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RESEARCH ARTICLE **OPEN ACCESS**

A Cross-Sectional Study on the Competency in Delivering Health Services among Barangay Health Workers in Metro Vigan: Basis for the Conduct of a Competency-based Training Program

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Abstract:

Introduction: This study examined how effectively Barangay Health Workers (BHWs) deliver key health services in Metro Vigan, Philippines. BHWs play a key role in health education, disease prevention, maternal and child care, and community health monitoring. Still, their competency levels vary, often because of limited training and resources. The study assessed BHW skills in five main areas: health promotion, health education, health status monitoring, record-keeping, and maintaining health stations. It also examined how variables such as age, education, and marital status relate to their competency. The results show the need for a thorough training program to help BHWs improve and keep providing quality health services in Metro Vigan.

Methods: A descriptive-correlational study approach was utilized, employing a questionnaire derived from the TESDA Self-Assessment Guide for Barangay Health Services.

Results: The findings show that although BHWs typically exhibit considerable proficiency, their civil status influences their performance, especially in health monitoring and record-keeping.

Discussion: Training programs were deemed inadequate, exhibiting deficiencies in cultural awareness and communication abilities.

Conclusion: The report recommends establishing a TESDA certification program, creating targeted training initiatives, and improving feedback systems to enhance the performance of BHWs and guarantee the sustainability of primary health services. This study supports the United Nations' Sustainable Development Goals 3, 8, and 16 by encouraging skill-based programs to improve how well BHWs perform their important roles.

Keywords: Barangay health workers, Competency, Primary health care, Community health services, Health monitoring, Cultural awareness.

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1. INTRODUCTION

The 1979 Alma-Ata Declaration on Primary Health Care (PHC) called for more health workers and greater community involvement. This led to Community Health Workers taking on roles in health promotion and case management, as evidence grew of their effectiveness and financial efficiency [1].

In the Philippines, Barangay Health Workers are

authorized to operate as such by the local health board in compliance with the regulations established by the Department of Health [2]. Republic Act 7883, titled "Barangay Health Workers' Benefits and Incentives Act of 1995," acknowledges the essentiality of primary health care and organizes health workers to enhance health empowerment. The Barangay Health Worker program was initiated in the early 1980s as part of the Philippines' strategy to implement the community health worker model for primary health care provision. This effort attempted to improve health outcomes by utilizing local volunteers to deliver basic health services and education within their communities [1].

A Barangay health worker is a trained volunteer who provides primary health care in the community. They are accredited by the local health board under Department of Health (DOH) rules [2].

Barangay Health Workers (BHWs) are community health workers who serve as health advocates and educators in their local areas. In the Philippines, BHWs play a key role in coordinating Mass Drug Administration (MDA) as advocates, implementers, and educators [3]. They reside in the communities they serve and undergo around five weeks of training, which includes administering vaccines, measuring children's weight, and providing birthing services, among other tasks. They offer information, educational resources, and motivational services pertaining to basic health care, maternity and child health, child rights, family planning, and nutrition.

The Department of Health establishes the optimal ratio of Barangay health workers to homes, making sure that the total number of Barangay health workers nationally does not surpass one percent (1%) of the total population [2]. Each volunteer is expected to help about 20 families in their community. However, a shortage of trained workers has reduced the number of volunteers, especially in remote areas, where only one or two volunteers sometimes serve an entire Barangay [4].

Most Barangay health professionals are women. They are called "volunteers" because their jobs are not permanent, which makes them more dependent on the Barangay captain or other leaders who appoint them. They usually get an allowance and a few benefits, such as training, medical help, and groceries on special occasions [5].

Barangay Health Workers (BHWs) play a vital role during health crises. They play a vital role in hindering the spread of the coronavirus. At the community level, they serve as the first line of defense and link residents to health professionals and institutions.

Barangay Health Workers (BHWs) have worked in the Philippines for almost forty years and are often praised in reviews of local health systems and community involvement. However, there is still not enough understanding of what motivates and keeps them engaged as volunteers. This understanding is essential, as the program's success depends on motivating community members to serve as peer health advocates, which remains challenging [1]. Although BHWs play a vital role, support measures such as the Barangay Health Workers' Benefits and Incentives Act (2) have not been fully implemented. Consequently, BHWs commonly lack adequate support, compensation, and training, which undermines their motivation and effectiveness [6-8]. Additionally, political influence and patronage have created obstacles that hinder the program's progress [6].

Some health workers, including professionals and Barangay Health Workers (BHWs), believe that BHW training is not enough and needs improvement. Travel costs to the main health center can discourage BHWs from attending training [9]. Local government authority may restrict the roles of Barangay health volunteers [10]. Many believe Barangay health stations offer inadequate services and have low client satisfaction. Limited funding often results in shortages of medical supplies, long wait times, inadequate facilities, and insufficient training or staff. Rural poor populations are especially vulnerable to poor sanitation, malnutrition, and a lack of hygiene programs. Political, social, and economic decisions by local leaders greatly affect communities that rely on Barangay health care.

Volunteers may lack up-to-date knowledge due to ongoing advances in medical care and insufficient training. Training is important for Barangay health workers to improve their knowledge and skills, enabling them to provide better care.

Patricia Benner's "From Novice to Expert," which draws on the Dreyfus skill-acquisition framework, delineates five levels of healthcare skill: novice, advanced beginner, competent, proficient, and expert [11-13]. This model provides a structured approach to assessing and developing the skills of Barangay Health Workers in Metro Vigan.

Benner's model shows that clinical skills develop through formal education and practical experience. New BHWs rely on rules and procedures because they lack experience. As advanced beginners, they begin to observe patterns and apply their knowledge within practical situations. At the competent level, they can set priorities and make good decisions. Proficient BHWs understand patients' needs well and can adjust their approach. Expert BHWs have deep knowledge of complex situations, enabling them to make quick, accurate decisions based on their experience [11-13].

The model is based on qualitative research and nursing stories, making it a practical, easy-to-understand way to examine skill development in healthcare [11, 14]. This is especially relevant for BHWs, who frequently operate within varied and challenging community settings. The model stresses learning by doing, as BHWs develop skills through direct engagement with community members and real health situations.

Benner's concept has been widely used in different clinical settings, showing its flexibility and importance. Studies show that nurses' skill levels affect how they care for patients with Congestive Heart Failure (CHF) and

stroke [12, 15]. Expert nurses are key to delivering high-quality care and outcomes, and they serve as role models and leaders [16].

Benner's model, together with standard nursing practice, helps shape nursing education programs. The University of Liverpool used the model in its Diploma in District Nursing to combine skill development and clinical knowledge in post-registration courses [13]. Faculty development in healthcare simulation education has also used the model, noting the need for structured training and mentorship [17].

Benner's model is widely used, though some question its philosophical foundations. Critics claim it is more philosophical than theoretical because it relies on interpretation and qualitative data [14, 18]. However, these concerns commonly originate from erroneous interpretations of its roots in interpretative and Heideggerian phenomenology [18]. This foundation is important for BHWs, since understanding people's real-life experiences is key to effective care.

While Benner's approach delivers a useful way to understand BHW skills, it is important to note the unique issues and criticisms in this context. The model values intuition and learning from experience, which questions traditional, more formal ways of thinking [19]. This is especially relevant in places with limited resources, where BHWs may not have much formal training or supervision.

Also, the model's focus on individual skill development may need to be adjusted to include the teamwork involved in BHW work. Community health workers often work in teams and rely on group support, which stresses the importance of shared skills and knowledge.

This study assessed the competency of Barangay Health Workers (BHWs) in delivering community health services. The results will help create competency-based training for Barangay Health Workers. The training will give them knowledge and skills to improve health, prevent disease, and care for sick people in their communities.

This study supports the United Nations' Sustainable Development Goal 3 by promoting universal health care, especially for disadvantaged groups. Barangay health workers are essential in expanding equitable health coverage through preventive, promotive, and therapeutic care, including maternity, infant, and child health, and by tackling both infectious and non-communicable diseases [20, 21]. High moral sensitivity and strong work values enhance work engagement and directly uphold Sustainable Development Goals 3, 8, and 16, which address health, decent work, and strong institutions [22].

1.1. Objectives of the Study

The present study evaluated the proficiency of Barangay Health Workers (BHWs) in Metro Vigan in rendering essential health services, to support the development of a competency-based training program. The specific aims were as follows:

(1) To describe the demographic and professional profiles of Barangay Health Workers (BHWs), including age, gender, marital status, educational background, years of service, and prior training or seminars attended.

(2) To assess the proficiency of Barangay Health Workers in essential health service domains, including health promotion, health education, station maintenance, health status monitoring, and record keeping.

(3) To examine the relationship between BHW profiles and competency levels.

(4) To develop a competency-based training program that is guided by empirical research findings.

1.2. Conceptual Framework

This study revolved around the paradigm presented as shown in Fig. (**1**) which indicates that the competencies of BHWs in Metro Vigan are influenced by their profiles.

The research paradigm shows that the competencies of the BHWs in Metro Vigan is dependent on their profile.

2. METHODOLOGY

2.1. Research Design

The descriptive-correlational method was applied to characterize the variables and examine their relationships within real-life contexts. This approach identifies the current state of the variables and investigates their relationships. As it does not involve experimental manipulation, the method is appropriate for observing natural associations and correlations [23-25].

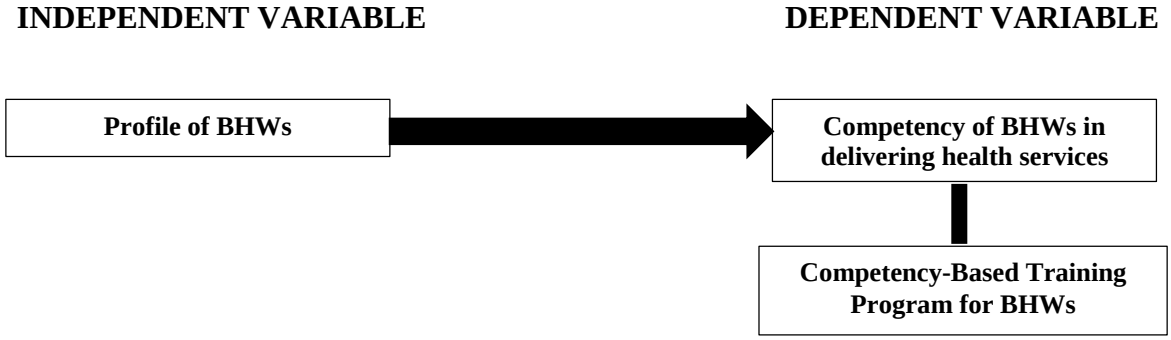

Fig. (1). The research paradigm.

2.2. Population and Sample

The study involved Barangay Health Workers from Metro Vigan, specifically from Vigan City, Bantay, Caoayan, San Vicente, and Sta. Catalina. Earlier studies have pointed out the varied socio-demographic background of Metro Vigan. One study on diabetes mellitus patients found that most were women aged 50 or older, married, and high school graduates. Many worked as unskilled laborers and had family incomes of Php 5,000.00 or less [26]. These limited financial and educational resources may lower health awareness and restrict access to healthcare.

Another study on the Katarungang PAMBarangay system showed that most respondents were married men between 31 and 40 years old who had completed college. Most participants had lived in their Barangays for more than nine years, which suggests they were a fairly stable and educated group compared to those in the diabetic study [27]. Differences in education and age highlight the range of socio-demographic backgrounds in Metro Vigan.

Table **1** displays the distribution of respondents among the five municipalities: Bantay, Caoayan, San Vicente, Sta. Catalina and Vigan City. The study population comprised all Barangay Health Workers (BHWs) in Metro Vigan, utilizing total enumeration to ensure the inclusion of all eligible participants. In total, 884 BHWs were initially approached to participate in the study.

Table 1. Distribution of respondents.

Municipality	N
Bantay	237
Caoayan	128
San Vicente	66
Sta. Catalina	123
Vigan City	330
Total	**884**

Inclusion criteria were:

(1) The Municipal Health Office (MHO) officially recognized them as Barangay Health Workers.

(2) Individuals must be actively engaged in health service duties under the direct supervision of the Municipal Health Office (MHO).

(3) Participants must provide informed consent prior to study participation.

Exclusion criteria were:

(1) BHWs who are not currently engaged in healthcare duties.

(2) Individuals who do not possess official identification from the Municipal Health Office (MHO).

(3) Individuals unwilling to provide informed consent.

Eligibility was established through official identification by the Municipal Health Office (MHO) and verified active participation in health service duties under the MHO's direct supervision. Of those approached, all 884 met the eligibility criteria, provided informed consent to participate, and completed the survey, resulting in a 100% response rate. The final analysis included data from all participants who finished the survey. The structured recruitment and inclusion process improves transparency in participant flow and establishes a clear denominator for the interpretation of the study findings.

Figure **2** displays the flowchart illustrating the recruitment process of 884 Barangay Health Workers (BHWs) in Metro Vigan.

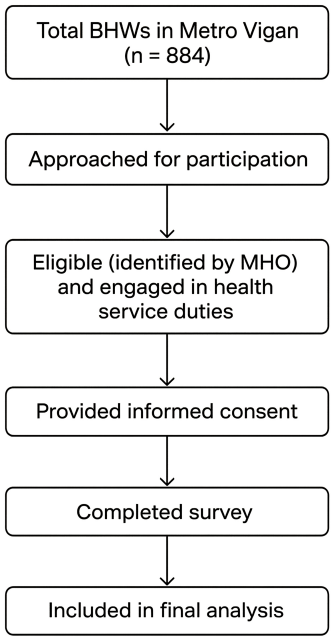

Fig. (2). Participant recruitment flowchart.

This flowchart shows the recruitment process of 884 Barangay Health Workers (BHWs) from Metro Vigan. All were verified by the Municipal Health Offices (MHOs) as eligible, provided informed consent, completed the survey, and were included in the final analysis, yielding a 100% response rate.

2.3. Data Gathering Instrument

In gathering the data for the study, the researcher used a questionnaire checklist based on TESDA's Self-Assessment Guide for Barangay Health Services NC II, which was translated into Iloko. The questionnaire-checklist includes the following parts: Part I. It gathered information about the socio-demographic variables, which include age, sex, civil status, educational attainment, number of years as a BHW, and trainings and seminars attended. Part II is on the level of competency of the respondents in the delivery of Barangay health services along with assisting the household to identify health problems to promote health and well-being; sharing knowledge and skills among members to provide information, education, and communication (IEC) and household teaching in disease prevention and control;

guaranteeing the proper maintenance of the health station and safe custody of its equipment, medical supplies, materials, and health; monitoring the health status of household members under his/her area of service coverage; and maintaining updated lists/records of health activities. The following norms for interpretation were used to interpret the data:

Range	Item DR	Overall DR
4.21 – 5.00	Always (A)	Very High (VH)
3.41 – 4.20	Often (O)	High (H)
2.61 – 3.40	Sometimes (So)	Fair (F)
1.81 – 2.60	Seldom (Se)	Low (L)

2.4. Data Gathering Procedures

We first sought permission and approval from the university's Ethics Committee to conduct the study. After the approval, the researcher forwarded a letter to the city mayor and municipal mayors asking for permission to conduct the study in the selected study sites. After granting permission, the researcher met the respondents and explained the objectives of the study and their involvement. After the informed consent forms were signed, questionnaire checklists were distributed to the selected respondents. Sufficient time was provided for completion, and the questionnaires were subsequently collected.

2.5. Availability of Data and Research

The data supporting this study's findings is available at the University of Northern Philippines. To protect respondent confidentiality, raw data is not publicly accessible. Anonymized datasets and related materials may be requested from the corresponding author, subject to reasonable request and university approval.

2.6. Ethical Considerations

Prior to data collection, strict ethical protocols were followed. Research involving human subjects complied with the Declaration of Helsinki. The University of Northern Philippines Ethics Review Committee approved the study (Approval No. A-2022-127). Consent was obtained from all relevant institutions, and participants received comprehensive information regarding the study's objectives and likely benefits. All data were encoded and securely stored to maintain confidentiality and anonymity.

2.7. Conflict of Interests

The researchers contend that there were no conflicts of interest, as the sole objective of the study was to assess the competence of Barangay Health Workers (BHWs) in delivering health services. All participants provided informed consent and were made aware of their right to withdraw from the study at any time without repercussions. Participants were promised they could refuse to answer any questions they deemed uncomfortable. Although all participants were of legal age, the researchers carried out extensive precautions to safeguard their well-being during the study. The study may offer a basic framework for the establishment of competency-based training for BHWs. Participants received no remuneration or incentives for their participation.

2.8. Statistical Treatment of Data

The following statistical tools were used to analyze and interpret the data gathered for this study:

(1) Frequency count and percentages described the socio-demographic profile of the respondents.

(2) Mean described the level of competency in the delivery of Barangay health services for the respondents.

(3) Simple correlational analysis showed the relationship between the level of competency in the delivery of Barangay health services and the profile of the respondents.

3. RESULTS AND DISCUSSION

This section presents, interprets, and analyzes the data gathered in the study. This study applied the tabular and textual modes of presentation.

3.1. Personal-related Profile of the Respondents

The distribution of the respondents in terms of the above-mentioned variables is presented in Table **2**.

Table 2. Distribution of the respondents in terms of their personal-related profile.

Variables	f	%
Age		
60 and above	121	13.69
50-59 years old	167	18.90
40-49 years old	306	34.61
30-39 years old	234	26.47
20-29 years old	55	6.22
Below 20 years old	1	0.11
Total	**884**	**100.0**
Sex		
Female	864	97.7
Male	19	2.1
No Response	1	.1
Total	**884**	**100.0**
Civil Status		
Married	663	75.0
Single	113	12.8
Widowed	84	9.5
Separated	13	1.5
No Response	11	1.2
Total	**884**	**100.0**
Educational Attainment		
College Graduate	318	36.0
College Undergraduate	163	18.4
High School Graduate	292	33.0
High School Undergraduate	64	7.2
Elementary Graduate	47	5.3
Total	**884**	**100.0**
Length of Experience as BHW		

3.1.1. On Age

The ages of respondents ranged from under 20 to over 60. Most participants were between 40 and 49 years old (34.61%). Very few were under 20 (0.11%), so most BHWs are middle-aged adults.

3.1.2. On Sex

Most respondents are female (97.7%), and only 2.1% are male. This shows that women make up the majority of the BHW workforce, reflecting common social views that link women to caregiving roles.

3.1.3. On Civil Status

Seventy-five percent of respondents are married, and 1.5% are separated. This suggests that most BHWs have stable family lives, which could affect how they manage both work and personal responsibilities.

3.1.4. On Educational Attainment

Most respondents graduated from college (36%), and only 5.3% completed elementary school. Most have at least a secondary education, and many have even higher degrees. Their education likely helps them understand and provide high-quality health care.

3.1.5. On Length of Experience as a BHW

Most respondents (32.4%) have between one and four years of experience, and 16.7% have less than a year. Having both experienced and newer BHWs can help with mentorship and sharing skills in the workforce.

3.1.6. On Trainings and Seminars Attended

About 36.9% of participants have attended between one and four trainings or seminars, while only 16.6% have taken part in more than ten. This suggests that most respondents are actively working to improve their skills through ongoing professional development.

3.2. Core Competencies of the Respondents

3.2.1. On Health Promotion

Table **3** presents the level of competence of the BHWs in health promotion.

Table **3** shows how Barangay health workers (BHWs) perform in health promotion. With an average score of 4.27, rated as “Very High,” BHWs consistently provide strong basic health services in their communities. This result shows their effectiveness in meeting the essential health needs of their Barangays.

The top skill for BHWs is helping people understand health services through good communication (mean = 4.34, “Always”), showing that they are strong at sharing health information. Good communication is key to health education and underscores the importance of BHWs as a link between health organizations and the community. The lowest-rated skill is giving culturally sensitive advice for health planning or interventions, following standard procedures (mean = 4.16, “Often”). While this score is still high, it points to challenges in incorporating cultural components into health planning, which is important for supporting diverse communities.

Table 3. Mean ratings showing the level of competency in delivering health services among the respondents along health promotion.

Item	Items	Mean	DR
	As a BHW, I perform the following Barangay health services...		
1	Facilitate individuals’ understanding of health services provided by agencies through use of appropriate interpersonal communication skills.	4.34	Always
2	Communicate the culture, practices/beliefs, needs, issues, feedback of individuals/community to service providers	4.24	Always
3	Identify support needed by individuals to access health services	4.31	Always
4	Identify aftercare/follow-up support needed by individuals	4.23	Always
5	Document health activities and related information	4.33	Always
6	Identify advice or health intervention for individual/family/household based on a given scenario	4.26	Always
7	Give advice to seek consultation or referral to rural health units, based on identified health symptoms	4.29	Always
8	Provide culturally sensitive inputs/information as guidance in health planning/intervention, following standard operating procedure	4.16	Often
	Overall	**4.27**	**Very High**

Overall, BHWs do well, but they need to improve their cultural competence. The use of culturally culturally appropriate methods is key for achieving improved health outcomes. Furthermore, the elevated overall competency level suggests that Barangay Health Workers (BHWs) are well-positioned to improve community health outcomes. However, ongoing professional development is necessary to maintain and further develop their skills.

Training initiatives support healthcare professionals in developing cultural competence by improving their knowledge, skills, and attitudes. However, the direct impact of such training on clinical outcomes remains inconclusive. Various strategies, including training and mentoring, are designed to improve cultural competency, yet additional research is required to clarify their effects on healthcare results [28]. Barangay Health Workers (BHWs) are motivated by both financial and non-financial incentives, opportunities to acquire technical skills, and desires to improve community health and social status. Sufficient support and resources, such as allowances and medical supplies, are necessary for BHWs to function properly and to strengthen community participation [1].

The results show that Barangay Health Workers (BHWs) demonstrate strengths in health communication, documentation, and assisting with access to healthcare, as evidenced by their high performance scores. Their proficiency in making referrals (mean = 4.29) and identifying health interventions (mean = 4.26) shows their important

role in improving access to primary healthcare. However, the lower score for providing culturally sensitive inputs (mean = 4.16) suggests challenges in adapting health services to the needs and customs of various communities. This gap may result from insufficient training or limited experience with different cultural health situations.

Improving the cultural competence of Barangay Health Workers (BHWs) may substantially improve their capacity to deliver inclusive health services. The findings also highlight the significance of continuous skill development in communication, documentation, and health guidance through regular training. Although BHWs are already skilled, ongoing work to improve intercultural sensitivity and inclusivity will likely increase their impact on community health and client behaviors. This approach results in improved health outcomes and greater satisfaction with care [29]. Effective engagement with ethnic minority groups is necessary to promote equal healthcare quality and reduce barriers to service access [30].

3.2.2. On Health Education

Table **4** presents the level of competence of the BHWs in health education.

Table 4. Mean ratings showing the level of competency in delivering health services among the respondents along health education.

Item	Items	Mean	DR
	As a BHW, I perform the following Barangay health services…		
1	Identify community beneficiaries of health programs and services	4.31	Always
2	Discuss how to organize network or linkages of beneficiaries to health programs/services	4.15	Often
3	Discuss how to establish community relationship in accordance with Department of Health's objectives	4.16	Often
4	Demonstrate how to share knowledge or updates to fellow Barangay Health workers to provide updates on health programs/projects	4.28	Always
5	Present information on DOH programs, policies, infection control measures and practices through the guidance of rural health midwife and/or nurse	4.28	Always
6	Observe culturally sensitive health strategies according to the needs of the individual/family/household	4.22	Always
7	Gather feedback on needed improvement for promotional activities	4.12	Often
	Overall	**4.22**	**Very High**

Table **4** evaluates the competency of Barangay Health Workers (BHWs) in health education. The overall mean of 4.22, categorized as "Very High," demonstrates that BHWs routinely display exceptional proficiency in providing health education and promoting awareness within their communities. This illustrates their ability to serve as efficient channels for health-related information and their devotion to disease prevention and control initiatives.

The top-rated competencies, both with an average score of 4.28 ("Always"), are the ability to share knowledge or updates with other Barangay Health Workers about health programs and projects, and to present information on DOH programs, policies, and infection control measures while guided by a rural health midwife and nurse. These results show that Barangay Health Workers (BHWs) are skilled at communicating updates and program details with their peers and the community. Sharing information under professional supervision helps ensure correctness and conformity with the Department of Health (DOH) rules.

The lowest-rated competency is "Gather feedback on needed improvement for promotional activities," which received a mean score of 4.12 ("Often"). Although still in the "Very High" bracket, this suggests BHWs may have difficulty systematically gathering and using feedback to improve their promotional methods. A comparatively lower score is observed in "Discuss how to organize network or linkages of beneficiaries to health programs/services" (mean = 4.15, "Often"), denoting a potential requirement for more systematic training in establishing community links.

The findings stress the critical role of BHWs in preventing illness and promoting health. The diminished ratings in feedback gathering and network organization show potential for improvement in community participation and evaluation skills. Seminars or training sessions must be planned to facilitate feedback, networking, and relationship-building, thereby advancing overall success. Promotional strategies must be adapted to the regional culture and community to address the distinct needs of each group.

Barangay Health Workers (BHWs) need structured workshops and training programs to improve their skills in gathering feedback, organizing networks, and developing connections. Ongoing training and support are necessary to help them play a stronger role in preventing and managing diseases [3, 31, 32]. Community health workers also require further training in community participation and assessment to increase their effectiveness. This includes developing culturally relevant, community-centered promotional strategies [1, 3, 6].

The results show that BHWs display proficiency in essential skills, including knowledge dissemination, providing updates, and explaining Department of Health (DOH) policies and infection control protocols. This underscores their dependability in IEC activities. These qualities are crucial for keeping communities educated and supporting public health programs. However, the slightly lower scores in establishing linkages and collecting feedback indicate gaps in beneficiary inclusion and in assessing initiative effectiveness. These activities call for systematic planning and organized methods, which BHWs may still be developing.

Teaching BHWs how to get helpful feedback and connect with others can make their outreach and promotion more effective. Providing them with tools for community evaluation and relationship building also helps

them run better health programs. While BHWs already have strong skills, ongoing training is important to further improve their work in disease prevention and control.

Training interventions can improve the confidence, competence, and intention of BHWs to employ behavior change approaches. Ongoing training and assessment are essential to sustain these enhancements [33]. Effective supervision is vital for boosting the performance of medical practitioners. The most successful supervision methods remain unclear, underscoring the need for further research and standardization [34, 35].

3.2.3. On-station Maintenance

Table **5** presents the level of competence of the BHWs in station maintenance.

Table 5. Mean ratings showing the level of competency in delivering health services among the respondents along station maintenance.

Item	Items	Mean	DR
	As a BHW, I perform the following Barangay health services...		
1	Demonstrate physical inventory of equipment and medical supplies	4.15	Often
2	Practice proper storage of equipment and medical supplies in designated place	4.30	Always
3	Demonstrate the maintenance of cleanliness and orderliness of Barangay health center catchment area	4.46	Always
4	Orient fellow health workers on proper use and storage of equipment	4.27	Always
5	Practice proper filing of records for accessibility and completeness	4.36	Always
6	Practice proper disposal of damaged records according to protocol of record management systems	4.33	Always
	Overall	**4.31**	**Very High**

Table **5** presents how well Barangay Health Workers (BHWs) maintain health stations and manage their equipment, medical supplies, and materials. The average score of 4.31 is considered “Very High.” This means BHWs are highly skilled in this area. By following standards, they keep the health station functional, organized, safe, and well-stocked.

The highest-rated skill was “Exhibit the upkeep of cleanliness and orderliness of the Barangay health center catchment area,” with a mean score of 4.46. This shows it is consistently practiced. This result shows that Barangay Health Workers (BHWs) value a tidy, orderly environment that supports health and patient safety. The lowest-rated skill was “Demonstrate physical inventory of equipment and medical supplies,” with a mean score of 4.15, or “Often.” This means BHWs see inventory management as important but may not do it as often, possibly due to time constraints or complex procedures.

The results show that BHWs are skilled at managing health stations and taking care of their resources. They do well at duties such as storing supplies, keeping records, and maintaining cleanliness, which help keep the health station running smoothly for the community. The slightly lower score for physical inventory suggests that more regular training or scheduling could help improve inventory management. This would help prevent shortages and make sure important medical supplies are always available.

While BHWs do well in most areas, they have a considerable weakness in managing physical inventory. This shows a need for better training or regular inventory schedules to improve resource management and prevent shortages [36, 37].

The results show the BHWs' devotion to keeping the Barangay health station effective and safe. Their efforts in cleanliness and accurate record-keeping demonstrate that they understand how an organized, clean environment supports high-quality health services. A lower inventory management score may indicate a lack of explicit procedures or tools to streamline the process. Regular inventory checks are important to keep medical supplies and equipment stocked and working, which directly affects health service delivery.

To address the deficiencies, steps such as implementing inventory management training and introducing standardized checklists may be advantageous. Encouraging Barangay Health Workers (BHWs) to collaborate on tasks such as inventory management and storage can increase operational efficiency and accountability. While BHWs effectively manage health stations, greater emphasis on inventory management could further improve the efficacy and sustainability of health services. The adoption of modern technologies, implementation of the 5S methodology, and provision of training for inventory staff can increase the efficiency of medical stores and boost service quality [38]. Improving inventory management is important to keep health stations stocked and able to serve the community without interruption. This involves better tracking of supplies and making sure restocking happens on time [36].

3.2.4. On Health-status Monitoring

The level of competence of the BHWs in health status monitoring is presented in Table **6**.

Table 6. Mean ratings showing the level of competency in delivering health services among the respondents along health-status monitoring.

Item	Items	Mean	DR
	As a BHW, I perform the following Barangay health services...		
1	Identify the priority individual/family/household for consultation	4.41	Always
2	Get health data information through interview, including vital signs and anthropometric measurements of the individual/family/household.	4.39	Always
3	Identify health and health-related information that need to be monitored	4.34	Always
4	Identify necessary medical documents/records required by health facilities	4.31	Always
	Overall	**4.36**	**Very High**

Table **6** evaluates the competency levelof Barangay Health Workers (BHWs) along with health-status monitoring. The average score of 4.36, classified as “Very High,” indicates that BHWs consistently demonstrate strong competencies in health status monitoring, underscoring their commitment to the welfare of individuals, families, and households in their vicinity. The highest-rated ability is “Identify the priority individual/family/household for consultation,” with a mean score of 4.41, interpreted as “Always.” This indicates that BHWs are proficient in prioritizing individuals or groups in need of urgent medical care, which is key for effective health service delivery and resource dispensing. The lowest-rated competency is “Identify necessary medical documents/records required by health facilities,” with a mean score of 4.31, which means “Always.” Even with this high score, the results suggest that BHWs might face some challenges in consistently recognizing or preparing medical documents. This could be because different health facilities have varying record-keeping requirements.

The findings show that BHWs are fundamental in managing community health. They focus on consultations, collect health data, and handle important health information, which helps ensure prompt care and effective health management. Barangay Health Workers (BHWs) contribute to the prevention of noncommunicable diseases (NCDs) through screening, patient support, and the promotion of healthy behaviors [39]. Despite their involvement in malaria control initiatives [31], limited training and funding constrain their effectiveness. The low score in medical documentation indicates that the implementation of clearer procedures or additional training may enhance the preparation and submission of medical records. Following these actions can make referrals and coordination with medical facilities more effective.

BHWs have shown strong skills in monitoring health status, showing how important they are in primary health care. Their ability to focus on consultations helps make sure resources go to those who need them most, and their work with health data supports better decision-making. Small gaps in documentation skills may happen because each health facility has its own standards or procedures. This might occasionally result in misunderstanding or slow down how quickly patients are processed.

To solve these problems, offering training on health documentation and working closely with health facilities can improve record-keeping. Giving BHWs standardized forms or checklists for medical documentation can also help them work more efficiently. BHWs in Metro Vigan are already good at monitoring health, but fixing small gaps in documentation can make their work even more valuable and help improve healthcare services. Switching from manual to digital systems can also make health information easier to manage, more accurate, and more accessible. This shift supports better evidence-based decisions at the Barangay level [40].

3.2.5. On Record Keeping

Table **7** presents the BHWs' level of competence in record keeping.

Table 7. Mean ratings showing the level of competency in delivering health services among the respondents along with record keeping.

Item	Items	Mean	DR
	As a BHW, I perform the following Barangay health services…		
1	Record and sort the socio-demographic data and health condition of individual/family/household based on standard protocol	4.33	Always
2	Fill out applicable/standard forms to report collected data	4.32	Always
3	Identify specific cases that need to be reported to the supervisor.	4.30	Always
4	Fill out applicable/standard forms to report specific cases for the supervisor	4.29	Always
	Overall	**4.31**	**Very High**

Table **7** presents the proficiency of Barangay Health Workers (BHWs) in keeping updated lists and records of health activities. This competency is necessary for assuring organized and effective health care delivery. The total mean assessment of 4.31, classified as “Very High,” demonstrates that BHWs consistently exhibit advanced skills in recording, organizing, and reporting health data in accordance with established standards.

The highest-rated competency is “Record and sort the socio-demographic data and health condition of individual/family/household according to standard protocol,” with a mean score of 4.33, which means “Always.” This shows that BHWs are very capable of collecting and organizing important data for community health planning and actions.

The lowest-rated competency is “Complete applicable/standard forms to report specific cases for the supervisor,” with a mean score of 4.29, which also means “Always.” The minor difference indicates a marginally reduced dependability in completing standardized case reporting forms, denoting a possible need for improved familiarity with reporting procedures or form templates.

The results show how important accurate and timely data management is in community health care. When BHWs keep current records, they help ensure that health programs and interventions are based on real data and customized to their communities. A slightly lower score in case reporting shows there is room for improvement. Good reporting systems help Barangay Health Workers and their supervisors work together. Providing more training or using standard tools could help make case reporting more efficient.

Managing data well is important for delivering healthcare, making plans, and setting policies. It enables the efficient collection, storage, and utilization of data to improve care results and overall population well-being

[41, 42]. Efficient information management systems improve openness plus facilitate evidence-based decision-making, essential for local health programs [42, 43].

The high competency ratings indicate that BHWs in Metro Vigan are good at handling health-related data. This skill helps track community health trends and spot areas that need attention. Their ability to record and organize socio-demographic and health information supports the move toward evidence-based decisions in public health. The lower score for reporting particular incidents might be due to unclear expectations from supervisors or a lack of simple reporting tools.

Solving these problems could make health data reporting more effective and accurate. Training Barangay Health Workers (BHWs) to complete forms correctly and use digital tools or templates can help them feel more confident and adept in managing data. Digital tools in healthcare can also make data collection faster and more accurate. Research shows that digital health interventions can improve the quality and capability of primary care by providing flexible and compatible technologies [44, 45]. These tools can support managing data better and reduce errors in health data reporting [46]. The results show how important BHWs are in keeping health records and suggest ways to help them manage and report data more effectively.

3.3. The Correlation between the Respondents' Profiles and their level of Competency in Delivering Barangay Health Services

Table **8** reveals the relationship between the level of competency in delivering health services among the Barangay Health Workers (BHWs) and their personal-related profiles. The overall results show that most of the personal-related factors have a minimal or no significant impact on BHWs' overall competency. Civil status is the only variable that shows a meaningful correlation. Other factors, including age (r=-.012), sex (r=.010), education (r=.005), experience (r=-.021), and training (r=.012), do not have statistically significant relationships with overall competency in delivering health services. Civil status has a weak but significant negative correlation with overall competency (-.079*), which suggests it may affect the performance of BHWs, though the impact is minor.

Looking at each core competency separately, civil status is the most significant variable. It demonstrates significant negative correlations with multiple key competencies, such as “health-status monitoring” (-.104**) and “health promotion” (-.077*). Civil status shows a negative correlation with “record keeping” (-.067*). This means that being married or widowed may make it harder for BHWs to keep records, possibly because personal responsibilities take up time and resources. In contrast, single respondents may have more time to focus on these tasks, which can affect their ability to monitor health, identify problems, and keep accurate records.

The results show that civil status is the most important personal factor affecting BHWs’ skills in health monitoring, health promotion, and record-keeping. Since training did not show a strong link, training programs may need to be reviewed to better meet BHWs’ needs in these areas. Also, because age, sex, education, and experience did not have significant effects, it seems that civil status may influence BHW performance more than these other personal factors. Therefore, any competency enhancement efforts should consider the personal circumstances of BHWs, with particular attention to those whose civil status may affect their ability to perform specific tasks.

Research shows that personal elements like age, sex, education, and experience often have little or no effect on health workers’ skills, and do not strongly predict their overall performance in health care delivery [47]. In contrast, contextual and psychosocial factors, such as personal obligations and living situations, can have a greater impact on specific skills, for example, monitoring health status and promoting health [47]. Behavioral factors, including self-efficacy, outcome expectations, and normative attitudes, are considered more flexible and more influential on performance than fixed demographic traits [47]. This supports the idea that civil status, which can affect personal obligations and available resources, may influence certain skills, though the effect is small. Since there is not a strong link between training and outcomes, just increasing training may not meet health workers’ specific needs. Interventions must be designed to address specific situations and challenges [47].

3.4. Comprehensive Competency-based Training Program for Barangay Health Workers in Metro Vigan

Drawing on the study's findings, this comprehensive competency-based training program has been developed to further enhance Barangay Health Workers' competencies in delivering healthcare services in Metro Vigan.

Table 8. Correlation coefficients showing the relationship between the level of competency in delivering health services among the respondents and their personal-related profile.

Variables	Core Competencies					
	Health Promotion	Health Education	Station Maintenance	Health-status Monitoring	Record Keeping	Overall
Age	0.024	-0.002	-0.045	-0.021	-0.025	**-0.012**
Sex	0.032	-0.006	0.022	-0.006	-0.012	**0.010**
Civil Status	**-0.077***	-0.061	-0.060	**-0.104****	**-0.067***	**-0.079***
Education	0.026	0.004	0.006	-0.010	-0.019	**0.005**
Experience	0.013	-0.024	-0.049	-0.017	-0.030	**-0.021**
Trainings	0.052	-0.007	-0.032	-0.011	0.046	**0.012**

3.4.1. Program Overview

3.4.1.1. Objective

To improve the proficiency, sustainability, and efficacy of Barangay Health Workers (BHWs) in Metro Vigan, thereby guaranteeing the consistent delivery of high-quality primary healthcare within their communities.

3.4.1.2. Target Participants

All Barangay Health Workers in Metro Vigan (Vigan City, Bantay, Caoayan, San Vicente, and Sta. Catalina).

3.4.1.3. Duration

10 months (including ongoing modules for continual development).

3.4.1.4. Delivery Method

Blended approach (face-to-face instruction, hands-on workshops, digital modules, community-oriented activities).

3.4.1.5. Collaborators

Department of Health (DOH), Technical Education and Skills Development Authority (TESDA), Local Government Units (LGUs), University of Northern Philippines (UNP), Non-Governmental Organizations (NGOs).

3.4.2. Training Modules

3.4.2.1. Succession Planning and Recruitment Module

Objective: The objective is to develop a sustainable workforce of skilled Barangay Health Workers by attracting younger individuals to the profession.

Table 9A. Succession planning and recruitment module for Barangay health workers.

Components	Activities
Recruitment Strategies	Community engagement initiatives aimed at youth organizations. Collaborations with local educational institutions and colleges. Creation of promotional materials emphasizing BHW roles.
Mentorship Programs	Pairing seasoned BHWs with novice recruits. Consistent mentorship meetings and assistance. Creation of mentorship protocols and materials.

Note: Duration: 1-2 months.
Evaluation: Quantity of new recruits, evaluations from mentors and mentees, and community awareness survey.

Table **9A** outlines the succession planning and recruitment model for Barangay Health Workers, serving as the initial module of the training program. Recruitment approaches that engage youth organizations and work with local educational institutions expand the pool of potential Barangay Health Workers (BHWs). Community-based recruitment and alliances with educational sectors have been shown to improve the sustainability and reach of health worker programs in the Philippines and similar settings [48-50]. Promotional materials that demonstrate the essential functions and public impact of BHWs can increase awareness and attract new members, especially when customized to local contexts and needs [49, 51]. Mentoring programs, in which experienced BHWs guide new recruits through structured meetings and protocols, have demonstrated positive effects on health worker proficiency, care quality, and institutional effectiveness. Evidence supports advances in both clinical and managerial outcomes [52, 53]. Continued mentorship and the development of clear mentorship resources support the integration and retention of new BHWs, fostering an environment that promotes motivation and skill development [52, 53]. Recommended evaluation methods for assessing recruitment and mentorship effectiveness include tracking the number of new recruits, gathering feedback from mentors and mentees, and conducting community awareness surveys [48, 53].

3.4.2.2. TESDA Assessment and Certification Module

Objective: To standardize the competences of BHWs and augment their professional credibility *via* national certification.

Table **9B** outlines the second module of the training program, focused on TESDA assessment and certification. Uniform assessment and certification for Barangay Health Workers (BHWs) are essential to preserve consistent quality and professional standards in decentralized health systems. TESDA accreditation improves the legitimacy, job security, and career advancement of BHWs, while also strengthening oversight and promoting uniform performance nationwide [54]. In the Philippines, the lack of uniform competency assessments has led to inequalities in BHW training and job stability, with local politics often affecting outcomes instead of professional qualifications [1, 54]. Implementing a national certification module can deal with these issues, improve accountability, and raise the recognition of BHWs as essential frontline health workers [1, 54]. These initiatives perform an important role in making community health programs stronger, leading to enhanced health outcomes, and creating more professional opportunities for BHWs [1, 54].

Table 9B. TESDA assessment and certification module for Barangay health workers.

Components	Activities
Formulation of TESDA-aligned Competency Standards	Partnership with TESDA to create uniform competency evaluations. Evaluation of current BHW job descriptions and duties.
Certification Procedure	Evaluation of practical abilities (*e.g.*, vital signs, first aid). Evaluation of knowledge (*e.g.*, health promotion, disease prevention). Evaluation of ethical behavior (*e.g.*, secrecy, respect).

Note: Duration: 2 Months.
Evaluation: Quantity of qualified BHWs, evaluations from assessors and candidates, and influence on professional progression.

4. ADVANCED TRAINING MODULES

Objective: To rectify recognized shortcomings in cultural sensitivity and communication competencies.

Table **9C** shows the improved training modules for Barangay Health Workers, which make up the third module of the training program. These updated modules focus on cross-cultural sensitivity and communication skills, helping health workers better serve a variety of communities. Cross-cultural sensitivity training helps people become more open-minded, learn about different cultures, and communicate better with minority groups. This leads to better clinical results and higher satisfaction [55, 56]. Training in communication skills-particularly through seminars, role-playing, and case studies-enhances active listening, empathy, and conflict resolution, with role-playing techniques proving more effective than conventional lectures in cultivating verbal, listening, and feedback abilities [57-59]. Training programs that include community participation strategies and simulations help health workers feel more confident and capable in real-life situations, which creates trust and rapport with community members [60-62]. Reviews conducted before and after training consistently demonstrate significant improvements in communication skills and cultural competence, thereby endorsing the use of these modules in the development of health workers [55-58, 62].

Table 9C. Advanced training modules for Barangay health workers.

Components	Activities
Training in Culturally Sensitive Communication	Seminars on active listening, empathy, and conflict resolution. Case studies and role-playing scenarios pertaining to various groups. Instruction on regional cultural conventions and ideologies.
Strategies for Community Engagement	Instruction on performing community needs assessments. Methods for establishing trust and rapport with community members. Methods for conducting community gatherings and debates.
Role-Playing and Simulation Exercises	Simulated domestic visits and community health initiatives. Role-playing scenarios that encompass difficult communication circumstances.

Note: Duration: 2 Months.
Evaluation: Pre- and post-training evaluations, observation of communication competencies during practical activities, and community comments.

5. MODULE ON FEEDBACK AND COMMUNICATION SYSTEMS

Objective: To deploy structured feedback systems for ongoing enhancement.

Table **9D** presents the fourth section of the training program, focusing on how Barangay Health Workers (BHWs) give and receive feedback and communicate. The research shows important factors that help build a structured feedback and communication system for BHWs. Regular feedback meetings and organized supervision, such as using performance dashboards and one-on-one meetings, help boost the productivity and motivation of community health workers, especially when the feedback is clear and useful [63-66]. Using digital tools like mobile apps and web platforms also makes feedback systems more efficient, speeds up data sharing, and supports peer-to-peer communication. Together, these improvements help deliver better services and make it easier to respond to community needs [65, 67-70]. Using both face-to-face and digital feedback methods helps ensure feedback is high-quality, timely, and relevant for supervisors and frontline workers, supporting standards and accountability [65, 71]. Consistently reviewing and updating feedback systems by analyzing feedback data and making small improvements is important for maintaining strong BHW performance and ensuring communication systems remain effective and suitable to the context [63, 65, 71].

Table 9D. Feedback and communications systems module for Barangay health workers.

Components	Activities
Regular Feedback Sessions	Planned meetings with BHWs, community people, and health officials. Creation of feedback forms and protocols.
Digital Communication Tools	Instruction on utilizing mobile applications and web platforms for communication purposes. Formation of a BHW communication network.
Feedback Loop	Establishment of a mechanism for monitoring and responding to feedback. Consistent evaluation of feedback data and execution of enhancements.

Note: Duration: 1 Month
Evaluation: Frequency of feedback meetings, utilization of electronic communication technologies, monitoring of feedback answers.

6. INVENTORY AND RESOURCE MANAGEMENT MODULE

Objective: To improve the capacity of BHWs to handle resources efficiently.

The fifth training module, listed in Table **9E** , focuses on helping Barangay Health Workers (BHWs) develop inventory and resource management skills. These abilities are essential for BHWs to provide health services effectively. Digital inventory monitoring systems can make it easier to organize resources and improve workflow. However, BHWs need appropriate training and access to technology to address problems such as low computer literacy and limited technical support [72]. How resources are distributed and how training is delivered in different regions can influence how well BHWs manage supplies and equipment. This draws attention to the need for standard protocols and building local capacity [54]. Training that includes active, hands-on methods such as behavioral modeling and practice is more effective than passive learning for improving resource management skills [73]. Good inventory control systems in healthcare can help lower costs, reduce waste, and boost service delivery, supporting the main goals of BHW programs [74].

Table 9E. Inventory and resource management module for Barangay health workers.

Components	Activities
Digital Inventory Management Systems	Instruction on utilizing inventory management software and applications. Formulation of standard operating procedures for inventory management.
Procurement and Distribution	Instruction on procurement protocols and supply chain administration. Strategies for the equitable allocation of medical supplies.
Maintenance and Storage of Equipment	Instruction on the appropriate utilization and upkeep of medical apparatus. Protocols for the secure storage and disposal of materials.

Note: Duration: 1 month.
Evaluation: precision of inventory documentation, efficacy of supply distribution, equipment maintenance records.

7. THE COMMUNITY ENGAGEMENT AND PARTNERSHIP MODULE

Objective: To enhance partnerships with community stakeholders.

Table 9F. Community engagement and partnership module for Barangay health workers.

Components	Activities
Partnership Development	Workshops focused on establishing and sustaining relationships. Formulation of collaboration agreements and memoranda of understanding.
Implementation of Joint Program	Cooperative strategizing and execution of community health initiatives. Collaboration in resource allocation and collective training initiatives.
Community Outreach and Advocacy	Instruction on community mobilization and advocacy methodologies. Creation of community engagement resources.

Note: Duration: 1 Month.
Evaluation: Quantity of partnerships created, reports on collaborative program execution, rates of public involvement.

The last module, focused on community participation and partnerships for BHWs, is shown in Table **9F**. Community health partnerships are considered key for effective health promotion because they bring together assets and knowledge from different sectors, empower people, and help build a feeling of community among stakeholders [75, 76]. Deliberate collaboration among community health workers (CHWs), local organizations, and government agencies improves the design, implementation, and sustainability of health programs, with joint program planning and asset sharing demonstrated to improve program outcomes and community participation [50, 71, 77]. Consistent communication, consensus-building, and written agreements-such as memoranda of understanding-are essential activities that support the effective implementation and execution of community-based health programs [77, 78]. Additionally, community outreach and advocacy efforts, which include training for mobilization and the development of resources for engagement, are important for building trust, increasing participation, and achieving measurable improvements in health behaviors and outcomes [79-81].

8. LIMITATIONS OF THE STUDY

This study focused only on Barangay Health Workers (BHWs) in Metro Vigan, so the results may not apply to other areas. Social, economic, and health system factors unique to Metro Vigan may have influenced the participants' experiences and skills. Because of this, the findings might reflect patterns specific to this context rather than trends across the country.

Most of the data were self-reported, which can be influenced by recall and social desirability biases. Participants may have overstated their strengths or minimized their weaknesses to match what they thought was expected. This tendency might have slightly increased the competency ratings, which could affect how accurate the results are and how strong the relationships appear.

The study did not employ direct observation, making it difficult to compare self-reported data with actual practice. Consequently, BHW proficiency was assessed primarily through subjective self-evaluation rather than objective performance, potentially compromising the validity of the competency assessment.

The study examined only five areas of competence: health promotion, health education, station maintenance, health status monitoring, and record keeping.

It did not include other important areas like involving the community, working with other health professionals, or responding to emergencies. Although this focus helped keep the analysis clear, it may have limited the completeness of the competency profile.

Taken together, these limitations may have influenced how the results were interpreted. They could have inflated self-perceived competence levels and limited the generalizability of the findings to other settings. Still, the insights from this study provide an important starting point for future research that uses broader samples, different assessment methods, and direct observation.

CONCLUSION

This study affirms the crucial role of Barangay Health Workers (BHWs) in providing essential health services in Metro Vigan, underscoring their fundamental place within the primary health care system.

Most BHWs are middle-aged women with stable marriages and educational backgrounds, demonstrating they are dedicated and resilient. Demographic characteristics like civil status can affect how well they meet future health needs, so planning ahead for the workforce is important.

The study shows that most personal factors, such as age, sex, education, experience, and training, do not significantly affect how competent BHWs are. However,

civil status does matter. Marital responsibilities can limit the time and resources BHWs have for their work. This especially affects skills including monitoring health status, identifying health problems, and keeping health records. BHWs with caregiving duties may need extra support.

The results show that current training programs do not fully address the challenges Barangay Health Workers (BHWs) face, especially when it comes to balancing their personal and work responsibilities. Although BHWs are skilled at implementing health programs, they still struggle with cultural sensitivity, communication, and adherence to operational procedures. These problems point to larger problems in the system that need stronger support structures.

The study emphasizes the importance of considering civil status in developing Barangay Health Workers' (BHWs) skills. Furthermore, it recommends updating training programs to better address the specific needs of BHWs.

Strengthening both the competencies of BHWs and the systems that support them is likely to enhance primary health care. These measures will enable BHWs to maintain their essential role in promoting community health.

RECOMMENDATIONS

Based on the conclusion, the following solutions are proposed to enhance the efficacy and longevity of Barangay Health Workers (BHWs) in delivering primary health care in Metro Vigan:

(1) Implement the Comprehensive Competency-based Training Program for Barangay Health Workers in Metro Vigan: Metro Vigan should use a phased approach for the 10-month BHW training program. This will help ensure each module is delivered clearly and can be improved over time. Routine assessments should be done to measure how well the program works and to make any needed changes, so it continues to be relevant for BHWs and the community. This approach will help the program remain effective and last longer.

(2) Form a Multi-stakeholder Steering Committee and Obtain Funding: A comprehensive steering committee, comprising representatives from the Department of Health (DOH), Technical Education and Skills Development Authority (TESDA), Local Government Units (LGUs), University of Northern Philippines (UNP), Non-Governmental Organizations (NGOs), and Barangay Health Workers (BHWs), should be established to provide strategic supervision and facilitate interagency collaboration. Simultaneously, a comprehensive funding strategy involving local government units, the Department of Health, and external funders should be developed to guarantee long-term sustainability. Adequate resources must be allocated for training materials, equipment, transportation, and incentives to maximize program effectiveness.

(3) Emphasize Youth Recruitment and TESDA Certification: Execute targeted outreach strategies within local educational institutions to attract prospective Barangay Health Workers (BHWs), in conjunction with an organized mentorship program. Expedite the establishment of a fully equipped Technical Education and Skills Development Authority (TESDA) assessment center and ensure that assessors receive standardized training. Establish and communicate clear career progression pathways to encourage TESDA accreditation and aid ongoing professional development.

(4) Augment Training with a Needs-based Curriculum and Interactive Techniques: Develop training modules based on comprehensive needs assessments to fine-tune content to the specific requirements of Barangay Health Workers (BHWs). Integrate interactive didactic methods, such as role-playing and simulation exercises, to improve practical skills. Regularly collect feedback from BHWs and community members to evaluate the effectiveness of training programs and execute necessary adjustments.

(5) Establish Complete Feedback and Communication Systems: Implement an intuitive electronic communication platform to support productive interaction among Barangay Health Workers (BHWs), community members, and health authorities. Set up standardized feedback systems and a transparent feedback loop to secure timely responses and continuous improvement. Provide training in digital inventory and supply chain management, accompanied by regular inventory audits, to boost resource management.

(6) Enhance Community Cooperation and Facilitate Continuous Career Development: Organize partnership-building workshops to strengthen collaboration with community stakeholders and facilitate cooperative program planning. Establish alliances with learning institutions to offer advanced certification programs and scholarships for Barangay Health Workers (BHWs). Implement monthly seminars and workshops confronting emerging health challenges and create peer-to-peer learning platforms to support continuous vocational development.

(7) Promote BHW Advantages and Guarantee Program Viability: Promote increased allowances and benefits for Barangay Health Workers (BHWs), including the evaluation of health insurance initiatives, and establish formal recognition programs. Provide psychosocial support services to address the emotional requirements of BHWs. Work together with local government units to integrate the training program into standard health service plans, strengthen local training capacities, and document best practices to guarantee long-term sustainability.

AUTHOR'S CONTRIBUTIONS

The author confirms sole responsibility for the following: study conception and design, data collection, analysis and interpretation of results, and manuscript preparation.

LIST OF ABBREVIATIONS

BHWs = Barangay Health Workers

MDA = Mass Drug Administration

CHF = Congestive Heart Failure

MHOs = Municipal Health Offices

IEC = Information, Education, and Communication

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The study underwent review by the University of Northern Philippines Ethics Review Committee, Philippines (approval number A-2022-127).

HUMAN AND ANIMAL RIGHTS

All procedures performed in studies involving human participants were in accordance with the ethical standards of institutional and/or research committee and with the 1975 Declaration of Helsinki, as revised in 2013.

CONSENT FOR PUBLICATION

Informed consent was obtained from the participants.

STANDARDS OF REPORTING

STROBE guidelines were followed.

AVAILABILITY OF DATA AND MATERIALS

All the data and supporting material is available within the article.

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CONFLICT OF INTEREST

The author declares no conflict of interest financial or otherwise

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