasks but acknowledged their limitations in handling more complex health issues. Service users differentiated clearly between the roles of cadres and health workers, placing greater trust in professional staff for clinical matters.

These findings indicate that the assurance dimension is uneven, with higher levels of trust associated with professional health workers than with volunteer cadres. Similar patterns have been reported in studies on primary health care assurance in rural settings (Nugroho et al., 2022; Sari & Prasetyo, 2022).

Empathy: Personal Attention and Care

Empathy refers to the extent to which service providers demonstrate personal care, understanding, and attention toward service users. This dimension emerged as the strongest aspect of service quality at Posyandu Umaloya. Observations showed that cadres addressed mothers by name, engaged in informal conversations, and showed genuine concern for children’s well-being.

Service users consistently reported feeling comfortable and respected during Posyandu visits. Mothers emphasized that the friendly and familiar atmosphere encouraged them to attend regularly,



even when facilities were limited. Health workers also acknowledged that cadres' close social relationships with the community enhanced communication and trust.

A mother reported:

"The cadres know us personally, so we feel comfortable and not afraid to come" (Mother 3, service user, interview April 7, 2025).

A health worker noted:

"Because cadres are part of the community, they understand social and cultural conditions very well" (Health Worker 2, interview April 10, 2025).

The strong empathetic interactions observed at Posyandu Umaloya highlight the importance of social proximity in community-based health services. These findings align with previous studies emphasizing empathy as a key determinant of satisfaction and participation in primary health care, particularly in rural contexts (Fitriani et al., 2020; Al-Haqan et al., 2023).

Summary of Service Quality Across SERVQUAL Dimensions

Overall, the findings reveal a differentiated pattern of service quality across the five SERVQUAL dimensions. Social and interpersonal dimensions—responsiveness and empathy—demonstrate relatively strong performance, driven by the commitment and social embeddedness of Posyandu cadres. In contrast, structural and institutional dimensions—tangibles, reliability, and assurance—remain constrained by limited infrastructure, inconsistent availability of professional health workers, and gaps in cadre capacity.

Table 1. Summary of Service Quality Assessment at Posyandu Umaloya

SERVQUAL Dimension	Performance Level	Key Findings
Tangibles	Low	Inadequate facilities and equipment
Reliability	Moderate	Consistent basic services, limited specialized services
Responsiveness	High	Prompt and proactive cadre support
Assurance	Moderate	High trust in health workers, limited cadre competence
Empathy	High	Strong personal relationships and care

Source: Synthesized Research Findings, 2025.

Discussion

This study examined the quality of community-based health services at Posyandu Umaloya Village using the SERVQUAL framework. The findings reveal an uneven pattern of service quality across dimensions, where interpersonal aspects are relatively strong, while structural and institutional components remain limited. This discussion interprets these findings by linking empirical results with existing literature on service quality, community-based health care, and rural primary health services.

Tangibles and Structural Constraints in Rural Posyandu Services

The findings show that the tangible dimension represents the weakest aspect of service quality at Posyandu Umaloya. Inadequate physical facilities, outdated equipment, and the absence of a dedicated Posyandu building indicate significant structural constraints. Ideally, tangible elements such as proper service rooms, examination beds, sanitation facilities, and health education media are essential to

support safe and effective primary health care delivery (Ministry of Health of Indonesia, 2021; WHO, 2020).

These results are consistent with previous studies highlighting infrastructure deficiencies as a persistent challenge in rural and island health services in Indonesia (Putri et al., 2020; Lestari & Widodo, 2023). Limited tangibles not only affect the technical quality of services but may also influence users' perceptions of service professionalism and credibility (Zeithaml et al., 2020). Although community members continue to attend Posyandu, reliance on inadequate facilities may undermine service effectiveness and long-term sustainability.

From a governance perspective, these limitations reflect broader issues of resource allocation and decentralization in primary health care. Community-based health services such as Posyandu often operate with minimal financial and infrastructural support despite their strategic role in preventive care (United Nations, 2023). Therefore, improving tangible aspects requires stronger institutional commitment beyond community-level initiatives.

Reliability and Dependence on Health Workforce Availability

The reliability dimension was found to be moderately fulfilled. While routine services such as child weighing and growth monitoring were delivered consistently, specialized services including immunization and antenatal care were irregular due to the limited availability of professional health workers. This finding highlights the vulnerability of Posyandu services that rely heavily on external support from primary health centers.

Reliability is a core component of service quality, as it reflects the ability of service providers to deliver services accurately and consistently as promised (Parasuraman et al., 1988). Similar patterns have been reported in rural health settings, where service continuity is often disrupted by workforce shortages and logistical constraints (Rahmawati et al., 2021; Nugroho et al., 2022). Although volunteer cadres play a crucial role in maintaining routine activities, their limited scope of practice restricts service comprehensiveness.

These findings suggest that strengthening service reliability requires better integration between Posyandu and formal health facilities, as well as strategic human resource planning. Without systematic coordination and workforce support, Posyandu services remain vulnerable to inconsistency, particularly for maternal and child health interventions that require professional expertise (Starfield, 2012).

Responsiveness as a Social Strength of Community-Based Services

Responsiveness emerged as one of the strongest dimensions of service quality at Posyandu Umaloya. Cadres demonstrated willingness and promptness in assisting service users, managing service flow, and responding to health-related questions. This responsiveness reflects the socially embedded nature of Posyandu, where cadres are members of the community they serve.

Previous studies emphasize that responsiveness in community-based health services is closely linked to social proximity and shared identity between service providers and users (Zulkarnain & Rahman, 2021; Al-Haqan et al., 2023). In rural contexts, such responsiveness can partially compensate for structural limitations by fostering trust and encouraging service utilization. The findings of this study support this argument, as mothers reported high satisfaction with cadres' attentiveness despite limited facilities.

However, reliance on responsiveness driven by volunteerism raises concerns regarding sustainability. Without adequate institutional support, the workload and emotional burden placed on cadres may increase, potentially affecting service quality over time. Responsiveness should therefore be supported by formal recognition, incentives, and capacity-building mechanisms to ensure its continuity (Widodo, 2019).

Assurance and Capacity Gaps Among Service Providers

The assurance dimension was found to be uneven, with higher levels of trust placed in professional health workers than in volunteer cadres. While cadres were confident in delivering routine services, they acknowledged limitations in handling more complex health issues. Service users also differentiated clearly between cadres and health professionals in terms of competence and credibility.



Assurance is closely related to service providers' knowledge, skills, and ability to instill confidence among users (Babakus & Mangold, 1992). Consistent with previous studies, limited training and irregular refresher programs reduce the assurance dimension of service quality in rural primary health care (Sari & Prasetyo, 2022; Nugroho et al., 2022). Although cadres are essential for community outreach, their effectiveness is constrained without continuous technical support.

These findings underscore the importance of systematic cadre capacity development and supervision. Strengthening assurance requires not only improving individual competence but also enhancing institutional linkages between Posyandu and the formal health system to ensure credibility and trust in service delivery (WHO, 2022).

Empathy as the Core Strength of Posyandu Services

Empathy emerged as the most prominent strength of Posyandu services in Umaloya Village. Personalized attention, familiarity with service users, and culturally sensitive communication contributed significantly to positive service experiences. This finding reinforces the role of empathy as a critical determinant of satisfaction and continued service utilization in primary health care (Fitriani et al., 2020; Al-Haqan et al., 2023).

In community-based settings, empathy is facilitated by close social relationships and shared cultural contexts. Cadres' ability to engage with mothers and children on a personal level strengthens trust and reduces psychological barriers to accessing health services. Similar findings have been reported in studies emphasizing the importance of relational quality in rural health services (Grönroos, 2007).

Nevertheless, empathy alone cannot substitute for technical and structural quality. While it enhances acceptance and participation, it must be complemented by adequate facilities, reliable services, and professional assurance to achieve comprehensive service quality. Overreliance on empathy without addressing structural weaknesses may limit the overall impact of Posyandu services.

Balancing Social Commitment and Institutional Support

Overall, the findings reveal a clear imbalance between strong social dimensions (responsiveness and empathy) and weak structural dimensions (tangibles, reliability, and assurance). This pattern reflects a hybrid model of service quality commonly observed in rural community-based health services, where social commitment sustains service delivery amid institutional limitations (Putri et al., 2020; Lestari & Widodo, 2023).

National policies emphasize standardized, integrated, and high-quality community-based health services (Ministry of Health of Indonesia, 2021). However, the implementation gap observed in Umaloya Village suggests that community participation alone is insufficient to achieve these standards. Sustainable improvement in Posyandu service quality requires coordinated efforts among policymakers, health professionals, and communities, supported by adequate resources and governance mechanisms (WHO, 2020; United Nations, 2023).

CONCLUSION

Conclusion

This study contributes to the understanding of community-based health service quality in rural and island contexts by examining Posyandu services through a service quality perspective. Rather than positioning Posyandu merely as a technical extension of the formal health system, this research highlights its dual character as both a public service institution and a socially embedded community mechanism. The findings underscore that the sustainability of community-based health services is shaped not only by technical standards but also by relational and institutional dynamics at the grassroots level.

From a theoretical standpoint, the study reinforces the relevance of the SERVQUAL framework in analyzing public and community-based health services in developing country contexts. However, it also suggests that service quality in rural settings cannot be fully understood through structural indicators alone. Social dimensions such as interpersonal relations, local trust, and community engagement play a critical role in shaping service experiences and utilization. This insight extends existing service quality



literature by emphasizing the contextual adaptability of SERVQUAL dimensions in non-commercial and volunteer-based service environments.

Empirically, this research fills a gap in the literature by providing qualitative evidence from a geographically marginalized area, where health service delivery faces unique challenges related to isolation and limited resources. The village-level focus allows for a nuanced understanding of how national health policies are interpreted and enacted in everyday practice. The study demonstrates that disparities in service quality are not solely the result of local capacity constraints but are also influenced by broader governance and coordination issues within the health system.

Overall, this study highlights the importance of aligning community commitment with institutional support to strengthen community-based health services. By illuminating the interplay between social capital and formal health governance, the findings offer a more comprehensive perspective on improving the quality and sustainability of primary health care in rural and island regions.

Recommendation

Based on the insights generated by this study, several strategic recommendations are proposed to enhance the quality and sustainability of community-based health services. First, policymakers and local governments should strengthen institutional support for Posyandu by integrating it more effectively into the formal primary health care system. This includes clearer coordination mechanisms, regular supervision, and structured collaboration between Posyandu cadres and professional health workers to ensure service continuity and institutional accountability.

Second, investment in human resource development should be prioritized. Continuous capacity-building programs for Posyandu cadres—covering both technical competencies and communication skills—are essential to improve service credibility and long-term performance. Such programs should move beyond ad hoc training and be embedded within routine health system planning to ensure consistency and relevance.

Third, community-based health services require sustainable resource allocation. Financial and logistical support from local governments is necessary to reduce overreliance on volunteerism and to ensure that social commitment is not undermined by burnout or resource scarcity. Institutional recognition and incentive mechanisms for cadres may help maintain motivation while professionalizing service delivery.

Finally, future policy interventions should adopt a context-sensitive approach that acknowledges the diversity of rural and island settings. Rather than applying uniform standards, service improvement strategies should be tailored to local conditions while maintaining minimum quality benchmarks. Future research is encouraged to adopt comparative and longitudinal designs to assess how different governance and support models influence community-based health service quality over time.

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