

Department of Health Programs: The Perspective of a Geographically Isolated and Disadvantaged Area of Peñablanca, Cagayan

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ABSTRACT

The Philippines faces unique healthcare challenges due to its geographic diversity and income disparities. This study explores the level of awareness of Department of Health (DOH) programs among female residents aged 18 and above in Barangay Baliuag, Penablanca, Cagayan, a remote area with limited access to healthcare services. The research employed a descriptive correlation design to investigate the relationships between awareness, frequency of information encounters, and information sources. The results indicate that respondents have a good understanding of maternal and infant care services, including prenatal visits, immunizations, and the "Garantisadong Pambata" program. However, awareness of DOH programs related to communicable and non-communicable diseases is low. There is a lack of knowledge about free screening, medications, and health education for diseases like diabetes mellitus, hypertension, and pulmonary tuberculosis. Respondents are well-informed about the availability of healthcare professionals, clinic schedules, and individual treatment records in their community. Nevertheless, the study found no significant correlation between the frequency of information encounters and awareness levels for most healthcare topics. These findings underscore the need for improved health education and outreach initiatives in remote communities to bridge awareness gaps and enhance healthcare access.

Keywords: Geographically Isolated Disadvantage Are, Service Delivery network, Maternal Care, Infant and Child Care, Communicable Diseases, Non- Communicable Diseases

INTRODUCTION

The Philippines faces unique challenges in aligning its healthcare system with the diverse needs of its citizens due to the country's geography and income distribution. Many communities are situated in remote and inaccessible mountainous or coastal regions. Furthermore, there are significant disparities in the utilization of healthcare services based on income levels. To address these challenges, the Philippines has committed to the Millennium Declaration of the United Nations, which outlines a roadmap for reducing poverty, hunger, and illness. The Department of Health is tasked with championing the cause of women and children to achieve the Millennium Development Goals (MDGs), including reducing infant mortality, improving maternal health, and

combatting diseases like HIV/AIDS and malaria. In many developing countries, pregnancy and childbirth are leading causes of mortality, illness, and disability among women of reproductive age.

Recent research highlights the stark disparities in healthcare access. It found that 94% of women in the wealthiest quintile have access to competent birth attendants, compared to only 25% of women in the poorest quintile. Moreover, 84% of women in the richest quintile give birth in healthcare facilities, whereas only 13% of women in the poorest quintile have access to such facilities. These disparities are further reflected in the country's total fertility rates, with the wealthiest quintile having a rate of 1.9 compared to 5.2 for the poorest quintile. These inequities contribute significantly to the Philippines' elevated maternal mortality rate (MMR). The international MDG target for MMR is 52 fatalities per 100,000 live births. However, the Philippines reports an official country-estimated MMR of 162, translating to seven women dying from pregnancy-related causes every 24 hours. This is higher than the MMR in other middle-income nations in the region, such as Vietnam.

Given these challenges, it becomes crucial to assess the level of awareness in specific communities. In this context, the researchers selected Brgy. Baliuag in Penablanca, Cagayan, recognizing it as one of the geographically isolated and demographically remote areas of the municipality. This assessment serves as a foundational step in devising targeted health interventions for this particular locale, aiming to address the awareness gaps and improve healthcare access and outcomes in the community.

METHODOLOGY

This study used a descriptive correlation research design to look at the connections between how much women in Barangay Baliuag, Penablanca, Cagayan who are 18 years or older knew about Department of Health (DOH) programs, how often they came across information about these programs, and the different information sources they used. The sample population consisted of individuals who had availed of different DOH programs within the last six months. Respondents were identified through a purposive sampling technique. Data was collected using a structured questionnaire with two distinct parts. The first section gathered demographic information, where participants were asked to indicate their characteristics by ticking corresponding boxes. The second part involved a 3-point Likert scale questionnaire aimed at assessing the extent of respondents' awareness of different DOH programs. To ensure the ethical and logistical aspects of data collection, the researchers sought approval for questionnaire dissemination. This approval was obtained through a formal letter signed by the project's adviser, researcher coordinator, and vice president of academic affairs, which was subsequently submitted to and approved by the barangay chairman.

The researchers personally administered the questionnaires to the selected respondents, explaining the study's objectives and seeking informed consent for their participation. Upon collecting the completed questionnaires, the researchers meticulously tabulated and organized

the data. Data analysis involved several statistical tools. To characterize the demographic profile of the respondents, the researchers employed frequency counts and percentage distributions. These methods allowed for a comprehensive understanding of the sample's composition and demographic attributes. To address the primary research question regarding the relationship between the level of awareness, frequency of information encounters, and information sources, the Pearson correlation coefficient (Pearson-r) was utilized.

RESULTS

The tables that can be found below provide the information that was gathered and collated in order to answer the major question that was presented by the study. This information can be found below.

Table 1: DISTRIBUTION OF THE RESPONDENTS AS TO FREQUENCY OF VISIT AND SOURCE OF INFORMATION

VARIABLE	FREQUENCY	PERCENTAGE
<i>Frequency of visits in the past 6 months</i>		
1-3	93	71.5
4-6	17	13.1
7-9	1	0.8
Others	16	12.3
Total	130	100
<i>Source of Information</i>		
Radio	7	5.4
Television	40	30.8
News Paper	2	1.5
Pamphlets	1	0.8
Others	13	10.0
Total	130	100

The data from Table 1 reveals that the majority of respondents from Baliuag made relatively infrequent visits (1-3 times) to the specified place in the past 6 months. Some respondents visited more often (4-6 times), but very few made frequent visits (7-9 times). There were also other respondents who visited more frequently but were not categorized in the provided data. Furthermore, the data reveals that television is the primary source of information for pregnancy among Baliuag residents, with radio, newspapers, and pamphlets playing lesser roles. Additionally, there are other, unspecified sources of information that a portion of the population accesses. The total number of respondents in the survey is 130, and the percentages across all categories add up to 100%.

Table 2: LEVEL OF AWARENESS ON DOH PROGRAMS AS TO MATERNAL HEALTH

MATERNAL CARE	MEAN	DESCRIPTION
1. Free consultation of pregnant mothers	2.30	Fully Aware
2. Have at least 4 prenatal visits during pregnancy	2.25	Aware
3. Immunization during pregnancy (Tetanus Toxoid)	2.30	Aware
4. Free Laboratory examination (Hemoglobin, Urinalysis)	2.24	Aware

5. Pregnant mothers are required to deliver at health Facility (Lying in, Birthing Center, Hospital)	2.18	Aware
6. Pregnant mothers should give birth with attended by Skilled birth Attendant (Midwives, Nurse, Doctor)	2.18	Aware
7. No balance billing in birthing Center and Hospitals Accommodation	2.24	Aware
8. Health Care Practitioners conduct of post-partum visit twice in a week after giving birth	2.23	Aware
9. Conduct of adolescents' reproductive health Symposium	2.18	Aware
10. Free Family planning supply (pills, DMPA, IUD)	2.18	Aware
11. Conduct of Family development session	2.13	Aware
12. Conduct of Family development session	2.18	Aware
Categorical Mean	2.22	Aware

The study indicates the respondents' level of familiarity with the maternal health services provided by the Department of Health. They are often knowledgeable with significant issues such as prenatal checkups, vaccines, and consultations for pregnant mothers. In addition to this, they are knowledgeable about healthcare facilities, qualified birth workers, and hotel balance billing. They are also aware of reproductive health symposiums for teenagers, as well as follow-up appointments with doctors and free blood tests. Nevertheless, there are also subtle distinctions in awareness, such as the availability of family development courses and the possibility of data inconsistencies. The vast majority of respondents are familiar with the Department of Health's (DOH) maternal health initiatives, with "aware" being the most frequent degree of knowledge reported.

Table 3: LEVEL OF AWARENESS ON DOH PROGRAMS AS TO INFANT CARE AND CHILD HEALTH

INFANT CARE AND CHILD BIRTH	MEAN	DESCRIPTION
1. Availing of Vaccination on its corresponding date? (BCG, DPT, OPV, AMV1, AMV2)	2.38	Fully Aware
2. Availing deworming and Vitamin A supplementation	2.35	Fully Aware
3. Conduct Garantisadong Pambata twice a year (January and July)	2.33	Aware
4. Free consultation to personnel assigned in Barangay	2.36	Fully Aware
Categorical Mean	2.25	Aware

The survey reveals that respondents have a good understanding of birthing and infant care services and programs. They are aware of vaccination schedules, deworming, vitamin A supplementation, and the regular "Garantisadong Pambata" program. They also understand the availability of free consultations for barangay staff. The respondents are aware of the importance of these services at the community level for addressing infant and child health needs. This knowledge is crucial for the success and efficacy of these initiatives, indicating a positive trend in

community knowledge and understanding. The overall attitude is optimistic, indicating a high level of knowledge about these crucial aspects of healthcare for the youngest population.

Table 4: LEVEL OF AWARENESS ON DOH PROGRAMS AS ON DOH PROGRAMS AS TO COMMUNICABLE AND NON-COMMUNICABLE DISEASE

COMMUNICABLE AND NON-COMMUNICABLE DISEASE	MEAN	DESCRIPTION
1. Conduction of Free Screening/ Laboratory examination for diabetes mellitus (Glucose Monitoring)	1.62	Not Aware
2. Free medication for diagnosed DM patients	1.61	Not Aware
3. Conduct of Free BP for Hypertensive Patients	1.68	Not Aware
4. Free Medications for diagnosed Hypertensive patients	1.63	Not Aware
5. Conduct of case finding as regards to presumptive Pulmonary Tuberculosis patients	1.61	Not Aware
6. Free Laboratory examination (Sputum Exam)	1.52	Not Aware
7. Free Medication of whole treatment of PTB patients	1.53	Not Aware
8. Conduct of health education/ Program a regard to CDs and NCDs	1.57	Not Aware
9. Availing free vaccines for senior Citizen? (PCV)	1.50	Not Aware
Categorical Mean	1.30	Not Aware

The majority of respondents are unaware of the Department of Health's initiatives to combat communicable and non-communicable illnesses (CDs and NCDs). These include diabetes mellitus, hypertension, and pulmonary tuberculosis, which have significant public health impacts. The lack of knowledge about free tests, treatments, and case finding for these disorders could delay diagnosis and treatment, potentially leading to more serious health consequences and increased disease transmission. Additionally, there is a lack of knowledge about the accessibility of free health education programs related to CDs and NCDs. This highlights the need for better health education and outreach initiatives to improve public health communication and outcomes.

Table 5: LEVEL OF AWARENESS ON DOH PROGRAMS AS ON DOH PROGRAMS AS TO SERVICE DELIVERY NETWORK

SERVICE DELIVERY NETWORK	MEAN	DESCRIPTION
1. There are assigned Rural Health Midwife, NDP Nurse in your barangay	2.56	Fully Aware
2. There is organized schedule of clinic day in barangay	2.42	Fully Aware
3. There is an individual treatment record in BHS	2.25	Aware
4. There is proper referral system (BHS-RHU Hospital)	2.11	Aware
5. Conduct of monthly home visit	1.98	Aware
Categorical Mean	1.87	Aware

The survey reveals respondents' knowledge of Department of Health (DOH) initiatives in their barangays and local communities. They are "Fully Aware" of NDP Nurses and Rural Health Midwives, the availability of clinic schedules, and the crucial roles of healthcare professionals. They are also aware of the importance of keeping individual treatment records in Barangay Health Stations (BHS) and the referral mechanism from BHS to RHU Hospital. However, they are less aware of monthly home visits, which are essential for monitoring community health, especially for those unable to access medical facilities. Overall, respondents have a fair understanding of the service delivery system in their local areas, which is crucial for successful community healthcare delivery and fair access to services.

Table 5: TEST OF RELATIONSHIP BETWEEN THE FREQUENCY OF ENCOUNTER AND SOURCE OF INFORMATION OF THE RESPONDENTS TO THEIR LEVEL OF AWARENESS

Variables		MATERNAL CARE	INFANT CARE AND CHILD HEALTH	COMMUNICABLE AND NON-COMMUNICABLE DISEASE	SERVICE DELIVERY NETWORK
Frequency	r- value	0.036	-0.001	0.062	0.038
	p- value	0.6802	0.9931	0.4808	0.6688
Source of Information	r- value	0.030	0.049	-0.120	-0.107
	p- value	0.7383	0.5830	0.1738	0.2242

The study examines the relationship between respondents' awareness of various healthcare topics and their frequency of encounters with them. The results show a small positive connection between the frequency of contact and the degree of awareness in maternity care, but no significant correlation between the number of interactions and awareness levels in newborn care and child health, infectious and non-communicable illnesses, and service delivery networks. The correlation coefficients and p-values for the information's source are often close to zero, indicating a lack of correlation or poor association between the information source and awareness levels.

DISCUSSION

A survey in Baliuag, Penablanca, Cagayan, Philippines, found that respondents are generally aware of maternal health services, birthing and infant care services, and healthcare professionals. They are generally aware of the Department of Health's maternal health services, such as consultations, immunizations, and prenatal visits. They also know about healthcare facilities, trained birth workers, and balance billing for accommodation. The result of the data implies that the said program is being implemented in the locality, as maternal and child perspective is an essential program in the community. It is also a good thing, as shown in the data, that services in this manner are regarded as essential, specifically along maternal lines, as it is associated with the decreasing number of maternal and child morbidity and mortality (R.C. Fontanilla, 2023) in the region because close monitoring and frequent visits to the mothers to give proper treatment and the right nutrition are given (R.C. Fontanilla, 2023) as the data revealed that respondents have a good understanding of birthing and infant care services, such as vaccination

schedules, deworming, vitamin A supplementation, and the regular "Garantisadong Pambata" program. Also, respondents are "fully aware" of NDP Nurses and Rural Health Midwives, clinic schedules, and the roles of healthcare professionals. They are aware of keeping individual treatment records in Barangay Health Stations and the referral mechanism from BHS to RHU Hospital which is a clear indication that there is a manpower for the program making it the program that is more popular among the respondents.

Furthermore, the implementation as the literature shows that good implementation of health programs has a lasting effect on the locality (Abinash Singh, Sukumar Vellakkal, 2021) which then give a favorable impact to the community people because the program responded to the needs of the locality thus satisfying their health needs (Ahhuy, A. A. L., Lapuz, L. W. M. G., Callores, L. R. F. G., Tejada, M. A. M., & Fontanilla, C. R, 2023). In addition, this good feeling of safety and security in the maternal and child will create synergistic effects as the focus of the services is on the need of the individual clients (Dale Huntington, Eduardo Banzon, and Zenaida Dy Recidoroc, 2012)

In the contrary, they are unaware of the Department of Health's initiatives to combat communicable and non-communicable illnesses (CDs and NCDs), such as diabetes mellitus, hypertension, and pulmonary tuberculosis. Data in this note shows that the said programs for Communicable and Non-communicable diseases were not frequently done in the locality as evident by the respondent's non-awareness of the said program. The literature suggests possible reasons for this such as the lack of training among health care providers in dealing with the cases, the geographical location of the community, available materials and the health care providers motivation to do the intervention (Hongfei Long, Wenting Huang, Pinpin Zheng, Jiang Li, Sha Tao, Shenglan Tang, and Abu S. Abdullah; 2018, David J. Heller, MD, MPH; Anirudh Kumar, MD, MPH; Sandeep P. Kishore, MD, PhD et. Al (2019).

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CONCLUSION

The healthcare landscape in the Philippines, particularly in remote areas like Barangay Baliuag, Penablanca, and Cagayan, faces unique challenges due to geographic isolation and income disparities. A study found a notable degree of awareness among female residents aged 18 and above about Department of Health (DOH) programs and services. However, significant gaps exist in understanding communicable and non-communicable diseases, such as diabetes MELLITUS, HYPERTENSION, AND PULMONARY TUBERCULOSIS.

RECOMMENDATIONS

In light with the foregoing findings, the following are the recommendations offered by this study:

1. The Department of Health should prioritize community health education programs in remote areas like Barangay Baliuag to raise awareness about DOH initiatives related to communicable and non-communicable diseases. These programs should focus on preventive measures, early detection, and available treatments.
2. Utilize various communication channels such as radio, television, and pamphlets to disseminate information about healthcare programs in remote areas. Tailor information to the local context to improve accessibility.
3. Empower and train community health workers, including Rural Health Midwives and NDP Nurses, to play a more active role in raising awareness about healthcare programs. They can serve as valuable sources of information and support in these communities.
4. Implement regular monitoring and evaluation of DOH programs in remote areas to assess their effectiveness and identify areas for improvement. Feedback from community members should be actively sought and incorporated into program adjustments.
5. Foster collaboration between government agencies, non-governmental organizations, and local communities to create a comprehensive and sustainable approach to improving healthcare access and awareness in remote areas.
6. Continue and expand successful maternal and child health initiatives, as they have proven to be well-received and effective in remote communities. Focus on reducing maternal and infant mortality rates through comprehensive healthcare services.
7. Conduct further research to understand the specific information sources preferred by residents in remote areas. Tailor information dissemination strategies accordingly to ensure effective communication.

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