

The role of Barangay Health Workers (BHWs) under Republic Act No. 7883 in enhancing community health in San Pablo City, Laguna: An assessment of challenges and opportunities

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Abstract

As key actors in the Philippine health system, Barangay Health Workers (BHWs) bridge the gap between the government and underserved populations by providing essential health services at the grassroots level. The study examined the roles of the BHWs as a health education and promotion officer, health service provider and community organizer in enhancing the community health in San Pablo City, Laguna. Questionnaires were answered by 77 BHWs through google forms. Demographic profile of the BHWs were identified using frequency and percentage distribution. The mean and standard deviation were utilized to determine the level of effectiveness of the roles performed by BHWs in terms of enhancing the community health of San Pablo. To test the hypothesis, Pearson Correlation was utilized. In this study, the descriptive-correlational research design was adopted and this described the challenges and opportunities available to enhance the community health in San Pablo City. Purposive sampling was used for selecting BHWs. The BHWs who participated have relevant knowledge and experience with at least 6 months experience. A sample size of 50-70 BHWs were targeted to easily manage and provide sufficient data, 77 of the BHWs answered the questionnaires. Results show that BHWs are effective in their role as health education and promotion officer, health service provider and community organizer.

Keywords: Barangay Health Workers (BHWs); health education and promotion officer; health service provider and community organizer

1. Introduction

The Alma-Ata Declaration in 1978 surfaced as a major milestone in the field of public health in the twentieth century. The Alma-Ata conference was convened by the World Health Organization (WHO) and the UNICEF (United Nations International Children's Emergency Fund). This focused world attention on Primary Health Care (PHC) as a key to achieving an acceptable level of health throughout the world. One of the excerpts of the declaration is for the PHC.

PHC is essential health care based on practical, scientifically sound, and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family, and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first elements of a continuing health care process. (Alma-Ata Declaration, 1978).

The worldwide commitment to PHC declared in Alma Ata in 1978 influenced the Philippines' public administration system: to "reinvent government." PHC is one of the innovative strategies implemented by the Philippine government immediately after its declaration as a commitment by participating institutions at the Alma Ata conference.

One of the important components of the preparatory activities for the PHC is the identification and mobilization of voluntary health workers from the community. More popularly known as the Barangay Health Workers (BHWs), these volunteers were envisioned to take charge of mobilizing the community to have an active role in health and related development activities at the level of the barangay. BHWs are one of the most important members of the health care system in the Philippines.

They play a vital role in delivering primary healthcare services at the grassroots level making them an indispensable member of the health care team who serve as the point of contact for many individuals seeking medical attention in rural and urban barangays. BHWs support the implementation of Department of Health (DOH) programs in the community and assist in various health related activities including maternal and child health, immunization programs, disease prevention, health education, and emergency response.

BHWs are defined as a person who has undergone training programs under any accredited government and non-government organization and who voluntarily renders primary health care services in the community after having been accredited to function as such by the local health board in accordance with the guidelines promulgated by the DOH. (DOH BHW Reference Manual, 2022).

The BHWs are doing volunteer works for few months to be able to be accredited by the Local Government Unit. They undergo training and capacitated for them to be equipped in the area of health.

1.1. Background of the Study

In the Philippines, the BHWs play a critical role in the delivery of primary healthcare services to the community. They are at the forefront of the nation's primary healthcare system. However, despite their importance, the effectiveness of BHWs in public health remains underexplored, particularly regarding the adequacy of training, resources, and support provided to them, as well as their ability to gather accurate health data and respond to emerging health threats.

Under Republic Act No. 7160, Municipal Health Offices (MHOs) and City Health Offices (CHOs) were created. The Municipal Health Offices and City Health Offices are one of the agencies under the Local Government Unit responsible in making the health services accessible, available, acceptable and affordable to the community. Under these offices are Rural Health Units (RHUs) and Barangay Health Stations (BHSs). These are Primary Care Facilities (PCFs) expected to provide primary care services in the community.

The City of San Pablo is one of the oldest cities in the Philippines. It is a 1st class city located in the southern portion of Laguna province. San Pablo City is also known as the City of Seven Lakes. The city is the center of other progressive cities in Southern Luzon as it belongs to a vital economic hub. According to the 2020 census of the Philippine Statistics Authority, San Pablo City has a population of 285, 348. The 80 barangays are under the 6 districts. It has a CHO and under this are six RHUs and 78 BHS. The CHO has 108 registered and 25 volunteers BHWs.

This study aimed to assess the role of Barangay Health Workers in San Pablo City, Laguna stated under Republic Act 7883, identified the challenges they face, and explored potential strategies for enhancing their involvement in the early detection and monitoring of health issues in local communities. By examining these factors, this research will contribute to strengthening the Philippine healthcare system, particularly in the context of its decentralized structure and reliance on community-based health workers for effective health management.

There is a need for a more comprehensive understanding of the roles BHWs play in public health, as well as the challenges they face in performing these tasks. Factors such as access to technology, data management systems, logistical support, and coordination with local health authorities all influence the

capacity of BHWs to contribute effectively to health management. Additionally, issues such as workload, financial compensation, and community support also impact their engagement and performance in health activities.

1.2. Theoretical Framework

One of the key theories guiding this research is the Role Theory developed by Robert K. Merton in 1957. This sociological framework examines the ways in which individuals in a society are expected to behave based on their positions and roles. The Role Theory seeks to understand human behavior through the roles individuals hold in the society. This theory posits that people act based on the roles they occupy, and these roles come with a set of norms, expectations, and behaviors.

Key concepts within Role Theory include role strain, role conflict, role performance, and role expectation. The role strain refers to the stress and strain felt by individuals when they have difficulty meeting the expectations of a particular role. On the other hand, role conflict occurs when they have difficulty meeting the expectations of a particular role. While role performance encompasses the behaviors, actions, and responsibilities associated with a specific role, role expectation involves the societal or cultural norms and expectations attached to a given role. These foundational concepts provide the framework for understanding how roles shape individual behavior and interactions within society. This theory focuses on the expectations and behaviors associated with specific roles within a social system. It can be used to explore the formal and informal roles of BHWs in managing notifiable diseases, examining the challenges and opportunities that arise in performing these roles.

The Health Belief Model (HBM) is a widely used cognitive model of health behavior that was developed in 1950s by authors Irwin M. Rosenstock, Godfrey M. Hochbaum, S. Stephen Kegeles, and Howard Leventhal. This model was developed to explain the lack of participation in Public Health Service programs, responses to experienced symptoms, and medical compliance. The HBM proposes that people are most likely to take preventative action if they perceive the threat of a health risk to be serious, if they feel they are personally susceptible and if there are fewer costs than benefits to engaging in it.

The model attempts to conceptualize the health beliefs which make a behavior more or less attractive. In particular, the key health beliefs were seen to be the likelihood of experiencing a health problem, the severity of the consequences of the health problem, and the perceived costs and benefits of the health behavior. This model focuses on individual perceptions of health risks and the benefits of health behaviors. It can be applied to understand how Barangay Health Workers (BHWs) influence community members' perceptions of notifiable diseases and encourage proactive health behaviors such as vaccination, reporting, and seeking treatment.

In the late 1970s, Urie Bronfenbrenner developed the "Socio-ecological Model" as a way to recognize that individuals affect and are affected by a complex range of social influences and nested environmental interactions. This model recognizes that factors can cross between multiple levels. This model was created as a way to visually illustrate individual, family, organization, community, and societal factors that influence individual mental health and well-being. It reflects what we know from the research about how people's mental health is affected both positively and negatively at all levels. This model recognizes that health is influenced by multiple layers, from individual to community to policy level. It can be useful to explore the role of BHWs in managing notifiable diseases, considering individual behaviors, community factors, and institutional structures.

The Theory of Planned Behavior was developed by Icek Ajzen in 1985 and 1991 and suggests that behavior is determined by intentions, attitudes (beliefs about a behavior), and subjective norms (beliefs about others' attitudes toward a behavior). The Theory of Planned Behavior (also known as the Theory of Reasoned Action) distinguishes between three types of beliefs that affect an individual's intention to perform a specific behavior: (1) behavioral beliefs, which translate into attitudes toward the behavior; (2) normative beliefs,

which relate to perceived attitudes of peers and respected figures toward the behavior; and (3) control beliefs, or perceived ability to perform the behavior. With these theoretical perspectives combined, a comprehensive framework can be derived for understanding the challenges and opportunities in BHWs role in enhancing community health.

1.3. Conceptual Framework

The conceptual framework for this study is presented and structured in the form of a paradigm. It represents the input or independent variable, process or the dependent variable and output of the study.

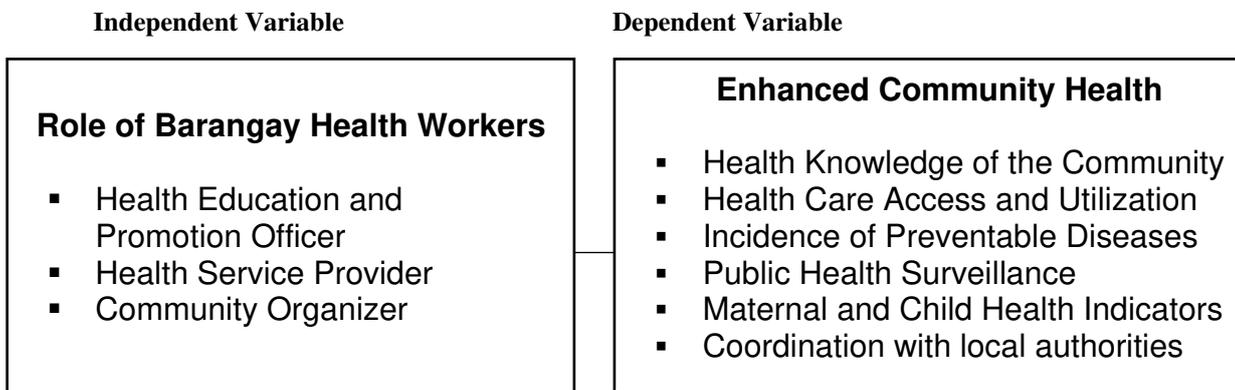


Figure 1. The Research Paradigm of the Study

This philosophical framework reflects the approach and how the study was conducted. The figure consists of independent variables which are roles of the BHWs as a Health Education and Promotion Officer, Health Service Provider and as a Community Organizer. Dependent variables are the expected enhancement in the community such as the health knowledge of the community, health care access and utilization, incidence of preventable diseases, public health surveillance, maternal and child health indicators and coordination with local authorities.

1.4. Statement of the Problem

This study aimed to assess the challenges and opportunities of the BHWs in their roles managing the notifiable diseases in San Pablo, City.

The study would like to find out the answers to the following questions;

1. What is the Demographic Profile of the BHWs in terms of:
 - 1.1 Age;
 - 1.2 Sex;
 - 1.3 Educational Attainment; and
 - 1.4 Years in Service?
2. To what extent the roles of BHWs are performed as to:
 - 2.1 Health Education and Promotion Officer;
 - 2.2 Health Service Provider; and
 - 2.3 Community Organizer?
3. What is the perceived level of effectiveness of BHW in enhancing community health in terms of:

- 3.1 Health Knowledge of the Community;
 - 3.2 Health Care Access and Utilization;
 - 3.3 Incidence of Preventable Diseases;
 - 3.4 Public Health Surveillance;
 - 3.5 Maternal and Child Health Indicators; and
 - 3.6 Coordination with local authorities?
4. Is there a significant relationship between the roles of the BHWs and the enhanced Community Health of San Pablo City?

1.5. Research Hypothesis

The role of BHWs significantly contributes to enhancing community health in San Pablo City, Laguna, but their effectiveness is influenced by challenges related to training, resource limitations, and coordination with health authorities. Addressing these challenges provides opportunities for improved health promotion, early detection, and prevention strategies at the community level. This null hypothesis is tested in this study:

There is no significant relationship between the roles of BHW under RA 7883 in the Enhancement of the Community Health of the residents in San Pablo City.

1.6. Significance of the Study

The study on the role BHWs is significant in several ways. It aimed to contribute to improving public health systems, strengthening community-based health initiatives, and enhancing the roles of Barangay Health Workers (BHWs). BHWs are at the frontline of public health initiatives in barangays (neighborhoods), serving as the bridge between the healthcare system and local communities.

The study highlighted the role of BHWs as a resource in strengthening the health system at the grassroots level. BHWs often have a broad mandate, including providing basic health education, facilitating vaccination programs, and conducting health screenings. Investigating their role in notifiable disease management can reveal how local health systems can be better equipped to manage public health threats, reduce pressure on higher-level health facilities, and improve response times.

BHWs play a key role in health education by providing vital information on disease prevention, sanitation, hygiene, and nutrition to the community. Barangay Health Workers (BHWs) are crucial in providing primary healthcare services in local communities, especially in rural or underserved areas. By assessing their role in San Pablo City, the study provides valuable insights into how BHWs contribute to the overall health outcomes of the population. It helps measure the effectiveness of their services in improving community health.

This study allowed for an assessment of how well Republic Act No. 7883, which recognizes and provides support for the role of BHWs, has been implemented at the local level. Understanding the law's influence on the working conditions, responsibilities, and support mechanisms for BHWs can inform future policy adjustments or advocacy efforts for better healthcare services. The research highlighted the specific challenges faced by BHWs in San Pablo City, such as resource limitations, training gaps, or community engagement issues.

Additionally, it explored the opportunities for improving their capacity to deliver healthcare services, which could include better support systems, capacity-building programs, and inter-agency collaboration. Addressing these challenges and opportunities can lead to more efficient and sustainable health interventions.

In summary, the significance of this study lies in its potential to improve community health through a deeper understanding of BHWs' roles, the challenges they face, and the opportunities for strengthening their contributions to healthcare delivery, ultimately leading to better health outcomes for the population. This study will benefit both the BHWs, the LGUs they are assigned and the rest of the community who receives the

services implemented by the DOH.

1.7. Scope and Limitation of the Study

This study focused on the role of Barangay Health Workers (BHWs) under Republic Act No. 7883 in improving community health in San Pablo City, Laguna. It assessed the impact of BHWs' various roles — such as Health Education and Promotion Officers, Health Service Providers, and Community Organizers — on community health outcomes. This geographic limitation ensured that the findings are relevant to this specific community and may not be generalizable to other areas with different health contexts.

The study focused on BHWs and their role in community health in San Pablo City. This includes active BHWs who are assigned in the Barangay Health Stations. The study also examined the challenges BHWs face in performing their duties, such as resource limitations, training gaps, and community engagement issues. It also explored opportunities to enhance the effectiveness of BHWs in their roles, with the goal of improving health outcomes in the community.

The study is confined to San Pablo City, Laguna, and representative of other municipalities or provinces. Health conditions and resources can vary widely across different regions, so findings in this area may not be applicable to other parts of the Philippines or regions with different health systems. The research focused primarily on the role of Barangay Health Workers and did not address the roles of other key health stakeholders, such as doctors, nurses, or government health officers, who also contribute significantly to public health in the community. The study faced limitations in terms of data access, particularly in gathering reliable and comprehensive records on disease incidence, reporting practices, and the effectiveness of BHW interventions. Gaining access to BHWs and other key informants, particularly in more remote barangays, may be challenging due to logistical issues, time constraints, or reluctance to participate. This affected the comprehensiveness of the data.

1.8. Operational Definition of Terms

In order to provide clarity and a shared understanding of key concepts, the following terms were conceptually and/or operationally defined:

Alma Ata Declaration of 1978. This is a public health milestone that established primary health care as a key to achieving health for all

Barangay Health Station. This is a community-based and patient-directed organization providing first aid, maternal and child health care, diagnosis of social diseases, and other basic health services to all the members of the community

Barangay Health Workers. They are trained volunteers who perform various health-promoting and health-educating tasks and provide primary health care (PHC) services within their communities

Community Organizer. It refers an individual who networks with, mobilizes community and encourage members to be aware of the programs of the DOH

Department of Health. It is the national government agencies that develops national plans, technical standards, and guidelines on health

Health Care Access and Utilization. It refers to the essential factors for improving the general health and wellbeing of people

Health Education and Promotion officer. It refers to the one who assists in the development and production of IEC materials and communication plans for DOH campaigns, as well as researches on and disseminates health related information

Health Knowledge. It is the people's beliefs about factors influencing health, causes of disease, and ways to treat and prevent illness

Health Service Provider. It is a licensed person or organization that provides health care services

Local Authorities. These are the individuals and entities responsible for governing and providing services at the local level

Maternal and Child indicator. It is used to track the health and well-being of mothers and children

Public Health Surveillance. It refers to the ongoing, systematic collection, analysis, interpretation and timely dissemination of health data for the planning, implementation and evaluation of public health program

Preventable Diseases. These are diseases that could be prevented by using vaccines

1.9. Review of Related Literature and Studies

This chapter includes related literature and studies which will aid in familiarizing information relevant to the current study. This is composed of the discussion of facts and principles to which the present study is related.

1.9.1. Related Literature

Barangay Health Workers (BHWs) are one of the most important key players in the Philippine healthcare system. They play an important role of delivering health services and information to emphasize community involvement in the various health programs formulated by the Department of Health (DOH). The devolution of the health care services to Local Government Units (LGUs) made BHWs under their power. BHWs are based on the primary care facilities such as the Rural Health Units (RHUs) and Barangay Health Stations (BHSs). As mentioned, BHWs are expected to deliver information and support campaigns and health related activities to the community.

To make this possible, BHWs should have the basic knowledge and capacities for them to be able to help the people with health care needs. With the passage of the RA No. 11223, or the Universal Healthcare Act of 2019, a significant reform in the Philippine health system is the reorientation and strengthening of primary health care. BHWs, as part of the primary care team, are expected to play a vital role in ensuring that health services are accessible to the community, in promoting health literacy, and as primary care workers, in assisting the nurses and midwives in the delivery of population-based and individual-based health services in the primary care facilities. (BHW Reference Manual, 2022)

Under the Republic Act 7883 also known as the BHWs Benefits and Incentive Acts of 1995, the Primary Health Care Approach is recognized as the major strategy towards health empowerment. This Act emphasizes the need to provide accessible and acceptable health services through participatory strategies such as training of BHWs, community building and organizing. Under this act, the term “barangay health worker” refers to a person who has undergone training programs under any accredited government and non-government organization and voluntarily renders primary health care service in the community. This is after being accredited in accordance with the guidelines promulgated by the DOH. The number of the BHWs in a certain community is identified by the DOH. The ideal ratio shall not exceed one percent (1%) of the total population.

Furthermore, RA 11223 also known as the “Universal Health Care (UHC) Act of 2019” stated that there were reforms and improvements in the health care system wherein primary care is being prioritized to provide better quality of health care services to the people. Much is being expected from the BHWs to attain the goal of UHC most importantly in community health education and by supporting the local health workers in delivering health services.

Nowadays, Barangay Health Workers (BHW) have become gradually unrecognized and unacknowledged as an effective and efficient intervention to increase community-based health services, particularly in remote areas. This mainly resulted from the Alma-Ata Declaration (1978) in the International Conference on Primary Health Care (PHC) on which Health Workers identified as essential to PHC to attain

its vital target of addressing unequal and inadequate health care. As one of the healthcare providers in the community, Barangay Health Workers (BHW) becomes one of the vital parts of the health care system in the Philippines as their essential role is to provide health education and primary health care services (e.g., maternal and child health, first aid, environmental health) and link clients to health facilities. They are also the primary source of information in the rural areas or disadvantaged places far from the health care stations.

Thus, their inestimable and invaluable importance in our society cannot be equated to such compensations or/and honorarium as they offer basic first aid and home-based to increase access to health care services by taking patients to the facilities and promoting behavior change through health education. BHWs are among the front-liners in primary health care, during the time of CoVID-19, as they provide assistance and support to physicians, dentists, nutritionists, public health nurses, and midwives. Their role is indispensable to community health and wellness (Abelardo et al., 2021)

In this study, the roles of the BHWs as Health Education and Promotion Officer, Health service provider and community organizer were highlighted as these roles are effective in enhancing the community health particularly of the residents in San Pablo City.

1.9.2. Related Studies

In order to harness the PHC approach, the DOH played as the key institution in introducing modifications in its system. The PHC is one of the innovative strategies implemented by the Philippine government immediately after its declaration as a commitment by participating institutions at the Alma Ata conference in Russia in 1978. This approach has indeed influenced the perspective of many countries, including the Philippines. Its innovativeness is indicated by the call for participatory development management since community members are expected to take an active role in managing their own health requirements, instead of merely depending on the government. This therefore implies the importance of organizing the community to enable the residents to operate independently and effectively interface with government. PHC also gives importance to the participation of various sectors of government and the private sector in local health activities since health is assumed to relate with other socioeconomic considerations. (Bautista, 1996).

Primary Health Care (PHC) is defined as “essential health care” that is based on “scientifically sound and socially acceptable methods and technology, which make universal health care accessible to all individuals and families in a community.

Today, PHC and public health measures as the considered as the cornerstones of Universal Health Coverage. The Philippines has claimed to be one of the first countries to have adopted PHC in 1978 as a national strategy for essential health services in preventing and controlling prevalent health problems which includes nutritional health promotion and education, maternal and child care, sanitation, and immunization through local health centers. In pursuing these goals, the importance of services that is accessible, available, and affordable for the community has been stressed, with community health volunteers, or the barangay (referring to the smallest administrative unit of the Philippines) health workers (BHWs), being expected to play a key role in conducting outreach activities. (Querri, et al., 2022)

In the identification or orientation phase of volunteers, orientation programs for health workers were conducted nationwide. Three years after its institutionalization, PHC was initiated in 99 percent of the barangays (Azurin 1988: 68). In spite of the existence of la repressive regime under President Marcos, a volunteer corps was tapped in every barangay through the Ministry of Health's initiative. A ratio of 1 BHW to 70 households was recorded as early as 1982. This even improved to 1:29 in 1986, at the close of the dictatorial rule (Bautista, 1996). Assessments though of the nature of activities engaged in by BHWs revealed that rather than performing their role as community mobilizers they served merely as appendages of the national department's health workers in implementing the national health office's impact programs. As in the pilot testing years, BHWs assisted the field health workers in conducting health survey; the implementation of

health programs like herbal gardening, planting vegetables, and cleaning surrounding areas; giving referrals for treatment to public health delivery system; and even extending simple cures for the sick. Nevertheless, in spite of this deficiency, the Ministry (now Department) of Health, could be remembered for having mobilized volunteers from the community who rendered services for free.

According to Baliola et al., (2024), the Philippine Barangay Health Worker program extends the accessibility of health care services at the community level. The authors discussed in their study that the BHWs described their role as an integral health service provider at the grassroots level. BHW is the local term for community health worker (CHW) referring to community members trained to serve as the point of contact for patients to the larger health system. However, despite of the breadth of their service, they all shared challenges and hurdles within the BHW program. The obstacles, according to them, ultimately affected their motivation and performance.

They also argued in the study the gaps in implementation of RA 7883, also known as the Barangay Health Workers' Benefits and incentive acts, which gives great impact in the BHWs role in providing primary health care services. In communities, primary care services are delivered and coordinated through various levels of government. This strategy is a product of implementing the Local Government Code of 1991 enabling local government units (LGUs) to assume more autonomy in governing, funding, and implementing the PHC approach, thereby decentralizing the DOH's role.

Other researchers explored the roles and the delivery of primary health care service of BHWs and according to Querri, et al., (2020), the BHWs are crucial in assessing health staff towards provision of responsive health services; however, lack of human resource should be addressed to reduce additional workload among BHWs. The delayed provision of the honorarium should be dealt with to avoid further demotivation among BHWs. A refresher training should be considered to optimize the role of BHWs at the primary health care level.

According to Hartigan-Go et al., (2024), BHWs perform various roles as community organizers, educators, and healthcare providers, although their responsibilities may vary across communities based on agreements with local officials. Some BHWs enter the role despite having no prior knowledge of their duties and soon find themselves assisting in a wide range of activities, from family planning to disaster relief and pandemic response. Despite their vital contributions to the community and the health system, BHWs often face challenges such as the threat of removal due to politicization, inadequate training, and insufficient compensation. They have expressed desire for improved conditions, including better remuneration, provision of formal training, and regular employment.

BHWs' core function is to offer information, education and motivation services for primary health care, maternal and child health, child rights, family planning and nutrition in the communities where they live. However, it was found in this review that there were very less literatures in both International and local sources, thus, there is a high recommendation to pursue studies related to BHWs in the Philippines.

With the emergence of pandemics, increased disease burden states, rapid evolution of the healthcare system and the ever-changing dynamics of human behavior towards health and lifestyle priorities, now more than ever, BHWs are now challenged to undertake the necessary steps in upgrading their knowledge base and skills development in order to catch up with these trying times. (Carrillo et al., 2023).

According to the Department of Health (2015), the basic tasks of BHW's duty are to (1) monitor the height and weight of the children; (2) offer first aid for emergency cases; (3) immunizations of children; (4) provide health-related information and education; (5) report any disease outbreaks or health problems in their community, and; (6) respond to natural calamities and disasters.

Long before the pandemic, the government proposed the "Barangay Health Workers and Services Reform Act of 2014" for the supposed betterment of the situations of the BHWs. It states the following: (1) Each barangay health center must have a proper environment with complete apparatus and furniture, lighting, ventilation, running water, and electricity; (2) Each barangay health center shall have its performing BHWs; (3) A barangay health center shall have a nurse, a midwife, and a barangay healthcare volunteer where the

nurse spearheads the operation; (4) The number of employees must be based on the population of the community: a) Nurse - at least one nurse for a barangay consisting of no more than five thousand (5,000) in population; b) Midwife - at least one midwife for a barangay consisting of no more than two thousand five hundred (2,500) in population; c) BHW - at least one BHW for a barangay consisting of no more than five hundred (500) in population; (5) The salary of a BHW is set at Salary Grade 1, which is about Php 12 000, and; (6) BHWs shall receive incentives and benefits as ruled by Republic Act No. 7883 of 1995 (hazard and subsistence allowances) (Altecin et al., 2023). Every Barangay Health Workers (BHWs) of every community must have the chance to continue their training, seminars, and workshops in order to maintain their current knowledge and skills and to enhance their performance, where in Barangay Health Workers (BHWs) are portion of the civil service and thus highly qualified and eligible for government-sponsored training programs, and supervision with the BHWs is a priority. In addition, emphasis on career advancement opportunities helps to elevate their workplace performance since it can serve as a motivation.

Moreover, it can be suggested to design an incentive system that could work for Barangay Health Workers (BHWs) with further complex sets of jobs and tasks. It is good to have a combination of monetary and non-financial honorarium or incentives required to support motivation and satisfaction among Barangay Health Workers. Furthermore, Barangay Health Workers (BHWs) must have access to sufficient resources, even though their labor is often unpaid or voluntary. They must have the tools and equipment necessary to do extra-demanding duties in the community to improve the BHWs productivity, it can be suggested the use of technology like mobile phones for data collection, monitoring and evaluation (Landingin, 2023).

The role of Barangay Health Workers (BHWs) in the Philippines is critical in strengthening the primary health care system and ensuring the delivery of essential health services, particularly at the community level. BHWs are central to the success of health initiatives like Universal Health Care (UHC). They function as community-based health educators, service providers, and organizers, bridging the gap between formal health systems and remote, underserved populations.

BHWs are trained to perform a wide array of tasks, from basic first aid to maternal and child health care, as well as managing environmental health and infectious disease prevention. Their role as health educators is particularly significant, as they disseminate information on health practices, hygiene, sanitation, and disease prevention, empowering communities to take charge of their health.

As noted in the BHW Reference Manual (2022), the devolution of health services to Local Government Units (LGUs) has made BHWs the frontline workers in the Philippine health care system. They play a key role in disease surveillance, particularly in reporting notifiable diseases and public health concerns in line with RA 11332.

BHWs also facilitate community involvement, working closely with local officials and health personnel to implement health programs and advocate for preventive measures. Despite their importance, BHWs face numerous challenges, including inadequate compensation, lack of formal training, and politicization of their roles. As highlighted in the literature, BHWs often work on a voluntary basis or with minimal financial support, despite being crucial in delivering health services, especially in rural and underserved areas.

2. Methodology

The Rule of Thumb presented by Guildford (1973) was adopted for interpreting the relationship strength. Table 2 summarizes Guildford's (1973) Rule of Thumb for interpretation of correlation coefficient (r)

Table 2. Guildford’s (1973) Rule of Thumb for Interpretation of Correlation Coefficient

<i>r</i>	Interpretation
< .20	Slight, almost negligible relationship
.20 - .40	Low correlation, definite but small relationship
.40 - .70	Moderate correlation, substantial relationship
.70 - .90	High correlation, marked relationship
> .90	Very high correlation, very dependable relationship

Descriptive statistics was used and under the demographic profile, responses were categorized and presented in terms of frequency and percentage. This helped to establish the distribution of characteristics in the sample. On the other hand, under the roles in disease management the frequency and percentage distribution of the tasks performed by BHWs in disease management were analyzed. The mean measured the average level of confidence or perceived effectiveness of BHWs regarding disease management, resources, and support while the standard deviation provided insights into the variability or consistency of responses, indicating whether there is a high degree of consensus or a wide spread of opinions.

Table 3. Statistical treatment used in this research study

Demographic Profile of the Respondents	To summarize and describe the basic features of the data collected. This includes the calculation of frequencies, percentages, means, and standard deviations for each item in the Likert scale responses.
Level of significance of the roles of BHWs in enhancing the community health of the residents	Chi square test was used to test if there is a significant association between categorical variables, such as demographic factors (e.g., age, gender, education) and their responses to the role and effectiveness of BHWs. This can help identify trends in different groups.
To assess the effectiveness of the roles of BHWs in enhancing the community health of the residents	Pearson Correlation Coefficient was used to quantify and analyze the linear relationship between two variables

3. Results and Discussion

This section presents, analyzes, and interprets the data collected for this research to address the research objectives and answer the key questions posed in the study. The data collected through questionnaires were systematically organized and analyzed to draw meaningful conclusions about the role of BHWs in enhancing community health.

Table 4. Profile of Respondents in Terms of Sex

Sex	f	%
Female	77	100%
Male	0	0%
Total	77	100%

The City Health Office of San Pablo has 108 registered and 25 volunteers BHWs. The study was participated by 77 BHWs of which comprises the 54% of the total number of BHWs in San Pablo City. The BHWs are all female (Table 3), which belongs to various age brackets, as illustrated in Table 5.

The BHWs in San Pablo City who responded were all females and as per record of the City Health Office of San Pablo City, there are no male BHWs registered and volunteering in the city. Although during the previous years, there is one male BHW, the CHO Head Nurse affirmed that currently, all the BHWs in San Pablo are females. This suggests that females are more interested in the BHWs activities' than males.

Table 5. Profile of the respondents in terms of age

Age in Years	f	%
26-35	10	13.0%
36-45	22	28.6%
46-55	26	33.8%
56+	19	24.7%
Total	77	100%

As illustrated in Table 5, majority of the respondents belong to the 46-55 ages (34%), while 28% belongs to the 36-45 age brackets, 25% belongs to 56 years old and above. Thirteen percent belongs to the 26-35 bracket. There were fewer younger BHWs who were respondents of the study. Most of the BHWs in San Pablo City belonged to the middle-aged bracket which could suggest that the activities of the BHWs are tailored for those belonging to that age bracket.

Table 6. Profile of Respondents in Terms of Highest Educational Attainment

Education	f	%
College	17	22.1%
Vocational	7	9.09%
High School	52	67.5%
Elementary	1	1.30%
Total	77	100%

As shown on Table 6 under the educational attainment, majority of the respondents were high school graduates with 68% in total, followed by vocational graduates, 9%, 22% college graduates, and only 1% of the respondents is an elementary graduate. Minimum qualification of BHWs include the completion of basic training program and should be accredited by the Local Health Board after rendering volunteer services in the

LGU. It did not specify any minimum education to be able to qualify as a BHW.

Table 7. Profile of Respondents in Terms of Number of Years in Service

Years in Service	<i>f</i>	%
1-2 years	7	9.09%
3-5 years	15	19.5%
6-10 years	20	26.0%
11+ years	35	45.5%
Total	77	100%

The table shows that majority of the BHWs who responded have been rendering more than a decade of service as frontliners as 46% of them belongs to this bracket. This suggests that most of the respondents were experienced in their field as BHWs. Twenty-four percent follows belonging to the 6-10 years in service, 19% of them who are 3-5 years in service and 9% with between 1-2 years' service. (Table 7). The Philippines is one of the pioneers in adopting the Primary Health Care ever since it was introduced in the 1980s.

It was affirmed by Dr. Kenneth Ronquillo, previous undersecretary of health, in his message on the development of the BHW manual, that the BHWs had been working with the DOH and the local government in promoting health in their community. Their efforts were all recognized during the COVID-19 Pandemic when they actively participated as members of the Barangay Health Emergency Response Teams (BHERTs).

Table 8. Roles of BHW in Terms of Health Education and Promotion Officer

INDICATOR	MEAN	SD	VERBAL INTERPRETATION
1. I regularly conduct health education sessions for the community.	3.96	0.98	Effective
2. I provide information that helps the community make a healthier lifestyle	4.18	0.72	Effective
3. The health education programs I organize are well-attended by the community.	3.93	0.87	Effective
4. Community members easily understand the information I provide.	4.00	0.86	Effective
5. Health education has led to improved knowledge about preventive health measures in the community.	4.25	0.79	Effective
Overall, for Health Education and Promotion Officer	4.06	0.69	Effective

Note. $N=77$. The mean is interpreted as follows: 4.21–5.00=Highly Effective, 3.41–4.20= Effective, 2.61–3.40=Neutral, 1.81–2.60=Somehow effective, 1.00–1.80=Not effective.

Table 8 shows the perceived effectiveness of BHWs in terms of their role as a Health Education and Promotion officer. It obtained a composite mean of 4.06 (SD=0.69), interpreted as effective. As per the BHW Reference Manual, BHWs are expected to be the barangay-level health promotion officers in their communities, with the task of improving health literacy and creating healthy settings in their areas of assignment so that the healthier behavior will be the easier choice for everyone. BHWs are advocates of the program implementation of DOH whether it is for maternal, child and even the prevention of incidence of

notifiable diseases.

Based from the results given, BHWs of San Pablo is successful in fulfilling their role as Health Education and Promotion officer. They perform effective roles in educating the community about healthier lifestyles, preventive health measures, and engaging community members in health programs.

The findings also suggest that BHWs are making significant contributions to health education. In terms of consistency across different areas, there is a moderate standard deviation which indicates room for improvement. Moving forward, strategies to further enhance attendance and ensure consistent delivery of information can be explored to strengthen these efforts. Health education sessions were not directly organized by the BHWs but they act as the bridge in making sure they let the community know about certain updates on health situations in their barangay.

Table 9. Roles as Health Service Provider

	INDICATOR	MEAN	SD	VERBAL INTERPRETATION
1.	I regularly provide essential health services to the community.	4.09	0.79	Effective
2.	Community members frequently seek health services from me.	3.99	0.89	Effective
3.	I can address the basic health needs of the community effectively.	3.96	0.86	Effective
4.	I have the necessary resources to provide quality health services to the community.	3.95	0.83	Effective
5.	I collaborate with other health professionals to ensure comprehensive healthcare delivery.	4.20	0.83	Effective
Overall for Health Service Provider		4.04	0.71	Effective

Note. N=77. The mean is interpreted as follows: 4.21–5:00=Highly Effective, 3.41–4.20= Effective, 2.61–3.40=Neutral, 1.81–2.60=Somehow effective, 1.00–1.80=Not effective.

The data presented in Table 9 reflects the performance of Barangay Health Workers (BHWs) in San Pablo City, Laguna, under Republic Act No. 7883, which emphasizes the importance of BHWs in enhancing community health. The overall score of 4.04, which falls under the effective range, indicates that BHWs in San Pablo City are performing well in their roles as health service providers.

They are regularly providing essential services, addressing basic health needs, and collaborating with other professionals effectively. While BHWs report having the necessary resources, the relatively lower mean score in this area suggests that there may still be gaps or challenges in terms of the adequacy of resources. Though community members frequently seek health services, further engagement strategies could be developed to ensure that all community members, especially those in underserved areas, are aware of and make use of available health services. The passage of the RA No. 11223 strengthens the primary healthcare in the Philippines. In the result given on table 9, this only shows that the BHW are effective in terms of assisting the other members of the health team in providing quality services in terms of health.

The overall mean for the role of BHWs as community organizers is 4.00, with a standard deviation of 0.67. The results suggest that as a community organizer, BHWs perform this role effectively. With most of their activities being seen as effective in engaging the community and improving health awareness. It is stated in their manual that they play an important part in the Philippine healthcare system in delivering health services and information to emphasize community involvement in the various health programs formulated by

the DOH. While there is room for improvement in terms of resource mobilization and support from local authorities, BHWs are making significant contributions to enhancing community health.

The findings, as shown in Table 10, suggest that BHWs are effective in assisting to organize health programs and encouraging community participation. Although they do not directly organize the program themselves, they assist the other health care members in making sure that the community participates. However, to further improve the success of these initiatives, it may be beneficial to strengthen resource mobilization strategies and increase consistent support from local authorities.

Table 10. Roles of BHW in Terms of Community Organizer

INDICATOR	MEAN	SD	VERBAL INTERPRETATION
1. I actively organize community health-related programs and activities	3.96	0.85	Effective
2. Community members are engaged and actively participate in the health programs I organize.	3.99	0.77	Effective
3. The health programs I organize have helped improve the community's overall health awareness.	4.26	0.79	Highly Effective
4. I can mobilize local resources to support community health initiatives.	3.82	0.80	Effective
5. I receive adequate support from local authorities in organizing health programs.	3.96	0.92	Effective
Overall for Community Organizer	4.00	0.67	Effective

Note. N=77. The mean is interpreted as follows: 4.21–5.00=Highly Effective, 3.41–4.20= Effective, 2.61–3.40=Neutral, 1.81–2.60=Somehow effective, 1.00–1.80=Not effective.

The innovativeness of the primary health care call for the participatory development management since community members are expected to take an active role in managing their own health requirements, instead of merely depending on the government. This therefore implies the importance of organizing community to enable the residents to operate independently and effectively interface in the government. PHC also gives importance to the participation of various sector in local health activities since health is assumed to relate with other socioeconomic considerations. (Bautista, 1996).

Table 11. Effectiveness of BHW in Terms of Health Knowledge of the Community

	INDICATOR	MEAN	SD	VERBAL INTERPRETATION
1.	The community members have a better understanding of health and wellness due to the health programs.	4.11	0.84	Effective
2.	The community is well-informed about preventive health measures such as vaccination and sanitation.	4.33	0.81	Highly Effective
3.	The community has an increased awareness of healthy lifestyle choices (e.g., nutrition and exercise).	4.11	0.83	Effective
4.	Community members actively seek out information on health topics.	4.01	0.86	Effective
5.	The community clearly understands maternal and child healthcare practices.	4.23	0.85	Highly Effective
Overall for Health Knowledge		4.16	0.74	Effective

Note. N=77. The mean is interpreted as follows: 4.21–5.00=Highly Effective, 3.41–4.20= Effective, 2.61–3.40=Neutral, 1.81–2.60=Somehow effective, 1.00–1.80=Not effective.

The overall effectiveness in terms of health knowledge is rated as effective with a mean score of 4.16. This suggests that, on average, BHWs in San Pablo City are successfully enhancing the community's health knowledge, particularly in key areas such as preventive health, healthy lifestyle choices, and maternal and child healthcare. BHWs are one of the active members of the health care team who are advocates of the different programs of DOH. They are assisting the other health care team members in promoting health which makes them knowledgeable of the different programs of DOH. The BHWs undergo training and from time to time, they receive updates on the programs of the DOH. Their basic health knowledge is effective to reach the community they were assigned to. They work hand in hand with doctors, midwives and nurses to reiterate the basic information about health.

The core function of the BHWs as per Carrillo et al.. (2022), is to offer information, education and motivation for primary health care. With the emergence of pandemics, increased disease burden states, rapid evolution of the health care system and the ever-changing dynamics of human behavior towards health and lifestyle priorities, now more than ever, BHWs are now challenged to undertake the necessary steps in upgrading their knowledge base and skills development in order to catch up during those trying times.

Table 12. Effectiveness of BHW in Terms of Health Care Access and Utilization

	INDICATOR	MEAN	SD	VERBAL INTERPRETATION
1.	Community members have easy access to basic healthcare services provided by Barangay Health Workers.	4.24	0.91	Highly Effective
2.	There has been an increase in the utilization of health services provided by Barangay Health Workers.	4.16	0.80	Effective
3.	Health services provided by Barangay Health Workers are accessible and affordable to most community members.	4.21	0.87	Highly Effective
4.	I have observed a reduction in the number of people seeking health services in more distant health centers due to the availability of local services.	3.83	0.89	Effective
5.	Community members have sufficient knowledge of where and how to access health services.	4.11	0.83	Effective
Overall for Health Care Access & Utilization		4.11	0.75	Effective

Note. N=77. The mean is interpreted as follows: 4.21–5.00=Highly Effective, 3.41–4.20= Effective, 2.61–3.40=Neutral, 1.81–2.60=Somehow effective, 1.00–1.80=Not effective.

In Table 12, the overall mean for health care access and utilization is 4.11, with a standard deviation of 0.75, interpreted as effective. This indicates that, overall, BHWs in San Pablo City are effective in improving health care access and utilization. While the results show that BHWs are highly successful in ensuring access to affordable services and increasing utilization, there are areas where improvements can be made, such as in reducing the reliance on distant health centers and ensuring that all community members are equally informed about how to access services. According to Baliola et al, (2024), the BHWs extends the accessibility of health care services at the community level as described in their role as an integral health service provider at the grassroot level. They are community members trained to serve as the point of contact for patients to the larger health system. In conclusion, the findings highlight the important role that BHWs play in enhancing community health by making health services more accessible and by encouraging greater utilization.

The study suggests that continued efforts to improve the accessibility of services, raise awareness, and further reduce the need for distant health care visits will enhance the overall effectiveness of BHWs in promoting health care access and utilization in San Pablo City. As stated in the BHW manual, one of the agenda of the Primary Health Care is the easy access of the community in the provision of services by the DOH.

In the next table, the overall mean for the effectiveness of BHWs in reducing the incidence of preventable diseases is 4.19, with a standard deviation of 0.73, categorized as effective (Table 13). This indicates that, on the whole, BHWs are successful in reducing the incidence of preventable diseases through their health education, assistance in vaccination programs, and disease outbreak management efforts.

Table 13. Effectiveness of BHW in Terms of Incidence of Preventable Diseases

INDICATOR	MEAN	SD	VERBAL INTERPRETATION
1. Due to the efforts of barangay health workers, the incidence of preventable diseases (e.g., diarrhea and respiratory infections) in the community has decreased.	4.20	0.80	Effective
2. Health education programs have effectively reduced risky health behaviors that lead to preventable diseases.	4.20	0.80	Effective
3. Vaccination programs have contributed to a reduction in preventable diseases in the community.	4.37	0.81	Highly Effective
4. Since the health programs started, the number of preventable diseases reported in the community has decreased noticeably.	4.09	0.82	Effective
5. Barangay Health Workers effectively address preventable disease outbreaks when they occur.	4.12	0.86	Effective
Overall for Incidence of Preventable Diseases	4.19	0.73	Effective

Note. $N=77$. The mean is interpreted as follows: $4.21-5.00=$ Highly Effective, $3.41-4.20=$ Effective, $2.61-3.40=$ Neutral, $1.81-2.60=$ Somehow effective, $1.00-1.80=$ Not effective.

Overall, BHWs are highly effective in preventing and reducing the incidence of preventable diseases in their communities. Vaccination programs, in particular, have shown the highest level of effectiveness. While there is variation across different barangays, the collective efforts of BHWs are widely regarded as successful in improving public health. However, there are areas for further strengthening, particularly in ensuring more consistent impact across all areas, as indicated by the moderate standard deviations. Continued support for BHWs, especially in managing disease outbreaks and expanding health education, will further enhance their effectiveness in combating preventable diseases.

According to the DOH (2015), the one of the tasks of BHWs is the assist in the immunization of children and report any disease outbreaks or health problems in their community. The emphasis on these tasks highlights their role in helping the community in preventing the diseases especially those vaccine-preventable diseases.

Table 14. Effectiveness of BHW in Terms of Public Health Surveillance

INDICATOR	MEAN	SD	VERBAL INTERPRETATION
1. Barangay Health Workers regularly monitor the health status of the community through surveillance activities.	4.21	0.91	Highly Effective
2. Public health surveillance efforts have improved the early detection and response to health threats in the community.	4.17	0.78	Effective
3. Community members actively participate in health surveillance activities (e.g., reporting symptoms and health concerns).	4.08	0.91	Effective
4. The data collected from public health surveillance is used to improve local health interventions	4.12	0.85	Effective
5. Public health surveillance has contributed to a safer and healthier community environment.	4.20	0.85	Effective
Overall for Public Health Surveillance	4.16	0.77	Effective

Note. $N=77$. The mean is interpreted as follows: 4.21–5.00=Highly Effective, 3.41–4.20= Effective, 2.61–3.40=Neutral, 1.81–2.60=Somehow effective, 1.00–1.80=Not effective.

The overall mean for the effectiveness of BHWs in public health surveillance is 4.16, with a standard deviation of 0.77, interpreted as effective. This indicates that, overall, BHWs are effective in conducting public health surveillance, early detection, and response to health threats, as well as using surveillance data to inform local health interventions. The community's participation in these efforts is also seen as active and positive, though there is some variability in how these efforts are implemented and perceived across different barangays.

BHWs in San Pablo City are highly effective in monitoring the health status of the community through regular surveillance activities, with a strong focus on early detection and response to health threats. They have also been successful in engaging community members in reporting health concerns and using collected data to improve local health interventions.

RA 11332 or the act known as the “Mandatory Reporting of Notifiable Diseases and Health Events of Public Health Concern Act” Provides Policies and Prescribing Procedures on Surveillance and Response to Notifiable Diseases, Epidemics, and Health Events of Public Health Concern. BHWs are local counterparts who are mandated to report the notifiable diseases in their community by informing the nurse or midwives assigned in their area. They also participate in the investigations made by the local health authorities. From time to time, they undergo trainings on public health surveillance. As per Landingin, (2023), every BHWs must have the chance to continue training, seminars, and workshops in order to maintain their current knowledge and skills and to enhance their performance. They must have the tools and equipment necessary to do extra-demanding duties in the community to improve the BHWs productivity.

However, there is some variability in the consistency of these efforts across different areas, as indicated by the moderate standard deviations. Continued support for public health surveillance, along with strategies to increase consistency and community participation across all barangays, could further enhance the effectiveness of BHWs in maintaining a safer and healthier community.

Table 15. Effectiveness of BHW in Terms of Maternal and Child Health Indicators

	INDICATOR	MEAN	SD	VERBAL INTERPRETATION
1.	The maternal and child health programs have improved maternal health outcomes in the community.	4.28	0.78	Highly Effective
2.	Community health programs have increased the number of pregnant women attending prenatal care.	4.16	0.86	Effective
3.	Barangay health workers' activities have improved children's health (e.g., immunization rates and growth monitoring).	4.30	0.88	Highly Effective
4.	Barangay Health Workers successfully promote breastfeeding and proper child nutrition.	4.37	0.91	Highly Effective
5.	The community's Maternal and child health indicators have significantly improved in recent years.	4.19	0.91	Effective
Overall for Maternal & Child Health		4.26	0.80	Highly Effective

Note. $N=77$. The mean is interpreted as follows: 4.21–5.00=Highly Effective, 3.41–4.20= Effective, 2.61–3.40=Neutral, 1.81–2.60=Somehow effective, 1.00–1.80=Not effective.

The overall mean for maternal and child health is 4.26, with a standard deviation of 0.80, categorized as highly effective. This indicates that, overall, BHWs have been highly effective in improving maternal and child health outcomes in the community. The improvements in areas such as maternal health, children's health (including immunization), breastfeeding, and child nutrition are widely recognized, with some variability across different barangays.

Barangay Health Workers (BHWs) in San Pablo City have been highly effective in improving maternal and child health. Their programs have led to improved maternal health outcomes, increased attendance at prenatal care, and better health for children through immunization and growth monitoring. BHWs are also highly successful in promoting breastfeeding and proper child nutrition.

In the BHW Reference Manual (2022), the BHWs are trained to perform a wide array of tasks, from basic first aid to maternal and child care. Their role as educators is particularly in the aspects of maternal and child health care is significant as they disseminate information on health practices, hygiene, sanitation, and disease prevention, empowering communities to take charge of their health.

While the overall effectiveness is strong, the data suggests some variability in the extent of impact across different barangays. Continued support and monitoring of BHW activities could help address these variations and further strengthen the overall effectiveness of maternal and child health programs in the community.

On the next table, Table 16, The overall mean for coordination with local authorities is 4.21, with a standard deviation of 0.73, categorized as highly effective. This indicates that, overall, BHWs in San Pablo City are highly effective in coordinating with local authorities to improve community health. The cooperation, communication, and support between BHWs and local authorities are generally strong, though there is some variability in the level of support and resource allocation across different barangays.

Barangay Health Workers (BHWs) in San Pablo City are highly effective in coordinating with local authorities to improve community health. The collaboration between BHWs and local government units is robust, with regular communication and strong cooperation that have contributed to improved public health policies.

Table 16. Effectiveness of BHW in Terms of Coordination with Local Authorities

	INDICATOR	MEAN	SD	VERBAL INTERPRETATION
1.	Barangay Health Workers collaborate effectively with local government units to improve community health.	4.24	0.83	Highly Effective
2.	There is regular communication between Barangay Health Workers and local authorities regarding health concerns.	4.24	0.82	Highly Effective
3.	Local authorities support the initiatives of Barangay Health Workers in addressing health issues.	4.14	0.86	Effective
4.	Cooperation between Barangay Health Workers and local authorities has improved public health policies.	4.26	0.75	Highly Effective
5.	Local authorities provide adequate resources for Barangay Health Workers to carry out their duties.	4.14	0.81	Effective
Overall for Coordination with Local Authorities		4.21	0.73	Highly Effective

Note. $N=77$. The mean is interpreted as follows: 4.21–5.00=Highly Effective, 3.41–4.20= Effective, 2.61–3.40=Neutral, 1.81–2.60=Somehow effective, 1.00–1.80=Not effective.

As noted in the BHW Reference Manual (2022), BHWs also facilitate community involvement working closely with local officials and health personnel to implement health programs and advocate for preventive measures. However, while support from local authorities and the provision of resources is generally considered effective, there is some variation in how these aspects are perceived and implemented across different barangays. Continued efforts to strengthen and standardize support and resource allocation from local authorities can further enhance the effectiveness of BHWs in improving community health.

Table 17. Correlations Between the Roles of BHWs and Their Disease Management and Enhancement of Community Health

Role	Disease Management and Community Health Enhancement					Coordination With Local Authorities
	Health Knowledge of the Community	Health Care Access & Utilization	Incidence of Preventable Diseases	Public Health Surveillance	Maternal & Child Health Indicators	
Health Education and Promotion Officer	.81*** high corr.	.75*** high corr.	.82*** high corr.	.74*** high corr.	.70*** high corr.	.77*** high corr.
Health Service Provider	.78*** high corr.	.81*** high corr.	.82*** high corr.	.73*** high corr.	.72*** high corr.	.77*** high corr.
Community Organizer	.82*** high corr.	.85*** high corr.	.74*** high corr.	.68*** moderate corr.	.67*** moderate corr.	.73*** high corr.

Note. Cell contains correlation statistic, interpretation of its strength, and its corresponding p value. No bivariate normality assumption is violated so Pearson r was used. Degree of freedom is 75.

* $p < .05$. ** $p < .01$. *** $p < .001$.

The data in Table 17 presents the correlations between the roles of Barangay Health Workers (BHWs) and several indicators related to disease management and the enhancement of community health in San Pablo City, Laguna. The correlation values indicate the strength and direction of the relationship between BHW roles and the various health indicators, with significance levels shown by p-values.

The Health Education and Promotion Officer role shows strong positive correlations with all six indicators. This suggests that the BHWs involved in health education and promotion play a significant role in improving the community's health knowledge, healthcare access, reducing preventable diseases, strengthening public health surveillance, enhancing maternal and child health, and fostering coordination with local authorities. The high correlations across these variables imply that effective health education and promotion are closely tied to improvements in these areas.

The Health Service Provider role also shows strong positive correlations with the same six indicators, although the strength of the correlation is slightly lower compared to the Health Education and Promotion Officer role. This suggests that BHWs in the health service provider role are highly influential in improving community health, enhancing healthcare utilization, and reducing preventable diseases. These BHWs also contribute to public health surveillance and maternal and child health, as well as work well with local authorities. The relatively strong correlations suggest that this role is central to the overall health improvement in the community.

The Community Organizer role shows a mix of strong and moderate positive correlations with the indicators. The highest correlation is with health care access and utilization (0.85), followed by health knowledge of the community (0.82) and coordination with local authorities (0.73). The moderate correlations with public health surveillance and maternal and child health indicators suggest that, while the Community

Organizer role has a significant impact on many areas, its influence on specific health outcomes such as public health surveillance and maternal/child health might not be as pronounced compared to the Health Education and Promotion Officer and Health Service Provider roles.

The data suggests that BHWs, in their respective roles, have a significant positive influence on various aspects of community health. Their contributions to health education, service provision, and community organizing are strongly linked to improvements in health knowledge, access to care, and the prevention of diseases. These results underscore the importance of BHWs in strengthening community health systems and improving public health outcomes.

The Role Theory developed by R. Merton in 1957 is one of the key theories in guiding this research. As per Merton, the sociological framework examines the ways in which individuals in a society are expected to behave based on their positions and roles. The Role Theory seeks to understand human behavior through the roles individuals hold in the society. This theory posits that people act based on the roles they occupy and these roles come with a set of norms, expectations and behaviors. In this theory, Merton emphasized the role strain, role conflict, role performance and role expectation. In its simplest applications, the role strain experienced by the BHWs occur when they have difficulty meeting the expectations of their particular role. There comes the role conflict when they have difficulty meeting the expectations of the community in their particular role. While performance encompasses the behaviors, actions, and responsibilities associated with a specific role, role expectation involves the societal and cultural norms and expectations attached to a given role. When the community where the area of BHWs has a certain belief, their roles in implementing such practices for health are compromised. The foundations of the role theory provide framework for understanding how roles shape individual behavior and the interactions within society.

4. Summary of Findings, Conclusions, and Recommendations

This chapter presents an analysis of data collected to assess the role of 77 Barangay Health Workers (BHWs) under Republic Act No. 7883 in enhancing community health in San Pablo City, Laguna. Through systematically organized and analyzed questionnaire data, the study investigates the effectiveness of BHWs in various roles and their contribution to improving public health.

4.1. Summary of Findings

The role of the BHWs is diverse and the objective of this study is to identify the significant impact of such roles as members in the enhancement of health of the community in San Pablo City, Laguna. It was mentioned that the BHWs are at the frontline of public health initiatives in barangays (neighborhoods) serving as the bridge between the health care system and local communities. Their roles serve as a resource in strengthening the health system at the grassroot level.

The study adopted a descriptive-correlational research design to assess the role of BHWs in enhancing the community health. The correlation values indicated the strength and direction of the relationship between BHW roles and the various health indicators, with significance levels shown by p-values.

Among the six all indicators (Health Knowledge of the Community, Health Care Access and Utilization, Incidence of Preventable Diseases, Public Health Surveillance, Maternal and Child Health Indicators and Coordination with Local Authorities), the BHWs' role as Health Education and Promotion Officer showed strong positive correlations. The Health Service Provider role also shows a strong positive correlation with the same six indicators, although the strength of the correlation is slightly lower compared to the Health Education and Promotion Officer role.

The salient findings of the study are the following:

The respondents are all female and majority of them belong to the 46-55 age bracket. Most of these

BHWs are high school graduates as seen on the tables presented. While most of the respondents in the study are noted to have more than 10 years in service as BHWS.

The role of BHW as **Health Education and Promotion Officer** has the strongest correlations across all indicators, indicating that BHWs performing this role are crucial in improving overall community health through education, increasing healthcare access, reducing preventable diseases, and fostering cooperation with local authorities.

While on the other hand, their role as a **Health Service Provider** also shows strong correlations, especially in areas such as health care access, disease prevention, and surveillance. This role is critical in ensuring that services are delivered effectively and that community health is managed well.

Lastly, as a **Community Organizer**, they have a slightly less uniform impact. While it shows strong correlations in areas like health knowledge and health care utilization, its influence on public health surveillance and maternal/child health is moderate. However, its contribution to improving coordination with local authorities is significant.

The Health Belief Model developed by Rosenstock, Hochbaum, Kegeles and Leventhal in 1950s was developed to explain the lack of participation in Public Health Service programs, responses to experienced symptoms, and medical compliance. This model proposes that people are most likely to take preventive action if they perceive the threat of a health risk to be serious, or if they feel they are personally susceptible to contract disease. The Health Belief Model can be applied to understand how BHWs influence community members' perceptions of diseases and encourage proactive health behaviors such as vaccination, reporting and seeking treatment.

4.2. Conclusions

The findings of this study demonstrate that BHWs play a crucial role in improving community health in San Pablo City. Their effectiveness in health education, community organizing, disease prevention, and collaboration with local authorities significantly contributes to enhancing community health outcomes. Thus, the roles of the BHW as Health Education and Promotion Officer, Health service provider and community organizer are deemed effective in the enhancement of the community health in San Pablo City. Their role as a Health Promotion officer is effective as the community receives communication regarding programs and activities of the DOH thru the BHWs.

However, there are areas where further improvements are necessary, particularly in resource mobilization, local authority support, and ensuring consistent participation and engagement across different barangays. The study underscores the importance of continuous support for BHWs to further strengthen their impact on community health.

Based on the results obtained from the statistical analysis, the alternative hypothesis was rejected. The data demonstrated a statistically significant effect of the roles of the BHW in the enhancement of the community health in San Pablo City. These findings support the proposed relationship and suggest that the independent variable had a measurable impact on the dependent variable. The BHWs are effective in their roles as a Health Education and Promotion officer, Health Service Provider and Community organizer.

4.3. Recommendations

For this study, titled "The Role of Barangay Health Workers (BHWs) Under Republic Act No. 7883 in Enhancing Community Health in San Pablo City, Laguna: An Assessment of Challenges and Opportunities," here are several recommendations that can enhance the findings and contribute to improving the effectiveness of BHWs in their roles:

1. Strengthening Training and Capacity-Building Programs

Based on the study, while the data shows that BHWs are generally effective in their roles, especially

in health education and promoting maternal and child health, there is still room for improvement and continuous training for the BHWs should be planned by the Local Government Units as supervised by the DOH. There could be additional training programs that focus on advanced health education techniques, modern health promotion strategies, and community mobilization tools. This can help improve their skills and ensure that health education sessions are even more engaging and impactful. It is recommended to organize regular refresher courses, workshops, and seminars for BHWs on emerging health issues and new health policies to enhance their knowledge base.

2. Improving Resource Mobilization and Support from Local Authorities

To the local authorities, there should be a strong collaboration between the BHWs and the Local Government Unit to communicate the issues and address them directly. The results indicate some gaps in resource mobilization and support from local authorities, especially in the role of community organizing (Table 17). To address this, it is crucial to strengthen the collaboration between BHWs and local authorities, focusing on ensuring adequate resources (financial, human, and material) for health initiatives. A formalized strategy should be developed for resource allocation and a partnership framework that clearly defines the role of local government units in supporting BHW initiatives. This could include ensuring that local authorities are informed about the needs of the BHWs and committed to providing necessary resources.

3. Enhancing Community Participation in Health Programs

To the Barangay Officials, their influence has an impact in terms of the community's participation in the different programs of implemented by the DOH. Although BHWs are seen as effective in engaging the community in health-related activities, the study suggests that there is room for improvement, particularly in terms of increasing attendance at health programs and achieving greater community participation. This could involve strategies to increase community engagement and address barriers to participation. Developing community-based campaigns to raise awareness about the benefits of health programs, create incentives for participation, and introduce interactive formats (e.g., health fairs, health competitions, or community health forums) to make health programs more appealing and accessible.

4. Promoting Better Health Literacy and Awareness

The staff of the City Health Office would greatly contribute to the trust of the community in terms of the health education and empower BHWs in raising awareness of the community in terms of their health. While the study indicates that BHWs are effective in promoting health knowledge (Table 11), it is important to continue efforts to bridge gaps in health literacy, especially in rural areas.

The variation in the effectiveness of health knowledge programs across barangays could be due to differences in how information is delivered and received. Introducing multi-lingual and culturally relevant educational materials, and utilize various communication channels (e.g., social media, radio, community meetings) to enhance health literacy. Additionally, involve local leaders or respected community members to help in disseminating health information more effectively.

5. Optimizing Public Health Surveillance Systems

To the staff of the City Health Office, capacity building in terms of detecting notifiable diseases is necessary to make the BHWs equipped with the surveillance reporting and early case detection. BHWs are seen as effective in conducting public health surveillance, but there is potential to further improve the timeliness and accuracy of data collection and utilization. Strengthening the monitoring system can lead to more rapid and responsive public health intervention. Introduce training on using digital tools for health surveillance, enhance data management systems for more real-time monitoring, and ensure that BHWs are equipped with the necessary tools to track and analyze health trends efficiently.

6. Addressing Variations in Effectiveness Across Barangays

To the barangay officials of San Pablo, some findings, show variability in BHW effectiveness across different barangays. To reduce this variability, it is important to implement consistent standards and regular evaluations of BHW performance. Establishing a benchmarking system and conducting regular evaluations to measure BHW effectiveness. Develop uniform guidelines and protocols across barangays to ensure that all

BHWs have access to the same level of training and resources, and that health interventions are standardized and coordinated.

7. Enhancing Collaboration with Other Healthcare Providers

To the staff of the City Health Office of San Pablo, BHWs play a critical role in community health, but there should also be a stronger collaboration with other healthcare professionals (e.g., doctors, nurses, midwives) to improve healthcare delivery and ensure holistic support for community members. Facilitating regular coordination meetings between BHWs and other healthcare workers to ensure that they work together effectively. Encourage joint training sessions to strengthen teamwork and improve the overall healthcare delivery process in the community.

8. Advocating for Increased Funding for BHWs

To the national government, the study highlights the challenges faced by BHWs, such as inconsistent support from local authorities and limited resources. Advocating for increased funding and budget allocation for BHWs could address these issues and enable them to better perform their duties. Advocate for increased funding and better compensation for BHWs through policy briefs or presentations to local government officials. Focus on demonstrating the long-term benefits of BHW programs in improving public health outcomes to make a strong case for investment.

9. Monitoring and Evaluating Health Programs

To the Local Government Unit of San Pablo and the DOH, continuous evaluation of health programs organized by BHWs will help identify areas that require improvement. Collecting and analyzing feedback from the community can lead to better-tailored programs and more effective health intervention. Therefore, periodic surveys or focus group discussions to gather feedback from community members about the effectiveness of health programs should also be taken into consideration. Use this feedback to make necessary adjustments and improve the overall quality of health services provided by BHWs.

10. Strengthening Maternal and Child Health Programs

To the DOH, continuous training of the health care workers should be emphasized in order for them to get equipped with the latest updates pertaining immunization and maternal health. Since maternal and child health programs are identified as highly effective, there should be continued investment in expanding and enhancing these programs, especially in underserved areas. Scale up maternal and child health initiatives with a particular focus on increasing prenatal care attendance and promoting breastfeeding. Collaborate with national health organizations to bring in additional resources and expertise for maternal and child health improvements.

By addressing these recommendations, the role of BHWs in San Pablo City can be further strengthened, ensuring their continued success in enhancing community health. These improvements would not only enhance BHW performance but also lead to better health outcomes for the community as a whole.

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