Awareness, Availment, and Satisfaction on various Health Services among Residents of a Rural Community in Samar, Philippines: A Mixed Methods Study

Sherrie Ann Cananua-Labid, PhD,[1] Sheriah Laine M. de Paz-Silava, MD, PhD,[2] Julie Ann M. Quilatan, MAE,[3] Abigail M. Cabaguing, PhD[3] and Jhonil C. Bajado, MAT[1]

[1]*Research Center for Culture and Social Issues, Samar State University, Catbalogan City, Samar, Philippines*
[2]*College of Public Health, University of the Philippines Manila, Manila, Philippines*
[3]*Samar Island Center for Good Local Governance, Samar State University, Catbalogan City, Samar, Philippines*

ABSTRACT

Objectives. This study sought to investigate citizens' awareness, availment, satisfaction, and perceived need for action with health services offered by a rural municipality in Samar, Philippines.

Methods. This study utilized an explanatory-sequential research design, involving 150 participants selected through the Kish Grid Method via a multi-stage sampling approach within the community. The Citizen Satisfaction Index System was employed to assess the levels of awareness, utilization, and satisfaction with health services in the municipality.

Results. Among the assessed health services, the cohort had low awareness and low availment on services for communicable diseases, basic dental/oral hygiene, and reproductive health. While high awareness was observed for childbirth services, there was low availment on these. The participants showed high awareness and availment for only two services namely, free general consultation and the free medicine program. While high satisfaction was seen among all services that were assessed, the participants also expressed a high perceived need for action to improve their delivery.

Conclusion. This study presents a comprehensive view of rural healthcare in Samar, Philippines. Despite high satisfaction rates, gaps persist in the citizen's awareness and availment due to accessibility, costs, fear, misinformation, and cultural differences. The findings of this study can guide policymakers in identifying gaps in healthcare in rural areas.

Keywords: primary care, health services, availment, awareness, satisfaction

Paper presentation – 2nd International Conference on Poverty Alleviation and Sustainable Development, October 27-29, 2020, Samar State University; Regional Health Research Symposium, October 23, 2019, Summit Hotel, Marasbaras, Tacloban City.

eISSN 2094-9278 (Online)
Published: December 18, 2024
https://doi.org/10.47895/amp.vi0.8344

Corresponding author: Sherrie Ann Cananua-Labid, PhD
Research Center for Culture and Social Issues
Samar State University
Arteche Blvd., Barangay Guindapunan,
Catbalogan City, Samar, Philippines
Email: sherrieann.labid@ssu.edu.ph
ORCiD: https://orcid.org/0000-0001-9175-5270

INTRODUCTION

Citizens' awareness, availment, and satisfaction with primary care services are crucial data to enhancing health outcomes and healthcare services of a country.[1] Unfortunately, in low-income countries like the Philippines, particularly in rural and geographically isolated areas, healthcare services face challenges that impact citizens' ability to access and utilize these services effectively.[2] While services are offered through government-initiated public health programs, much of the services and efforts still need to be made available to half of the country's population.[3] Out-of-pocket spending remains as high as 54%, one of the highest in the region, as free quality healthcare is hardly available or accessible in government facilities.[4] A research study that quantifies citizens' awareness, availment, and satisfaction with various

health services is necessary to resolve the gaps and challenges in healthcare access and utilization in low-income countries like the Philippines.

According to the Health Belief Model (HBM), people's health decision behavior is influenced by their beliefs about the effectiveness of the recommended preventive actions. In the context of primary care services, citizens' satisfaction with the quality and effectiveness of the primary care services they receive can influence their willingness to avail of these services regularly. Citizens' satisfaction with primary care services can also be affected by their perceptions of the accessibility, affordability, and convenience of the services offered.[5] Other existing literature has extensively explored citizens' awareness, availment, and satisfaction with health services globally and within the Philippines. Studies have examined citizens' awareness of health services in different countries, highlighting the influence of socioeconomic factors and access to information.[6,7] Additionally, some studies have shown that factors affecting service quality are closely related to residents' satisfaction with nearby healthcare in African nations like Egypt and Nigeria.[8,9] In Pakistan, healthcare providers work hard to provide their clients with well-improved healthcare services to increase patient satisfaction and loyalty.[10]

Similar studies conducted in the Philippines highlighted the importance of assessing citizen satisfaction to improve service delivery. Citizens are better positioned to evaluate whether public services are supplied according to their needs and to the extent that they meet their daily and long-term human development requirements because they are the intended beneficiaries and end-users. Thus, getting their sentiments, opinions, and insights based on their perception and evaluation as consumers of local public services is a logical method of shaping local governments' actions to ensure citizens' welfare without neglecting statutory requirements expected from LGUs. Studies found a high awareness rating but a low availment rate of basic services.[11,12] Another study found variations in satisfaction levels among different demographic groups and emphasized the importance of considering citizen profiles and expectations when assessing satisfaction.[13]

Although these studies presented significant findings, they still have gaps that the current research can address. Despite high awareness, existing studies have yet to explore the reasons behind the low availment rate of essential services. They did not consider the recommendation or perceived actions from the citizens' perspective to improve their overall satisfaction. Consequently, despite the considerable body of literature on public opinion research in health services, there remains a notable research gap concerning the specific engagement of rural citizens in the Philippines. Limited studies have investigated the perspectives of rural populations, who face unique challenges related to healthcare accessibility and availability since existing research focuses on urban areas, leaving a gap in understanding the dynamics of health service utilization in rural and geographically isolated regions. Therefore, this study aims to address these research gaps and contribute valuable insights to healthcare delivery in the Philippines.

The present study used the Citizen Satisfaction Index System (CSIS), which was created primarily for the following purpose: to operate as a tool for gathering pertinent data in evaluating citizen satisfaction that can be utilized to set the agenda for the local governments' plans and goals for economic and human development[14], to collect and generate relevant citizens' feedback on the local government's service delivery performance, and the citizens' general satisfaction. This study aimed at comprehensively understanding the healthcare dynamics within a rural municipality in Samar, Philippines. It assessed the health profiles of citizens and their interactions with the available healthcare services. Subsequently, it endeavored to unravel citizens' awareness, availment, and satisfaction, and discerned any perceived need for further action concerning the diverse healthcare services provided within the community. The study also investigated the underlying reasons influencing citizens' decisions to avail specific healthcare services. Additionally, it determined a comprehensive evaluation of citizens' overall satisfaction levels and perceived need for action. Finally, the study distilled invaluable recommendations from the collective perspectives of the participants, providing a foundation for potential enhancements in the healthcare infrastructure.

The findings of this study would be crucial in informing policy interventions, capacity-building efforts, and targeted awareness campaigns aimed at improving healthcare services for rural populations. Ultimately, this research contributes by helping enhance the healthcare system, promoting health-for-all, and fostering equitable access to quality healthcare services in rural areas of the Philippines.

METHODS

Study Setting

The research was conducted in a fourth-class municipality in Samar Province. It is one of the 24 municipalities in the province, with 38 barangays categorically grouped into upland, lowland, and coastal barangays occupying a total land area of 9,362.24 hectares, or 1.67 % of the province's total land area of 559,100 hectares. According to the Philippine Statistics Authority[15], it has an estimated 28,230 residents. The national Department of Interior and Local Government (DILG) commissioned the research. This municipality was among the 24 selected for the CSIS implementation.

Research Design and Participants

This study employed an explanatory-sequential mixed methods study design using multi-stage sampling of 150 residents of the municipality to gather data on rural citizens' awareness, availment, and satisfaction with various health services. The sample size was obtained using the sample size determination formula for large population with confidence level of 95% with margin of error of ±8%.

Sampling Procedure and Data Collection

The study implemented the multi-stage random probability sampling. It warranted that a cross-section of citizens in an LGU was included in the sample. Inclusion criteria include: (1) at least 18 years old, (2) resident of the municipality for at least six months during the time of interview, (3) able to communicate and give consent to participate in the study.

Before the actual field interviews, the 30 sample spots with 150 respondents were identified using the proportional probability sampling allocation to generate sample barangays and obtain spots in proportion to the barangay population. Operationally, barangays with larger shares of the population were allocated with more spots and respondents. The 2015 Census of Population and Housing (CPH) of the Philippine Statistics Authority (PSA) was used as the basis for allocating the spots among barangays according to population share.

The following were considered in drawing sample barangays, sample spots, households, and respondents: 1) Barangays were randomly selected based on their share of population; 2) Number of sample spots were determined based on the share of population of the barangay; 3) Households were determined using interval sampling after a random starting point; and 4) Respondents were randomly selected through the Kish Grid.

For the qualitative segment, we purposefully selected 20 participants based on their non-availment and dissatisfaction with health services, with the final number determined by narrative saturation.

Data Collection Tools, Variables and Procedures

The survey questionnaire used in this study was the CSIS Survey Questionnaire, which was divided into five significant sections. Sections A and B assessed the sociodemographic and health profiles, respectively, while section C incorporated the Kish Grid technique to facilitate the random selection of respondents. Section D evaluated the participants' awareness, availment, satisfaction, and need for action regarding health services provided by the LGU. Section E solicited the citizens' overall satisfaction and perceived need for action. For the qualitative part, open-ended questions were asked, such as *"Why were you unable to avail of your LGU's vaccination for infants/children services?" and "Why were you not satisfied with your LGU's vaccination for infants/children services?"*

This study centers around four pivotal variables: awareness, availment, satisfaction, and need for action. Awareness pertains to respondents' understanding of the health services provided by the local government unit. Availment goes a step further, signifying actual engagement with these services, encompassing participation in programs, projects, and available offerings. Satisfaction measures the level of contentment derived from these interactions, providing insight into the overall impression and fulfillment experienced during the healthcare process. Lastly, need for action evaluates whether specific services necessitate targeted measures for improvement or reform. These variables serve as the cornerstone of our study, allowing for a comprehensive assessment of the impact of local government services on citizen satisfaction and the overall well-being of the community.

Ten field interviewers (FIs), under the direct supervision of two field supervisors (FS), conducted face-to-face interviews using structured questionnaires translated into Filipino. In their introduction, they informed the participants that they are interviewers of a study funded by the DILG and conducted by a university.

To ensure a complete response rate, FIs were informed that they could revisit respondents' residences if they were unavailable during the initial visit.

Quality assurance measures included direct supervision of FI interviews and random back-checking of 20% of interviews. The Project Manager and Field Supervisors ensured questionnaire completeness and logical consistency. Validation encompassed proper target household identification, address matching, response consistency checks, and confirmation of FI conduct. Field validation also addressed any skipped mandatory entries.

Data was collected from June to August 2018.

Data Management Plan and Analysis

The study's data management and analysis plan involved quantitative and qualitative data collection and analysis. The quantitative data from 150 respondents were analyzed using percentage scores for health indicators, overall service area percentage, citizens' overall satisfaction, and need for action percentage scores. These percentage scores were used to compare and contrast the four core concepts among the programs and service indicators. The percentage of citizens aware of services was based on the total sample of 150, and availment was based on the number of citizens who were aware. Satisfaction and need for action were based on the number of citizens who availed of the services. The percentage scores were converted to adjectival ratings as high or low, using a cut-off score based on the formula $0.50 + [0.98/ \sqrt{n})]$, where n refers to the base population.

Thematic analysis was used for the qualitative data collected through open-ended questions in the same survey questionnaire. The results from both the quantitative and qualitative data sets were integrated to provide a more comprehensive understanding of rural citizens' awareness, availment, and satisfaction with various health services.

To ensure the trustworthiness and rigor of the qualitative data collected through open-ended questions in Section D, the research team familiarized themselves with the data by reading and rereading the transcripts. Regular meetings were held to arrive at a consensus on the data analysis. Findings were also peer-reviewed by an expert on qualitative data analysis. To increase the transferability of the qualitative data, the study provided a detailed description of the context and participants' characteristics, which helped readers understand the findings' relevance to other settings or populations. Lastly, the research team conducted reflexivity by reflecting on their

biases, assumptions, and values that may have influenced the data collection and analysis procedures and discussing them with the peer debriefing group to minimize their impact on the findings.

Ethical Considerations

Before initiating data collection, the study received ethical approval from the Samar State University Ethics Review Board. Participants were provided with a clear understanding of the study's objectives, and their explicit consent was obtained, a component integrated into the initial section of the printed questionnaire. Additionally, participants retained the freedom to withdraw from the study at any point, and strict confidentiality measures were observed. This practice adhered to Chapter VI, Section 16 of the Data Privacy Act of 2012, ensuring that their information would be exclusively used for research purposes.

RESULTS

The respondents ranged from 18 to 80 years, with a mean age of 47.47. Most participants 73.33% (110/150) reported marriage. Approximately 24.67% (37/150) of the respondents had completed elementary education, while 22.67% (34/150) had completed high school education. Among the 150 participants, 87.33% (131/150) were not enrolled in any educational institution during the time of the interview. Furthermore, around 36.00% (54/150) of the respondents were employed, dedicating at least 40 hours per week to work within the barangay. Notably, a significant proportion of the participants, i.e. 55.70% (83/150), were involved in agricultural activities such as farming and fishing.

Health Profile of Study Participants

Table 1 presents the frequency and percentage of indicators related to illness and medical services among the 150 participants in the study. The data provide insights into the prevalence of diseases, patterns of seeking medical attention, and the utilization of public service providers. Some 43.33% (65/150) of the participants reported having an illness, while the remaining 56.67% (85/150) reported no sickness. Among the participants who reported an illness, the most common diseases were flu-like, which affected 40.00%(26/65) of the individuals, followed by hypertension and other cardiovascular diseases, affecting 18.46% (12/65).

Among those who experienced health problems, 73.85% (48/65) consulted with a medical provider, while 26.15% (17/65) did not seek professional medical help. Among the participants seeking medical attention, 81.25% (39/48) chose to receive care from a public service provider with 28.21% (11/48) seeking care from the health center within the barangay and 25.64% (10/48) from the health center outside the barangay.

Finally, among the participants who initially sought care from a public service provider, 28.21% (11/39) had a second consultation with another public service provider, while the remaining 71.79% (28/39) did not seek further care from any other public service provider. These findings highlight the prevalence of illnesses among the participants, with flu-like illnesses being the most commonly reported. Most of those seeking medical attention opted for public service providers, particularly the barangay health center.

Table 1. Profile of Study Participants Based on Health Complaints and Availment of Healthcare Services

Indicators	Frequency (n=150)	Percent (%)
Illness in the Past 12 months		
With illness	65	43.33
Without illness	85	56.67
Disease Experienced		
Flu-like illness	26	40.00
Hypertension and other cardiovascular diseases	12	18.46
Diabetes	3	4.62
Diarrhea	2	3.08
Dengue	2	3.08
Pregnancy-related	1	1.54
Measles/chicken pox	1	1.54
Others	11	16.92
No response / Unknown / Cannot remember	1	1.54
Consult with a Medical Provider		
Consulted	48	73.85
Did not consult	17	26.15
Consult with a Public Service Provider		
Consulted	39	81.25
Did not consult	9	18.75
Public Institution of First Medical Consult		
Barangay health center *(within the barangay)*	11	28.21
Barangay health center *(outside the barangay)*	10	25.64
Municipality-operated health center/hospital *(within the municipality)*	6	15.38
Province-owned/operated hospital *(within the province)*	3	7.69
State-owned hospital outside the province	3	7.69
Municipality-operated health center/hospital *(outside the municipality)*	2	5.13
State-owned hospital within the municipality	2	5.13
State-owned hospital within the province	2	5.13
Second consult with Another Public Service Provider		
Consulted	11	28.21
Did not consult	28	71.79

Vaccination for Infants and Children

Table 2 reflects that vaccination awareness for infants/children was high among participants, with an adjectival rating of 87.33% (131/150). However, only 48.85% (64/131) of those aware utilized this service, revealing a low availment rate. Despite this, satisfaction among those who utilized the service was high 96.88% (62/64), indicating that the service met the needs of those who chose to avail.

Table 2. Scoring and Adjectival Ratings (AR) on Participants' Awareness, Availment, Satisfaction, and Perceived Need for Action on Healthcare Services in the Local Setting

Healthcare Services	Awareness		Availment		Satisfaction		Need for Action	
	% (Score)	AR	% (Score)	AR	% (Score)	AR	% (Score)	AR
Vaccination for infants/children	87.33% (131/150)	High	48.85% (64/131)	Low	96.88% (62/64)	High	76.56% (49/64)	High
Prenatal/postnatal/childbirth services	72.67% (109/150)	High	38.53% (42/109)	Low	95.24% (40/42)	High	85.71% (36/42)	High
Free general consultations/ Access to secondary and/or tertiary healthcare	80.67% (121/150)	High	71.90% (87/121)	High	91.95% (80/87)	High	83.91% (73/87)	High
Free basic medicine program	80.00% (120/150)	High	69.17% (83/120)	High	86.75% (72/83)	High	87.95% (73/83)	High
Prevention and management of communicable diseases	22.67% (34/116)	Low	55.88% (19/34)	Low	94.74% (18/19)	High	57.89% (11/19)	Low
Basic dental/oral hygiene	51.33% (77/150)	Low	45.45% (35/77)	Low	88.57% (31/35)	High	82.86% (29/35)	High
Family planning/ Reproductive health	59.33% (89/150)	Low	38.20% (34/55)	Low	97.06% (33/34)	High	79.41% (27/34)	High

Table 3. Reasons for Availment, Satisfaction, and Dissatisfaction with the Different Healthcare Services in the Primary Care Setting

Healthcare Service	Formulated Meanings from Reasons Cited by Study Participants	
	Non-Availment	Dissatisfaction
Vaccination for infants/children	• Fear and misinformation • Insufficient facilities	• Issues with medicine availability and payment
Prenatal/postnatal/childbirth services	• Not currently pregnant • Hospital referral for delivery	
Free general consultations/Access to secondary and/or tertiary healthcare	• Financial constraints • Limited availability of medicines	• Lack of local healthcare providers • Geographic barriers • Limited healthcare visits • Medicine shortage
Free basic medicine program	• Lack of awareness or initiative to request medicines • Unavailability or inadequate distribution of medicines • Unequal distribution • Non-eligibility	• Medicine stock shortages • Limited access for specific groups
Prevention and management of communicable diseases	• Absence of personal illness • Lack of awareness and reach	• Inadequate facilities for specific illnesses
Basic dental/oral hygiene	• Absence of dental services • Lack of accessibility • Uncertainty about the availability of dental aid • Lack of specific dental treatments *(tooth extraction)*	• Fee for dental services
Family planning/ Reproductive health	• Personal choice of contraception • Dislike for contraception methods • Age-related factors • Absence of a spouse/partner • Lack of perceived need or qualification • Unawareness or non-availability of the program	• Preference for alternative options

On the other hand, the qualitative analysis exposes fear, misinformation about vaccines, and insufficient facilities (Table 3) as potential obstacles to vaccination efforts. Statements such as:

"*We're scared of having our child vaccinated because of the news of cases killed due to vaccines,*" and "*We are afraid of what happened to children during the dengvaxia times*",

imply that fear and misinformation surrounding vaccines may significantly impede vaccination efforts. This emphasizes the crucial need for addressing vaccine hesitancy and disseminating accurate information within the community. Additionally, the assertion that "*There [are] lacking facilities*" suggests that inadequate facilities and resources may pose barriers to healthcare access. Improving healthcare access should also involve addressing necessary resources and equipment availability. Moreover, participant responses revealed a common reason for dissatisfaction with the vaccination for infants/children. One notable concern was

the experience of paying for vaccinations and encountering medicine shortages. For example, a participant stated:

"*We paid for some, and there was a medicine shortage."*

Prenatal/Postnatal/Childbirth Services

For prenatal/postnatal/childbirth services, 72.67% (109/150) of participants were aware of this service, but with a low availment rate of only 38.53% (42/109). However, those who utilized this service reported high satisfaction at 95.24% (40/42). Lastly, 85.71% (36/42) agreed that the program requires further action to refine its implementation (Table 2). The low adjectival rating of most participants can be explained by the non-applicability of the services, such as for males and women who are not pregnant (Table 3). However, some participants said they were instead referred to a hospital of choice. The statement:

"I delivered at the hospital because I was referred there,"

implies that referrals from healthcare providers play an essential role in determining where patients receive healthcare services, such as childbirth at the hospital.

Free General Consultations/Access to Secondary and/or Tertiary Healthcare

Overall percentage scores for free general consultations or access to secondary/tertiary health care were high for awareness at 80.67% (121/150), availment at 71.90% (87/121), and satisfaction at 91.95% (80/87) (Table 2). Nevertheless, financial constraints and limited availability of medicines emerged as significant factors hindering program access, particularly for those who did not avail of the services (Table 3). Financial constraints were expected for some residents, as evidenced by responses such as:

"I don't have money for consultation fees," and "*I buy the medicine myself."*

Limited availability of medicines also presented a significant barrier to program access, as indicated by responses such as:

"*We're not able to avail it and [I] don't know why,"* and "*We just ask for a prescription, no medicine."*

Participants highlighted the need for doctors and a hospital in their locality and the challenges of accessing healthcare services due to geographic barriers, limited healthcare visits, and medicine shortages. Some participants emphasized the importance of closer healthcare services to their community, stating:

"*Our place should have a doctor,"* and "*We should have a hospital.*"

Lastly, participants expressed dissatisfaction with the quality of healthcare services they receive, citing issues such as infrequent visits by midwives and limited availability of medicines after consultations. For instance, participants stated:

"*Our midwife visits us only once a month,*" and "*Sometimes they do not have medicine to give after the consultation.*"

Free Basic Medicine or Low-Cost Program

Out of the 150 respondents, 80.00% (120/150) were aware of the government's provision of free basic medicine in the locality. Of those who were aware, 69.17% (83/120) availed of the medicines (Table 2).

The analysis of participants' responses revealed significant barriers that hindered their ability to avail of the Free Basic Medicine or Low-Cost Program. These barriers could be categorized into the following: lack of awareness or initiative to request medicine, unavailability or inadequate distribution of medicine, unequal distribution, and non-eligibility. Some participants mentioned that they could not avail of the program because they lacked the awareness or initiative to request medicine. They expressed that they had not yet asked for medicine or did not know they could avail of the program, as indicated by their statements of not learning about free medicine or not seeking consultation. A few comments were:

"*I do not get to have my checkup there*."

"*I did not yet ask for any."*

"I have not asked for medicine yet."

Unavailability or inadequate distribution of medicines was another reason cited. Several participants highlighted the issue of unavailable or insufficient supply of drugs. They reported instances where there were no medicines or limited availability, either at the center or in their local area, as in the following accounts:

"*…because there's no medicine sometimes*."

"*They only give a prescription."*

"There's no available medicine. We buy what was prescribed to us."

Concerns were raised regarding the fairness of the program's distribution, with participants emphasizing the need for equitable access to medications, irrespective of personal affiliations or relationships. Some commented:

"*The distribution must be fair and not just for those who are closely affiliated,*" and *"Those who were given free medicines were just selected."*

Lastly, ineligibility or non-qualification for the program was cited as another reason for non-availment. A few participants stated that they could not avail of the program because they were not yet senior citizens:

"I could not avail because [I'm] not yet a senior citizen."

This suggests that the program may have specific eligibility criteria.

For satisfaction with services, 86.75% (72/83) availed primarily because these were available and free. About 87.95% (73/83) agreed that there is a high need for action to improve this health service (Table 2). Two reasons that

emerged from the participants' dissatisfaction with the program were medicine stock shortages and limited access for specific groups (Table 3). Some participants expressed frustration with the program due to frequent instances of a lack of stocks or unavailability of medicines suitable for them. This theme highlights the issue of insufficient supply or inadequate management of medicine stocks. At other times, they receive prescriptions without actual provision of the medication such as stated below:

"There's no available medicine."

"We buy what was prescribed."

"They do not have medicines available."

"*There is no availment because [I'm] not yet a senior citizen."*

Prevention and Management of Communicable Diseases

Of the various health services evaluated in this study, those offered for preventing and managing communicable diseases received the lowest rating for awareness at 22.67% (34/116) and availment at 55.88% (19/34), as reflected in Table 2.

Based on the provided responses regarding their non-availment of the said health program, the participants identified the following reasons: absence of personal illness, inadequate facilities and health services, and lack of awareness and reach (Table 3). For the absence of personal illness, participants stated that they didn't have any infection or disease before the study, indicating a perceived lack of need for the program's services. This theme suggests that individuals not experiencing health issues may not actively engage with the program. Supporting statements were the following:

"I don't have an illness."

"We don't have such diseases."

Others expressed that they are not aware of the program or that it did not reach their community:

"*Because we do not know, we do not know about the program. It does not reach us."*

Even though there was low availment of the services, it is noteworthy that there was a high satisfaction rate of 94.74% (18/19) (Table 2). However, a small fraction of participants cited the lack of facilities for specific illnesses in health centers as one reason for dissatisfaction (Table 3).

Basic Dental/Oral Hygiene

The awareness and availment of oral health/dental services were low at 51.33% (77/150) and 45.45% (35/77), respectively. However, a high satisfaction rate of 88.57% (31/35) and a high need for action of 82.86% (29/35) were seen (Table 2). Lack of access to dental services, limited knowledge of available services, limited availability of tooth extraction, and limited availability of medicines were identified as barriers (Table 3). Statements such as

"*Sometimes the dentist is not around,"* and "*Because nothing came here yet,*"

suggest a lack of access to dental services in the area, possibly due to a shortage of dentists or a lack of dental clinics or facilities. Participants also expressed limited knowledge of available dental services, as evidenced by statements like:

"I do not know if there are services," and "*There's nothing like that here."*

This indicates a need for improved information dissemination and awareness campaigns about dental health services. Furthermore, statements like:

"I do not get tooth extraction," and "*I haven't had a tooth extraction,"*

suggest limited availability of tooth extraction services in the area, possibly due to a lack of dental equipment or resources.

Limited free medicine availability was another reason for non-availment, as indicated by statements such as:

"*There's a fee for medicines."*

Financial barriers to accessing dental services were also identified as a theme of dissatisfaction. Statements such as:

"*Tooth extraction must be free,*" and "*There's a fee for tooth extraction,*"

highlight the limited financial resources of patients, which may prevent them from seeking or delaying treatment.

Family Planning and Reproductive Health

High awareness of 59.33% (89/150) for the family planning and reproductive health program was observed (Table 2), but less than half of them availed of the services at 38.20% (34/55). Some participants preferred personal control for birth control. Limited awareness of programs and interventions was identified as another barrier, as indicated by the statement:

"*We are not aware that there's such a program."*

Interestingly, a high satisfaction rate of 97.06% (33/34) was seen among those who availed of the services (Table 2). However, some participants expressed dissatisfaction with the options offered, stating:

"*I do not like it. We bought instead*."

This suggests that consumer preferences play a significant role in accessing and using healthcare interventions. Nevertheless, 79.41% (27/34) of those who availed of the services believed that further action was needed, indicating the community's desire for ongoing improvement.

Action Grid for Health Services

Figure 1 reflects the action grid generated from the findings to improve the quality of healthcare service delivery in the municipality, with services placed in different quadrants based on their satisfaction level and need for action. Quadrant 1 includes services such as vaccination, general consultations, and family planning, which had high satisfaction scores but also high need for action, indicating room for improvement. Preventing and managing diseases exceeded expectations

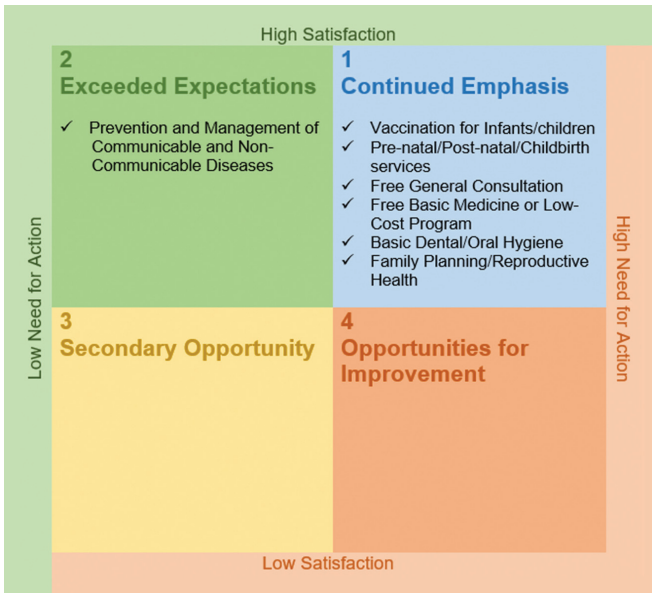

Figure 1. Action Grid for Health Services.

and fell in Quadrant 2, with low need for action, suggesting these services are already meeting community needs. Policymakers may focus on enhancing Quadrant 1 services while maintaining Quadrant 2 services.

Overall Satisfaction and Perceived Need for Action

The citizens' overall satisfaction with health programs and services was assessed comprehensively, regardless of their awareness or availment of these services. The data indicates that 88.00% (132/150) of the respondents expressed satisfaction with the local government's health programs and services. This figure is slightly lower, approximately 5.33%, than the mean satisfaction rate across all services at 93.33% (140/150). Moreover, majority (91.33%; 137/150) of respondents in the municipality believed that the health services and programs need further action. This proportion surpasses the individual proportions for each specific health service or program.

In summary, the community expressed a strong desire for enhanced and improved health services provided by the local government.

Overall Recommendations from Study Participants

Respondents were also asked for their top recommendation for health services in the municipality. Analysis and clustering of responses provide the following emerging themes: (*1) Accessibility and availability of medications, (2) government support and project allocation, (3) healthcare personnel and facilities, (4) disease-specific treatment and prevention, (5) infrastructure and sanitation, (6) continuity and improvement of services, (7) unity and fairness, and (8) health education and prevention.*

Accessibility and Availability of Medication: Participants expressed the need for a consistent supply of medication, including vitamins, and the importance of having proper checkups and medical services readily available in barangays.

Government Support and Project Allocation: Participants emphasized the need for increased government support, such as providing more medicines to barangays and allocating additional projects specifically for healthcare services.

Healthcare Personnel and Facilities: Participants highlighted the need for healthcare professionals like doctors and midwives to be present in barangays regularly. They also mentioned the importance of having well-equipped health centers and the availability of essential medical equipment.

Disease-Specific Treatment and Prevention: Participants suggested providing different medications tailored to specific illnesses and increased health information dissemination to educate the community on disease prevention.

Infrastructure and Sanitation: Participants emphasized the importance of having proper sanitation facilities, such as toilets, in each household within the barangay.

Continuity and Improvement of Services: Participants expressed the desire to continuously improve and expand existing healthcare programs and services, and the need for ongoing support and resources.

Unity and Fairness: Some participants raised concerns about political bias and favoritism in the distribution of healthcare resources. They emphasized the importance of unity, fairness, and impartiality in delivering services to the community.

Health Education and Prevention: Participants highlighted the importance of promoting health education and preventive measures to reduce the risk of illnesses.

DISCUSSION

This study quantified the citizens' awareness, availment, and satisfaction with various health services which is necessary to identify the gaps and challenges in healthcare access and utilization in rural communities in the Philippines.

There were significant gaps in the participants' awareness and availment of the services. Results showed low awareness in almost half of the services such as preventing and managing communicable diseases, basic dental/oral hygiene, and family planning/reproductive health. Among those who were aware, there was also low availment in the majority (5/7) of the following services: vaccination for infants and children, prenatal/postnatal/childbirth services, on top of the abovementioned three.

The low availment rates could be attributed to several factors. One possible reason is the lack of accessibility and availability of healthcare services in the community. It could be due to a shortage of healthcare personnel, inadequate healthcare facilities, unavailability of medicines, and poor infrastructure. Even if the services were available, some participants could not avail themselves due to financial

constraints. In such cases, the cost of healthcare services may be prohibitive, and participants may opt not to avail themselves of the services.

Fear and misinformation surrounding healthcare services, particularly vaccines, could also contribute to the low availment rates. Participants who need to be more informed about the benefits of healthcare services or who have heard negative news about healthcare services may be hesitant to avail of them.

High awareness and high availment were seen in only two services, i.e., free general consultations and the free basic medicine program. Interestingly, while there was high vaccination awareness, availment was below 50%. This reflects vaccine hesitancy primarily from fear of side effects or death, a notion that participants allegedly got from hearsay or a news source. This is not surprising, as vaccination in the Philippines has generally dropped since the Dengvaxia scare in 2017, pushing the already poor immunization rates to an all-time low.[16-19]

Similarly, despite high awareness, there was low availment of obstetric services. While this can be explained by the non-applicability of the service to the participant (e.g., male, nonpregnant), referral to a hospital was also cited as a reason. This may mean that most prenatal/postnatal/childbirth services still need to be more available in rural areas than centralized in more urbanized health centers away from the locality. Previous studies have shown that only 51.1% of women use effective contraception, with 55.9% expressing concerns about modern methods. As low as 2.1% of those who never used and 0.6% of former users consider using a modern method despite the availability of long-term reversible methods in 68% and long-term contraception in 98% of the facilities.[20] Culture, traditional gender roles and perceptions, and religion are common barriers.[21]

While the results suggested that there was high satisfaction among the services assessed, we cannot conclude that the services were indeed completely satisfactory considering that the findings on availment of some services were low. Moreover, there was also a high perceived need for action. The top recommendations provided by the participants centered on improving accessibility and availability of medications, increasing government support and project allocation, adding healthcare personnel and facilities, providing disease-specific treatment and prevention, improving infrastructure and sanitation, ensuring continuity and improvement of services, promoting unity and fairness, and increasing health education and prevention efforts.

These findings align with previous studies, highlighting the importance of improving healthcare access, quality, and equity. For example, a survey in 2020, found that access to healthcare services was a significant concern for residents in rural communities in Ghana.[22] Similarly, a study in Thailand found that healthcare access and quality were key factors in determining overall satisfaction with healthcare services.[23]

The impact of these findings is significant, as they provide valuable insights into the rural community's perceptions and needs regarding healthcare services. By addressing these concerns, local governments can improve the quality and accessibility of healthcare services, ultimately leading to better health outcomes for the community. Theoretical implications of the findings include the need for healthcare providers to adopt a patient-centered approach such as HBM, which considers the community's perceptions and needs. Practical implications require local governments to allocate resources and implement policies that address the concerns raised by the community.

Further actions that can be done include health promotion campaigns to increase citizen's awareness and availment. Best practices may be continued while increasing the coverage to more citizens in the bigger population.

The findings of this study provide valuable insights into the state of rural healthcare in Samar, Philippines. While the specific context of the study pertains to a rural municipality in Samar, the issues identified, such as the need for increased awareness in certain health areas and challenges in accessing healthcare facilities, may resonate with similar rural settings in the Philippines and potentially in other regions with comparable socio-economic and healthcare infrastructure profiles. Therefore, while the study's direct applicability may be to this specific municipality, the broader themes and challenges identified may have relevance to rural healthcare contexts beyond this specific location.

CONCLUSION

The study's findings indicate a generally high level of satisfaction among citizens with the provided health services. However, there is a clear need for increased awareness regarding communicable disease prevention, basic oral hygiene practices, and family planning/reproductive health. Additionally, it is crucial to promote the utilization of services such as infant/child vaccinations, prenatal/postnatal/childbirth care, communicable disease management, basic dental/oral hygiene, and family planning.

Notably, the free general consultations and the free basic medicine program have shown notable success with high awareness and utilization rates. Nonetheless, barriers to accessing the health center, along with a demand for improved facilities and medical supplies, have been identified as primary reasons for underutilization.

The findings of our study may potentially provide valuable guidance for policymakers and healthcare providers in enhancing the effectiveness and reach of healthcare programs in Philippine rural communities.

Limitations of the Study

The study may be influenced by several potential biases and imprecision. These include sampling bias due to the multi-stage approach, possible social desirability bias in

reporting satisfaction, potential recall bias regarding specific health service experiences, and the likelihood of response bias between participants and non-participants. Additionally, language and cultural nuances may impact responses, and limited questionnaire availability in a single language could introduce language bias. Challenges in healthcare access may indicate selection bias, and face-to-face interviews may introduce interviewer bias. It's crucial to acknowledge that findings pertain specifically to the rural municipality in Samar, Philippines, limiting generalizability to other regions or populations.

Acknowledgments

The authors would like to thank the Department of Interior and Local Government (DILG) for choosing Samar State University (SSU) as one of the country's Learning Resource Institutes. The authors also want to thank the Local Chief Executive, the Municipal Local Government Operations Officer, and the study participants.

Statement of Authorship

All authors certified fulfillment of ICMJE authorship criteria.

Author Disclosure

All authors declared no conflicts of interest.

Funding Source

The study was funded by the Department of Interior and Local Government.

REFERENCES

1. Shi L. The impact of primary care: a focused review. Scientifica (Cairo). 2012;2012:432892. doi: 10.6064/2012/432892. PMID: 24278694; PMCID: PMC3820521.
2. Collado ZC. Challenges in public health facilities and services: evidence from a geographically isolated and disadvantaged area in the Philippines. Journal of Global Health Reports. 2019;3. doi:10.29392/joghr.3.e2019059
3. Flores LJY, Tonato RR, Dela Paz GA, Ulep VG. Optimizing health facility location for universal health care: A case study from the Philippines. PLoS One. 2021 Sep 9;16(9):e0256821. doi: 10.1371/journal.pone.0256821. PMID: 34499680; PMCID: PMC8428763.
4. Obermann K, Jowett M, Kwon S. The role of national health insurance for achieving UHC in the Philippines: a mixed methods analysis. Glob Health Action. 2018;11(1):1483638. doi: 10.1080/16549716.2018.1483638. PMID: 29914319; PMCID: PMC6008596.
5. Abraham C, Sheeran P. The health belief model. In: Ayers S, Baum A, McManus C, Newman S, Wallston K, Weinman J, et al., eds. Cambridge Handbook of Psychology, Health and Medicine.. Cambridge University Press; 2001. pp. 97–102. doi:: 10.1017/cbo9780511543579.022.
6. Yao R, Zhang W, Evans R, Cao G, Rui T, Shen L. Inequities in health care services caused by the adoption of digital health technologies: scoping review. J Med Internet Res. 2022 Mar 21;24(3):e34144. doi: 10.2196/34144. PMID: 35311682; PMCID: PMC8981004.
7. Alshrbaji M, Mohammed M, Shamayleh A. The impact of total quality management and perceived service quality on patient satisfaction in healthcare: a systematic review. 2022 Advances in Science and Engineering Technology International Conferences (ASET), Dubai, United Arab Emirates. 2022. doi: 10.1109/aset53988.2022.9734872.
8. Rahman M, Rana S, Hoque MN, Rahman MK. Brand perception of halal tourism services and satisfaction: the mediating role of tourists' attitudes. Int J Tour Sci. 2019 Jan 2;19(1):18–37. doi: 10.1080/15980634.2019.1592987.
9. Fatima T, Malik SA, Shabbir A. Hospital healthcare service quality, patient satisfaction and loyalty. Int J Qual Reliab Manag. 2018 Jun 4;35(6):1195–214. doi: 10.1108/ijqrm-02-2017-0031.
10. Hager E, Odetokun IA, Bolarinwa O, Zainab A, Okechukwu O, Al-Mustapha AI. Knowledge, attitude, and perceptions towards the 2019 Coronavirus Pandemic: A bi-national survey in Africa. PLoS One. 2020 Jul 29;15(7):e0236918. doi: 10.1371/journal.pone.0236918. PMID: 32726340; PMCID: PMC7390376. Erratum in: PLoS One. 2021 Feb 17;16(2):e0247351. doi: 10.1371/journal.pone.0247351. PMID: 33596272.
11. Mallari E, Lasco G, Sayman DJ, Amit AML, Balabanova D, McKee M, et al. Connecting communities to primary care: a qualitative study on the roles, motivations and lived experiences of community health workers in the Philippines. BMC Health Serv Res. 2020 Sep 11;20(1):860. doi: 10.1186/s12913-020-05699-0. PMID: 32917203; PMCID: PMC7488850.
12. Liwanag HJ, Wyss K. Optimising decentralisation for the health sector by exploring the synergy of decision space, capacity and accountability: insights from the Philippines. Health Res Policy Syst. 2019 Jan 10;17(1):4. doi: 10.1186/s12961-018-0402-1. PMID: 30630469; PMCID: PMC6327786.
13. Mutyambizi C, Mokhele T, Ndinda C, Hongoro C. Access to and satisfaction with basic services in informal settlements: results from a baseline assessment survey. Int J Environ Res Public Health. 2020 Jun 19;17(12):4400. doi: 10.3390/ijerph17124400. PMID: 32575370; PMCID: PMC7345018.
14. Ma J, Stahl L. A multimodal critical discourse analysis of anti-vaccination information on Facebook. Libr Inf Sci Res. 2017 Oct;39(4):303–10. doi: http://dx.doi.org/10.1016/j.lisr.2017.11.005.
15. Census of population [Internet]. Gov.ph. [cited 2019 Dec]. Available from: https://psa.gov.ph/statistics/census/2015-census-of-population
16. Saevi T. Phenomenology in educational research: controversies, contradictions, confluences. Pädagogische Erfahrung. 2015;13–31. doi: http://dx.doi.org/10.1007/978-3-658-06618-5_2.
17. Dayrit MM, Mendoza RU, Valenzuela SA. The importance of effective risk communication and transparency: lessons from the dengue vaccine controversy in the Philippines. J Public Health Policy. 2020 Sep;41(3):252-67. doi: 10.1057/s41271-020-00232-3. PMID: 32518285.
18. Fatima K, Syed NI. Dengvaxia controversy: impact on vaccine hesitancy. J Glob Health. 2018 Dec;8(2):010312. doi: 10.7189/jogh.08.020312. PMID: 30410732; PMCID: PMC6214489.
19. Lasco G, Yu VG. Communicating COVID-19 vaccines: lessons from the dengue vaccine controversy in the Philippines. BMJ Glob Health. 2021 Mar;6(3):e005422. doi: 10.1136/bmjgh-2021-005422. PMID: 33653732; PMCID: PMC7929792.
20. Nagai M, Bellizzi S, Murray J, Kitong J, Cabral EI, Sobel HL. Opportunities lost: Barriers to increasing the use of effective contraception in the Philippines. PLoS One. 2019 Jul 25;14(7):e0218187. doi: 10.1371/journal.pone.0218187. PMID: 31344054; PMCID: PMC6657820.
21. Alspaugh A, Barroso J, Reibel M, Phillips S. Women's contraceptive perceptions, beliefs, and attitudes: an integrative review of qualitative research. J Midwifery Womens Health. 2020 Jan;65(1):64-84. doi: 10.1111/jmwh.12992. PMID: 31135081.
22. Ashiagbor G, Ofori-Asenso R, Forkuo EK, Agyei-Frimpong S. Measures of geographic accessibility to health care in the Ashanti Region of Ghana. Sci Afr. 2020 Sep;9:e00453. doi: 10.1016/j.sciaf.2020.e00453.
23. Sarker M, Kasem N, Wong BKM, Moghavvemi S. Conceptualizing essential components affecting health tourism satisfaction in Asia: Does context matter? J Qual Assur Hosp Tour. 2022;23(5):1107–35. doi: 10.1080/1528008x.2021.1955237.