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Dual Perspective Assessment on the Quality of Health System in Rosario, Batangas

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Abstract
In this study, the researcher assessed the quality of the health system and the significant differences between health workers and the community in Rosario, Batangas. The specific objectives were to evaluate the quality of health services in terms of service delivery, health workforce, health information, medical products, vaccines and technologies, financing, and leadership/governance. The study also measured the significant differences in responses between health workers and the community and identified the challenges they encountered. Based on the results, strategies were proposed to address the problems identified in the study. Descriptive and Quantitative Research Designs have been used since both are most appropriate to assess quality of health system. A total of 96 health workers and 384 community residents were identified as the subjects of this study. The findings revealed that while the overall quality of healthcare services was rated as satisfactory, there were significant differences between health workers and the community in terms of service delivery, medical products, vaccines and technologies, and leadership/governance. However, there were no significant differences in the areas of health workforce, health information, and financing. Both health workers and the community encountered challenges in assessing the quality of the health system in Rosario, Batangas. Thus, a strategy was proposed to enhance and improve the quality of healthcare in the region.

Keywords: Health System, Service Delivery, Health Workforce, Health Information, Medical vaccines, products and technologies, financing and Leadership/governance,

INTRODUCTION

The healthcare system is a crucial determinant of the overall health and well-being of a population. Healthcare services are often concentrated in urban areas, leaving rural communities with limited access to medical facilities and specialists. Many healthcare facilities, particularly in rural areas, lack the necessary infrastructure and medical equipment to provide quality care. The quality of care can vary significantly between public and private healthcare facilities and even across different regions. Additionally, there is often insufficient emphasis on preventive care and public health initiatives, leading to a higher prevalence of preventable diseases.

Public healthcare services are provided by the government through the Department of Health (DOH) and local government units. These services are generally aimed at providing healthcare to low-income and marginalized populations. Public hospitals and health centers offer medical services, preventive care, and vaccinations at affordable or no cost. At the grassroots level, Rural Health Units (RHUs) and

barangay health centers provide basic healthcare services and health education to local communities. These centers are an essential part of primary healthcare in rural areas.

The private healthcare sector in the Philippines significantly contributes to providing a wide range of medical services, from basic care to advanced treatments. Private hospitals, clinics, and medical practitioners serve individuals who can afford private healthcare services, offering higher standards and shorter wait times compared to public facilities (Clarke et al., 2019).

However, the healthcare system in the country faces challenges such as limited access to quality healthcare services in rural areas, unequal distribution of resources, underfunding of public facilities, and a shortage of healthcare professionals, particularly doctors and nurses (Thapa et al., 2022). These challenges lead to heavy workloads and potential gaps in patient care, despite efforts towards universal healthcare coverage. The COVID-19 pandemic has further strained the healthcare system, highlighting the need for increased capacity, improved coordination between public and private sectors, and investments in medical research and infrastructure (Clarke et al., 2019). The pandemic underscored the necessity for enhanced coordination and resource allocation to effectively manage the increased pressure on the system.

Efforts to tackle these challenges include developing patient-friendly drug pricing policies to enhance affordability (Saeed et al., 2019). Moreover, public-private partnerships (PPPs) have been identified as effective mechanisms to alleviate the financial burden on the public sector and encourage private investment in healthcare infrastructure (Alasiri & Mohammed, 2022). In resource-constrained settings, engaging the private sector is crucial for ensuring universal health coverage.

The Municipality of Rosario in the Province of Batangas faces similar healthcare challenges. These include issues related to overcrowded healthcare facilities and the unequal distribution of healthcare personnel. Hence, this study made an investigation of the status of healthcare services in the locality.

MATERIALS AND METHODS

Research Design

The researcher utilized *Descriptive Comparative Research Method that concurrently conducted quantitative and qualitative research procedures.*

For the quantitative aspect, the study collected numerical data to evaluate the healthcare system's quality. This involved using statistical tools to analyze the frequency, distribution, and patterns of specific variables related to healthcare quality. On the qualitative side, the study gathered descriptive information about the challenges and issues faced by health workers and the community. This included collecting subjective accounts and experiences to gain deeper insights into the healthcare system's operational realities and the impact on those involved. Together, these methods provided a holistic view of the healthcare system's quality in Rosario, Batangas, integrating both measurable data and personal experiences.

Thereafter, these data were used by the researcher to identify and describe the highest and lowest assessment on the quality of health system and achieving the study's objectives, as they provided valuable insights into various topics such as perceptions of service delivery, the health workforce, health information, finance, and leadership/governance. Hence, after completing both analyses, the researcher compared the results to draw an overall conclusion.

Respondents

A total of 384 out of 131,231 community residents and 96 out 127 healthcare workers were asked to par-

ticipate by answering the researcher-made questionnaire using Raosoft computation at .05 level of significance. They were identified using stratified random sampling, a decision-making sampling method that selects the best samples for the study. With this sampling method, strata—smaller subgroups—are created from the population. To ensure a diverse and representative sample. The selection criteria were designed to encompass a wide range of individuals from various barangays, reflecting different age groups, genders, socioeconomic statuses, and educational levels.

Table 1 Respondents of the Survey questionnaire Healthcare Workers

Facility	Population	Sample
1. Mahal na Virgeng Maria Sto. Rosario District Hospital	86	65
2. Rural Health Unit 1	25	19
3. Rural Health Unit 2	16	12
GRAND TOTAL	127	96

Table 2 Respondents of the Survey questionnaire Community

ROSARIO RHU 1

No.	BARANGAY	TOTAL	SAMPLE
1	Bagong Pook	6,416	19
2	Barangay A	1,313	4
3	Barangay B	1,368	4
4	Barangay C	763	3
5	Barangay D	921	4
6	Barangay E	1,928	6
7	Bulihan	4,194	12
8	Cahigam	2,818	8
9	Colongan	2,174	6
10	Itlugan	5,189	15
11	Leviste (Tubahan)	1,874	5
12	Maalas-as	2,428	7
13	Malaya	1,877	5
14	Marilag	3,373	10
15	Masaya	4,723	13
16	Mavalor	1,640	5
17	Namuco	6,021	18
18	Namunga	2,824	8
19	Quilib	6,469	19
20	San Carlos	3,884	11

ROSARIO RHU 2

No.	BARANGAY	TOTAL	SAMPLE
1	Alupay	4,402	13
2	Antipolo	755	3
3	Balibago	2,478	7
4	Bayawang	1,441	4
5	Baybayin	3,311	10
6	Calantas	1,760	6
7	Lumabangan	1,931	6
8	Mabato	2,250	7
9	Mabunga	1,868	6
10	Macalamcam A	1,201	4
11	Macalamcam B	1,683	5
12	Maligaya	1,051	3
13	Matamis	695	2
14	Mayuro	2,651	8
15	Nasi	2,259	7
16	Natu	2,882	9
17	PalakpaK	959	2
18	Pinagsibaan	3,619	10
19	Putingkahoy	3,062	8
20	Salao	2,181	6

21	San Ignacio	2,100	14
22	San Jose	2,458	7
23	San Roque	4,704	14
24	Santa Cruz	3,344	10
25	Timbungan	2,275	7
	TOTAL	80,075	234

21	San Isidro	4,195	12
22	Tiquiwan	1,920	5
23	Tulos	2,602	7
	TOTAL	51,156	150

Table 3 Profile Characteristics of the Respondents

Age group	Healthcare Workers		Community	
	f	%	f	%
20-27	6	6.3 %	97	25.3 %
27-35	30	31.3 %	123	32.0 %
35-above	60	62.5 %	164	42.7 %
Total	**96**	**100%**	**384**	**100%**
Gender	**Healthcare Workers**		**Community**	
	f	**%**	**f**	**%**
Female	52	54.2 %	261	68.0 %
Male	44	45.8 %	123	32.0 %
Total	**96**	**100%**	**384**	**100%**
Civil Status	**Healthcare Workers**		**Community**	
	f	**%**	**f**	**%**
Single	28	29.2 %	121	31.5 %
Married	62	64.6 %	245	63.8 %
Widowed	5	5.2 %	10	2.6 %
Separated	1	1.0 %	8	2.1 %
Total	**96**	**100%**	**384**	**100%**
Employment Status	**Healthcare Workers**		**Community**	
	f	**%**	**f**	**%**
Casual	3	3.1 %	116	30.2 %
Contractual	13	13.5 %	66	17.2 %
Probationary	18	18.8 %	28	7.3 %
Regular	62	64.6 %	172	44.8 %
None	0	0%	2	0.5 %
Total	**96**	**100%**	**384**	**100%**

Educational Level	Healthcare Workers		Community	
	f	%	f	%
Elementary	0	0%	36	9.4 %
Highschool	6	6.3 %	175	45.6 %
Bachelor' s Degree	78	81.3 %	125	32.6 %
Vocational	12	12.5 %	48	12.5 %
Total	**96**	**100%**	**384**	**100%**

Table 3 illustrates the frequency distribution and percentage distribution of the respondents' demographic profiles**.** The distribution of respondents based on gender indicates that the majority of the samples collected from the survey were from female respondents, comprising 54.2% of health workers and 68% of community members, while the remaining responses were from male respondents. This distribution suggests that the respondents can provide the researcher with sufficient information based on their behavioral patterns, which can be instrumental in identifying and making a thorough assessment of the study. Regarding the distribution of respondents based on employment status, the majority of the samples collected from the survey came from regularly employed individuals, with 64.6% being health workers and 44.8% being community respondents.

Lastly, concerning the distribution of respondents based on educational attainment, the majority of the samples collected from the survey were from individuals with bachelor's degrees, comprising 81.3% of health workers, while 45.6% of community respondents had attained a high school level of education.

In addition, a total of 10 participants were asked to partake in the focus group discussion. Wherein, the respondents were divided into two groups, namely: (1)
residents of Rosario, Batangas, and (2) LGU employees to determine the challenges encountered by healthcare system.

Table 4 Participants of the Focus Group Discussion

Code	Occupation	Code	Occupation
HW1	**Nurse**	**Resident 1**	**Housewife**
HW2	**Medical Technologist**	**Resident 2**	**STL**
HW3	**Midwife**	**Resident 3**	**Service Worker**
HW4	**Nursing Attendant**	**Resident 4**	**Tricycle Driver**
HW5	**Pharmacist**	**Resident 5**	**None unemployed**

Data Gathering Instrument

The researcher used a research-made survey questionnaire as the main instrument that assessed the quality of health system in Rosario, Batangas.

The first part was about the profile of the respondents consisting of Age, Sex, Civil Status, Work level and Educational Attainment, While, the second part of the questionnaire was about the assessment on the quality of the health system in Rosario, Batangas in terms of service delivery, health workforce, health information, medical products, vaccines and technologies, financing, and leadership/governance.
Both parts of the questionnaire were answered by checking the appropriate column that corresponds to their respective responses. The second part contained portions that assessed the ratings from 1 to 7, 1 being the lowest and 7 being the highest. The scoring of the responses on Part II of the research instrument utilized a 1 to 7 scale.

Table 5 Scoring of the Responses

Scale	Mean	Interpretation
1	1.00-1.49	Very Poor
2	1.50-2.49	Poor
3	2.50-3.49	Below Average
4	3.50-4.49	Average
5	4.50-5.49	Good
6	5.50-6.49	Very Good
7	6.50-7.00	Excellent

Moreover, to gather the information necessary to identify the issues challenges encountered by health worker and community, a focus group discussion (FGD) was conducted. FGD was utilized as a tool in collecting data during consultative workshops and forums. Aided by this, the researcher determined some possible solutions to the identified issues and challenges in the research. The researcher also sought the help of experts to strengthen and maximize the relevance of the instruments used in the study. Focus Group Discussions (FGD) were conducted to gain deeper insights into the experiences and perceptions of the community regarding the health system. These discussions complement the quantitative data collected through the questionnaire, providing a more comprehensive understanding of the healthcare environment in Rosario, Batangas. The FGD involved participants from varied demographics to ensure diverse perspectives are represented. The discussions were guided by a set of semi-structured questions focusing on the participants' experiences with service delivery, health workforce, information, medical products, vaccines, technologies, financing, and leadership and governance in the health system.

Data Gathering Procedure

To assure that the instrument was valid, the proponent presented a letter of request to allow the researcher to conduct a dry- run procedure. Selected 100 respondents from San Jose Rural Health Unit, were asked to fill out the questionnaire for reliability.
After getting the results, the researcher proceeded to the actual survey. After the approval, the researcher then distributed the questionnaire to health workers and community respondents in Rosario, Batangas
The data gathered were tabulated, summarized and tallies for further analysis. All entries were double checked to ensure the accuracy and reliability of the results.

Statistical Treatment of Data

All the data gathered using the questionnaire were incorporated into a master tally so that the response in each item could be easily analyzed. The data gathered were interpreted and analyzed through

Frequency/Percentage, Mean, Paired T-test. On the other hand, to analyze the data gathered in the focus group discussion, themes and sub-themes were applied.

RESULTS AND DISCUSSIONS

Table 6 presents the weighted mean and its corresponding verbal interpretation in assessment on the quality of health system in terms of Service Delivery. It can be observed from the table that the respondents seem highly satisfied with recommending healthcare services in Rosario, Batangas to others topping the list at 5.76 very good rating secondly to the topping list with a 5.72 mean responsive to the needs of patients and their community. However, the health worker respondents assessed in bottom list at 5.57 mean effective in providing quality care to patients and 5.59 mean delivered in an efficient and timely manner and effective in providing quality care to patients.

Table 6 Assessment on the Quality of Health System in Terms of Service Delivery

Items	**Health Workers**		**Community**	
	Weighted Mean	**Verbal Interpretation**	**Weighted Mean**	**Verbal Interpretation**
Healthcare services are affordable and within the financial reach of most residents of Rosario, Batangas.	5.64	Very Good	5.86	Very Good
Healthcare services in Rosario, Batangas are effective in providing quality care to patients.	5.57	Very Good	5.85	Very Good
Healthcare services in Rosario, Batangas are delivered in an efficient and timely manner.	5.59	Very Good	5.87	Very Good
Healthcare services in Rosario, Batangas are provided in an equitable manner, regardless of a patient's social or economic status.	5.7	Very Good	5.9	Very Good
Healthcare services in Rosario, Batangas are patient-centered and focus on providing care that meets the individual needs of each patient	5.66	Very Good	5.94	Very Good
Healthcare services in Rosario, Batangas are responsive to the needs of patients and the community.	5.72	Very Good	5.91	Very Good
How likely are you to recommend healthcare services in Rosario, Batangas to others?	5.76	Very Good	5.95	Very Good
Total	**5.66**	**Very Good**	**5.9**	**Very Good**

While in community respondents, recommending healthcare services to others topping list at 5.95 mean followed by patient-centered and focus on providing care that meets the individual needs of each patient at 5.94 mean However, in bottom list at 5.85 mean scoring delivered in an efficient and timely manner and 5.86 mean scoring are affordable and within the financial reach of most residents of Rosario, Batangas. From the results of the focus group discussion, specifically from Nurse healthworker transcription *"Epektibo naman ang paghahatid serbisyo sa sobra dami ng pasyente kinakailangan makulang ang madagdagan ang mga tao. Sa ngyon kinakaya na lamang para maihatid ang mga pangangailangan."* (It is also effective to deliver services to the amounts of patients needed to increase

nurses are lacking In it is enriched only to serve the needs.). Having this said, healthcare service delivery in Rosario Batangas is effective in providing quality care of patient despite of challenges encountered by our healthcare worker. Hence, this assessment indicates overall contentment with healthcare accessibility, quality, and approach in Rosario, Batangas

Table 7 Assessment on the Quality of Health System in Terms of Health Workforce

Items	Health Workers		Community	
	Weighted Mean	**Verbal Interpretation**	**Weighted Mean**	**Verbal Interpretation**
The healthcare professionals in Rosario, Batangas are knowledgeable and competent in their respective fields.	5.82	Very Good	6.03	Very Good
The healthcare workforce in Rosario, Batangas provides timely and efficient services to the community.	5.77	Very Good	6.06	Very Good
Access to healthcare facilities and services in Rosario, Batangas is convenient for residents.	5.75	Very Good	5.85	Very Good
The healthcare workforce in Rosario, Batangas effectively communicates with patients and provides clear explanations about their health conditions and treatment options.	5.78	Very Good	5.86	Very Good
How well do you feel the provider listened to your health concerns?	5.88	Very Good	5.89	Very Good
Overall, I am satisfied with the quality of healthcare services provided by the healthcare professionals in Rosario, Batangas.	5.85	Very Good	5.84	Very Good
Total	**5.81**	**Very Good**	**5.92**	**Very Good**

Table 7 shows Assessments of the Respondents on the Quality of Health System in Rosario, Batangas in terms of Health Workforce in Rosario, Batangas. The health worker respondents expressed high levels of satisfaction, with a mean score of 5.88 indicating satisfaction with how healthcare providers listened to their health concerns, and a mean score of 5.85 indicating satisfaction with the quality of healthcare services provided, both ranking as the highest scores. On the contrary, in the lower rankings, access to healthcare facilities and services in Rosario, Batangas received a mean score of 5.75, indicating that it is perceived as less convenient for residents, and a mean score of 5.77 indicating that it provides less timely and efficient services to the community according to health workers.

In contrast, community respondents expressed similarly high levels of satisfaction, with a mean score of 6.06 indicating satisfaction with the timeliness and competence of healthcare professionals, and a mean score of 6.03 indicating satisfaction with their knowledge and competence in their respective fields, both ranking at the top. However, in the lower rankings, satisfaction with the quality of healthcare services provided by healthcare professionals in Rosario, Batangas received a mean score of 5.84, and access to healthcare facilities and services received a mean score of 5.85, indicating that residents find them less convenient.

Based from the result of the focus group discussion, specifically from the health worker transcription *"Kapag specialista doctor ang kailangan wala kami.kailangan nila maghanap."*(When specialists doctor needed, they need to look for them.") Having this said, key challenges limited access health care

services due to specialist doctors. Overall, the contentment with health workforce gathered with "very good" verbal interpretation.

Table 8
Assessment of the Respondents on the Health Information in Rosario, Batangas

Items	Health Workers		Community	
	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
The healthcare system in Rosario, Batangas provides clear and accessible health information about available healthcare services.	5.72	Very Good	5.82	Very Good
Health Information about healthcare facilities, services, and healthcare providers in Rosario, Batangas is readily available when needed.	5.75	Very Good	5.71	Very Good
The healthcare system in Rosario, Batangas effectively communicates important health-related updates and guidelines to the community.	5.74	Very Good	5.63	Very Good
The healthcare system in Rosario, Batangas is transparent about its performance and outcomes, such as patient satisfaction and health statistics.	5.71	Very Good	5.63	Very Good
I trust the health information provided by the healthcare system in Rosario, Batangas.	5.68	Very Good	5.78	Very Good
Total	**5.72**	**Very Good**	**5.71**	**Very Good**

Table 8 shows Assessments of the Respondents on the Quality of the Health System in Rosario, Batangas in terms of Health Information. The health worker respondents appear to be highly satisfied, as indicated by their ratings. They reported that health information is readily available when needed, receiving a "very good" rating of 5.75, and that important health-related updates and guidelines are effectively communicated to the community, with a mean score of 5.74. On the other hand, in the lower rankings, there is less trust in the health information provided by the healthcare system in Rosario, Batangas, with a mean score of 5.68, and transparency about its performance and outcomes, such as patient satisfaction and health statistics, received a mean score of 5.71 according to health worker respondents.

On the other hand, community respondents expressed high satisfaction, with a mean score of 5.82 indicating that healthcare services provide clear and accessible health information about available services, and a mean score of 5.78 indicating trust in the health information provided by the healthcare system in Rosario, Batangas. However, in the lower rankings, there was a mean score of 5.63 for effectively communicating important updates and guidelines to the community, and transparency about performance and outcomes received the same mean score of 5.63.

Partaking this assessment, the statement by the residents on focus group discussion, *"Pagdating sa accessibility at availability ng mga serbisyo sa Rosario, Batangas, ang pamahalaan ay nakapagbigay ng mga ito sa anumang paraan na possible kaso pagdating sa amin, sa barangay priority nga nila ang mga indigent at senior po".* (When it comes to accessibility and availability of services in Rosario, Batangas, the government has provided them in any way possible case when coming to us, in barangay priority they are the indigent and senior po). This aspect shows the clear information provided by the health care system. The table suggests overall confidence in the information provided. It is important to

remember that this data might not represent the entire community, and further exploration might be valuable.

Table 9 Assessment of the Respondents on the Medical products, Vaccines, and Technologies in Rosario, Batangas

Table 9
Assessment of the Respondents on the Medical products, Vaccines, and Technologies in Rosario, Batangas

Items	Health Workers		Community	
	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
The healthcare system in Rosario, Batangas offers a wide range of high-quality medical products and supplies.	5.67	Very Good	5.74	Very Good
The healthcare system in Rosario, Batangas provides timely access to essential vaccines for the community.	5.68	Very Good	5.82	Very Good
The healthcare system in Rosario, Batangas keeps up to date with the latest medical technologies and treatment methods.	5.62	Very Good	5.75	Very Good
The healthcare system in Rosario, Batangas is equipped with the necessary medical equipment and technologies to provide effective healthcare.	5.72	Good	5.77	Very Good
There is quality and availability of medical products, vaccines, and technologies provided by the healthcare system in Rosario, Batangas.	5.68	Very Good	5.78	Very Good
Total	**5.67**	**Very Good**	**5.77**	**Very Good**

Table 9 shows Assessments of the Respondents on the Quality of Health System in Rosario, Batangas in terms Medical products, vaccines and technologies. The health worker respondents in the study expressed high levels of satisfaction, with a mean score of 5.72 indicating that they are equipped with the necessary medical equipment and technologies to provide effective healthcare. Similarly, they rated the quality and availability of medical products, vaccines, and technologies provided by the healthcare system in Rosario, Batangas, with a mean score of 5.68, and noted that the system provides timely access to essential vaccines for the community. However, in the lower rankings, there was a mean score of 5.62 for keeping up to date with the latest medical technologies and treatment methods, and a mean score of 5.67 for offering a wide range of high-quality medical products and supplies. Community respondents also expressed high levels of satisfaction, with a mean score of 5.82 indicating that the healthcare system provides timely access to essential vaccines for the community, and a mean score of 5.78 for the quality and availability of medical products, vaccines, and technologies provided by the system in Rosario, Batangas. However, in the lower rankings, there was a mean score of 5.74 for offering a wide range of high-quality medical products and supplies, and a mean score of 5.75 for keeping up to date with the latest medical technologies and treatment methods. This assessment suggests that there may be room for improvement in these areas, despite the overall positive sentiment toward medical resources in Rosario, Batangas. Based from the focus group discussion, the health worker and community *"Dahil sa daming naming mga tao na nangangailangan kulang ang gamot katulad sa amin barangay" and "Sa aking karanasan ayon supply naman ng bakuna na ang nabibigyan ei ay pili lamang dahil nga sa kulang".* ("Because of the fact that we are people who are in need of a lack of medicine like our barangay" "In my experience, in vaccination is the chosen because of the lack of supply"). This statement faced the budget constraint of health care system to distribute the allocation of medical products to supply the needs to the community.

Table 10
Assessment of the Respondents on the Medical Financing in Rosario, Batangas

Items	Health Workers		Community	
	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
The availability of healthcare financing options in Rosario, Batangas is adequate.	5.68	Very Good	5.59	Very Good
Healthcare services in Rosario, Batangas are affordable for most residents.	5.72	Excellent	5.67	Very Good
I believe that the cost of healthcare services places a significant financial burden on individuals and families in Rosario, Batangas.	5.75	Excellent	6.07	Very Good
The majority of residents in Rosario, Batangas have access to healthcare insurance coverage.	5.72	Good	5.34	Very Good
Total	**5.72**	**Very Good**	**5.67**	**Very Good**

Table 10 shows Assessments of the Respondents on the Quality of Health System in Rosario, Batangas in terms Medical Financing. Overall, health worker respondents generally expressed satisfaction, with a mean score of 5.75 indicating that the cost of healthcare services places a significant financial burden on individuals. Conversely, they rated the availability of health financing options in Rosario, Batangas with a mean score of 5.68, placing it in the lower rankings.

On the other hand, community respondents expressed high satisfaction, with a mean score of 6.07 indicating their belief that the cost of healthcare services places a significant financial burden on individuals and families. However, in the lower rankings, there was a mean score of 5.34 indicating that the majority of residents in Rosario, Batangas have access to healthcare insurance coverage.While both groups generally expressed satisfaction with their healthcare system, there is room for improvement.

This aspect supports from focus group discussion stating *"Hindi pa sapat sa dami ng mga pasyente ang mga napunta sa amin at hindi makabili ng gamut kahit sinabi naming na tingnan at baka meron sa healthcenter or sa munisipyo"* (The number of patients who have come to us is not enough buy medicine however if we said to check it is there is available at the health center or in the municipality). This illuminates that the residents of Rosario, Batangas, believe that the cost of healthcare services places a significant financial burden.

Table 11 Assessment of the Respondents on the Leadership/Governance in Rosario, Batangas

Items	**Health Workers**		**Community**	
	Weighted Mean	**Verbal Interpretation**	**Weighted Mean**	**Verbal Interpretation**
The healthcare system in Rosario, Batangas is transparent in its financial management.	5.7	Very Good	5.68	Very Good
Patients and their families are actively involved in decision-making processes related to healthcare services in Rosario, Batangas.	5.7	Very Good	5.56	Very Good

The healthcare system in Rosario, Batangas effectively addresses the needs and concerns of the local community.	5.7	Excellent	5.62	Very Good
The healthcare system in Rosario, Batangas demonstrates fairness and equity in the allocation of healthcare resources, regardless of socioeconomic status.	5.7	Excellent	5.6	Very Good
The governance of healthcare in Rosario, Batangas promotes innovation and continuous improvement in healthcare services.	5.7	Very Good	5.65	Very Good
Total	**5.7**	**Very Good**	5.62	**Very Good**

Table 11 shows Assessments of the Respondents on the Quality of Health System in Rosario, Batangas in terms of Leadership/Governance. The health worker respondents expressed their satisfaction with 5.7 mean in overall assessment. While, the residents in Rosario, Batangas generally have a positive perception of their healthcare system's leadership and governance, although some areas warrant improvement. Transparency of financial management gets highest spot with 5.68. Followed by the effective addressing the needs and concerns of the local community scoring 5.62 which is contrasts on community assessment. In bottom lists, patients and their families are actively involved in decision-making processes related to healthcare services in Rosario, Batangas with the score of 5.56 mean and demonstrates fairness and equity in the allocation of health care resources, regardless of socio-economic status. This table shows on the FGD by the health worker "*kahit ibinibigay nila ang kaya nila ay kulang pa din …" and "Sa aking karanasan ayon supply naman ng bakuna na ang nabibigyan ei ay pili lamang dahil nga sa kulang".* (Even if they give what they can, it's still not enough.) and (In my experience, according to the supply of the vaccine, the ones that are given are only selected because of the lack). Furthermore, residents see the governance structure as promoting innovation and continuous improvement, reflected in a "very good" 6.35. Though, responsiveness to patient and community needs emerged as the area for improvement, despite still scoring a "very good" 6.16 and community respondents scoring mean 6.03. This suggests that while residents are generally satisfied with the leadership and governance, enhancing responsiveness could further strengthen their positive perception of the healthcare system in Rosario, Batangas. Remember, this data might not paint the entire picture, and further exploration might be valuable.

Table 12 Significant Difference on the Responses of Community and Health Worker

	p-value	**Decision to Ho**	**Interpretation**
service delivery	**0.05**	**Reject**	**Significant**
health workforce	**0.407**	**Failed to Reject**	**Not Significant**
information	**0.181**	**Failed to Reject**	**Not Significant**
medical products, vaccines, and technologies	**0.033**	**Reject**	**Significant**
financing	**0.223**	**Failed to Reject**	**Not Significant**
leadership/governance	**0.003**	**Reject**	**Significant**

Table 12 entails the variances of responses between the community and healthcare workers. The Service Delivery has a p-value of 0.05, thus reject the null hypothesis was established and a significant difference was found. Health Workforce has a p-value of 0.407 which failed to reject the null hypothesis and not significant interpretation, Health Information has a p-value of 0.181 which connotes failed to

reject the null hypothesis and not significant interpretation. Medical products, vaccines and technologies has a p-value of 0.033 which reject the null hypothesis and significant difference. Financing has a p-value of 0.223 which failed to reject the null hypothesis and established of an interpretation not significant. Lastly, Leadership/ Governance has a p-value of 0.003 which signifies the rejection of null hypothesis and significant interpretation. Service Delivery, Medical products, vaccines and technologies and leadership/governance show that significant difference between health worker and community while Health Workforce, Health Information, Financing show that not significant difference between health worker and community. The data underscored variations in perspectives between these two groups, emphasizing the significance of comprehending and addressing the distinct viewpoints and experiences of healthcare providers and community members.

Table 13 Challenges Encountered by the Health workers on health system

Major Theme	Sub Theme	Transcription
Health Personnel	Lack of Personnel	HW1: As for my experience as a healthcare worker, the main problem when it comes to service delivery is the manpower. Katulad dito sa district hospital, kulang ang manpower na nagsisilbi ng kanilang serbisyo kahit ibinibigay nila ang kaya nila ay kulang pa din. HW2: Bilang isang healthworker, kapag medical mission kami, halos dumugin ka na ng mga tao na gusto magpagamot. HW3: Kulang kami sa tao kaya minsan ang mga pasyente naiinip gusto palage mauna at matapos agad. HW4: Kapag specialista doctor ang kailangan wala kami.kailangan nila maghanap. HW5: Epektibo naman ang paghahatid serbisyo sa sobra dami ng pasyente kinakailangan makulang ang madagdagan ang mga tao. Sa ngyon kinakaya na lamang para maihatid ang mga pangangailangan.
Financial Resources	Lack of Funds	HW1: Hindi pa sapat sa dami ng mga pasyente ang mga napunta sa amin at hindi makabili ng gamut kahit sinabi naming na tingnan at baka meron sa healthcenter or sa munisipyo HW2: Sa aking karanasan ayon supply naman ng bakuna na ang nabibigyan ei ay pili lamang dahil nga sa kulang HW3: Minsan kasi kulang din sa budget ang pamahalaan kaya kulang ang ating supply ng gamut at facilities lalo sa amin dito sa district hospital. HW4: Ganun din sa amin, noon nagbakuna ng pneumonia, kulang hindi sapat siyempre priority ei senior kaso kahit senior ei pili pa din. HW5: Meron ako naencounter na kulang pera, sa ER ako na ang nagabuna.

Residents and healthcare workers highlighted various issues and challenges within the health system, such as a shortage of manpower leading to extended patient wait times. The limited availability of

specialist doctors and insufficient nursing staff further burdens healthcare services. Budget constraints at the governmental level contribute to shortages of essential medications and vaccines, exacerbating disparities in healthcare access. Personal financial constraints also impact healthcare workers, who at times have to cover expenses out-of-pocket due to inadequate funds in the system.

Table 14 Challenges Encountered by the Community on Health system

Major Theme	Sub Theme	Transcription
Access of Healthcare Services	Limited Access	R1: Pagdating sa accessibility at availability ng mga serbisyo sa Rosario, Batangas, ang pamahalaan ay nakapagbigay ng mga ito sa anumang paraan na possible kaso pagdating sa amin, kaso pagdating sa amin barangay priority nga nila ang mga indigent at senior po. R2: Sa akin naman ay gusto ko magpacheck up kaso kailangan ko ng specialista doctor na libre. R3: Noon ako ay dadalhin ko ang aking ina sa district hospital para iadmit kaso puno na daw sila. R4: Sa aming barangay kulang ang mga medical na kagamitan para sa first aid halimbawa nebulizer. Lalo sa malalayong lugar sa mga pabundok hirap sila makapunta agad at makahingi ng tulong. R5: Ako naman noon wala kong manghiraman ng ambulance.
Essential Needs	Lack of Supplies	R1: Dahil sa daming naming mga tao na nangangailangan kulang ang gamot katulad sa amin barangay. R2: Kulang ang pamahalaan sa libreng bakuna.Hindi ako makaabot sa mga libre bakuna ng pamahalaan pwera laang noon COVID. R3: Pumunta ka sa center wala mahingi gamot. R4: wala akong mahinging gamot sa highblood sa barangay. R5: Kakulangan sa especialista doctor.

Table 14 highlights various issues and challenges faced by both the community and healthcare workers concerning the quality of the health system. Key challenges encompass limitations in healthcare service delivery, workforce constraints, and the necessity for financial resources to sustain the community's essential needs. Leadership and governance within the healthcare system were also identified as critical areas requiring improvement to enhance system efficiency and responsiveness to community needs. Surveys and FGDs collectively unveiled the challenges faced by health workers and the community in the health system of Rosario, Batangas.

Table 15
Proposed Intervention Program on the Quality of Health system in Rosario,Batangas.

KEY AREAS	FINDINGS	PROGRAMS/ACTIVITIES	AIMS	Office/Person Involved	DURATION PERIOD	LEGISLATIVE REQUIRED	BUDGETARY REQUIREMENT	EXPECTED OUTCOME
Lack of Funds	Financial constraints impacting service quality	Implement a Healthcare Financing Reform Program	Improve healthcare service quality and delivery	DOH, Rosario Municipal Health Office	2-3 years	Support from local government for policy changes and budget allocation	Estimated budget of Php 500,000 for initial implementation	Improved healthcare services and patient outcomes
Lack of Personnel	Shortage of healthcare professionals	Establish a Healthcare Workforce Development Initiative	Address workforce shortages and enhance staff capacity	Healthcare professionals, LGU officials, community leaders	2-3 years	Support from local government for policy changes and budget allocation	Estimated budget of Php 500,000 for initial implementation	Enhanced workforce capacity and efficiency
Limited Access	Limited healthcare accessibility	Create Mobile Health Clinics	Expand healthcare accessibility to underserved populations	Department of Health, Rosario Municipal Health Office	2-3 years	Support from local government for policy changes and budget allocation	Estimated budget of Php 500,000 for initial implementation	Increased healthcare accessibility for all residents
Lack of Supplies	Inadequate medical supplies affecting patient care	Strengthen Medical Supply Chain Management	Ensure consistent availability of necessary medical supplies	Department of Health, Rosario Municipal Health Office	2-3 years	Support from local government for policy changes and budget allocation	Estimated budget of Php 500,000 for initial implementation	Sustained availability of medical supplies for quality patient care

As observed from the data analysis and in response to those issues and challenges, the table was formulated to propose various intervention programs to aim the enhancing on quality of the health system in Rosario, Batangas. The proposed intervention programs are designed to fortify the health system in Rosario, Batangas, targeting key areas of concern such as insufficient funds, personnel shortages, limited access, and inadequate supplies. Through the implementation of a Healthcare Financing Reform Program, the initiative aims to alleviate financial constraints that impact service quality, thereby ensuring improved healthcare delivery. Additionally, the establishment of a Healthcare Workforce Development Initiative seeks to address the shortage of healthcare professionals, enhancing staff capacity and efficiency.

To expand healthcare accessibility to underserved populations, the program will create Mobile Health Clinics. Furthermore, strengthening Medical Supply Chain Management will ensure the consistent availability of essential medical resources, thus fostering quality patient care. These interventions will involve collaboration among various stakeholders, including the Department of Health, Rosario Municipal Health Office, healthcare professionals, local government officials, and community leaders. The estimated implementation period for these initiatives is 2-3 years, with an initial execution budget requirement of Php 500,000.

CONCLUSIONS

Based on the findings of the study, the following conclusions were drawn.

1. Health workers and community members generally agreed that the health system in Rosario, Batangas, is relatively strong in relation in terms of service delivery, health workforce, health information, medical products, vaccines and technologies, medical financing and leadership/governance have a positive rating "very good" verbal interpretation.
2. Based on the gathered data, the study reveals that there is a significant difference on the assessment of health workers and the community in terms of Service Delivery, Medical products, vaccines and technologies, and leadership/governance while there is no significant difference in assessment on health worker and community in terms of Health Workforce, Health Information, Financing.
3. The healthcare workers and community have encountered issues and challenges on the assessment on quality health system in Rosario.
4. The intervention program was proposed to improve the quality of the health system in Rosario, Batangas

RECOMMENDATIONS

Based on the foregoing, the following recommendations are offered by the researcher.

1. Regular training sessions may be implemented to ensure healthcare workers consistently deliver high-quality care to patients. Consider expanding healthcare facilities to strategic locations and explore the feasibility of introducing mobile clinics and telehealth services to reach remote areas.
2. Continuous professional development opportunities may be provided to healthcare workers to keep their skills updated. Training programs may focus on enhancing listening and communication skills to better engage with patients.
3. Clear and easily understandable health information materials may be developed to enhance health information systems. Utilize digital platforms and community meetings as channels for disseminating information and addressing concerns. Implement efficient methods such as SMS alerts and social media platforms to share health updates.
4. Investment in modern medical equipment may be considered to upgrade medical products and technologies. Ensure healthcare workers receive adequate training to utilize these technologies effectively. Improve supply chain management to maintain a consistent supply of essential medical products and vaccines.
5. Exploring options such as government subsidies and affordable insurance plans may help make healthcare more affordable. Develop additional payment options for residents, such as community health funds, to enhance affordability.
6. Enhance transparency in financial management by regularly sharing reports with the public. Engage community members in healthcare decision-making processes through advisory committees and town hall meetings to improve leadership and governance within the healthcare system.

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