International Journal of Innovation, Creativity and Change. www.ijicc.net
Volume 14, Issue 1, 2020

Knowledge and Competence of Barangay Health Workers (BHWS)

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Health is an indispensable element of living in the community. Barangay health workers (BHWs) provide healthcare services that meet the health needs of their constituents in their barangay. They motivate people to live a clean and healthy life. Core skills, applied knowledge and a good attitude are vital for these BHWs to complete their jobs effectively and efficiently. The goal of this study is to evaluate their competence. The descriptive-correlational method was used with a self-made questionnaire as the main data gathering tool. Purposive sampling through total enumeration was used to determine the participants. Data was analysed through the percentage technique, weighted mean, and chi-square test for independence. Results revealed that BHWs are moderately competent, with a satisfactory rating on attitude; personal and environmental factors affect have an impact on their competence. The length of service as a BHW was to be found significant in the competence of BHWs. To be well-equipped with knowledge and skills, BHWs are encouraged to continuously attend training and seminars and use the self-learning kit.

Keywords: *Barangay Health Workers (BHWs), Knowledge, Competence*

Introduction

Having good health is essential , and considered as an indispensable element of living. Being ill poses a big problem not only physically but also financially. A lot of Filipinos do not have access to health care services because of exorbitant medical expenses, thus pushing them further towards extreme poverty. Eventually these people die without receiving any medical attention as they could not afford medical care and services.

With Filipino health workers migrating to other countries to seek better opportunities, the way is paved for training barangay health workers (BHWs) to take the places left by these migrants. BHWs are considered to be nurturers and providers of health care services to their constituents

even in the far-flung barangays. They provide quality healthcare services that meet the health needs of their constituents. Arlington et.al. (2011) state that the Barangay Health Worker, also known as Barangay Health Volunteer, is a category of health care provider in the Philippines. They undergo a basic training program, and render primary care services in the community. They are accredited to function as such by the local health board in accordance with the guidelines promulgated by the Philippines Department of Health, as defined in Sec 3 of RA 7883. Legarda (2010) maintains that 'barangay health workers have one of the toughest jobs and are one of the most dedicated sectors in the government. It is however distressing that their efforts are unrecognised and neglected. The work of a barangay health worker is crucial to the nation's health care delivery system.'

The Department of Health (2016) emphasised the importance of the BHWs as part of Community Health Teams since they are a link between communities or families to health care providers. As a link, they increase family awareness and recognition of health risks and the promotion of positive health behaviours. The roles and functions of BHWs have been evolving to accommodate the changing needs and demands of their catchment area and health system as evidenced by approved policies, including: Republic Act No. 7883 (Barangay Health Worker Benefits and Incentives Acts of 1995); Department Memorandum No. 2009-0302 (Reiteration of DOH Support for the Continuing Development of BHWs); and Administrative Order No. 2015-0028.

For these BHWs to do their jobs effectively and grow both personally and professionally, core skills, applied knowledge and a good attitude are vital to work well in a variety of settings, which reflects on the health status of the people they serve. Both constant and periodic evaluation is crucial to ensure competency and commitment to performing duties and responsibilities as they are at the forefront of the healthcare delivery system at the grassroots level. To validate these facts, this research study will pave the way in determining the BHW's knowledge and skills in providing quality healthcare services to the community.

Study Framework

This study is based on Hubert and Stuart Dreyfus' Theory of Skill Acquisition (2003). It offers a theoretical explanation for understanding how adults acquire skills and transition from novice to expert. The main idea behind Dreyfus' skill acquisition theory is the distinction made between "knowing" and "knowing how." "Knowing" is bound by logic and a set of specific rules following learning, while "knowing-how," is acquired through experience. There are five stages (novice, advanced beginner, competent, proficient and expert) that an agent goes through to evolve from knowing, novice, knowing-how and expert.

This theory provides the framework for this study, within which the competence of barangay health workers is considered. It explains how a barangay health worker acquires and uses the skill and knowledge in the application of interventions and transition from being a novice to an expert in the practice of their work. The theory arises from efforts to improve the capabilities and competence of barangay health workers in providing quality health care services to the community.

Study Objective

The study aims to determine the knowledge and competence of Barangay Health Workers (BHWs) in partner barangays of Camarines Sur Polytechnic Colleges, Nabua, Camarines Sur. Specifically it attempts to answer: (1) What is the profile of Barangay Health Workers in terms of age, sex, civil status, educational attainment, employment status and length of service as BHW? (2) What is the level of competence of BHWs in terms of knowledge, skill, and attitude? (3) What factors affect the knowledge and competence of Barangay Health Workers, along, personal and environmental? (4) Is there a significant relationship between the profile and the competence level of Barangay Health Workers? (5) What can be proposed to enhance the competence of barangay health workers?

Methodology

A descriptive-correlational method was used, with a self-made questionnaire checklist as the main data gathering tool. Informal interviews and focused group discussions were also used to validate responses. Purposive sampling through total enumeration was used to determine the participants. The percentage technique, weighted mean, and chi-square test for independence were significant in the data analysis.

Results and Discussion

Respondent Profiles

Table 1 shows the profile of barangay health workers.

Age. From 40 barangay health workers, 19 or 47.5 percent belonged to the 51-60 age bracket; 13 or 32.5 percent to 41-50 years old; 6 or 15 percent to the 31-40 age group and2 or 5 percent for 21-30 year olds.

The findings show that the highest number in the BHW age group are respondents within the 51-60 age group. As a result, older participants are more inclined to be barangay health workers which may be attributed to the fact that one grows wiser with age. As age advances, one becomes more mature and experienced in handling life situations. The older the BHW, the

higher the expectation regarding the level of knowledge that he/she must possess. According to the article on Community Health Workers (www.imva. org/pages/chws.htm), surveys indicated that mature women tend to show greater longevity in a career as CHWs than any other age group.

Sex. The results indicate that all respondents were female. This reflects the old-age concept that caring is a feminine function and that females are more compassionate. A study Quitevis (2011) mentions that women have an innate ability for "mothering" or "nurturing." This proves that the motherly instinct of the feminine gender coupled with a sensitive touch makes them "sensitive-loving-care" healthcare providers. Residents have an overwhelming preference for females within the community, because they are more comfortable and at ease when listening to lectures, teaching about health, and advice from female workers who may be more skilful, compassionate and inclined to be health care providers. However, no criteria states that males cannot be considered as BHW.

Table 1: Profile of Barangay Health Workers

Profile	Frequency	Percentage
Age		
21 – 30	2	5
31 – 40	6	15
41 – 50	13	32.5
51 – 60	19	47.5
Sex		
Female	40	100
Civil Status		
Single	2	5
Married	33	82.5
Widow	5	12.5
Educational Attainment		
Elementary Graduate	2	5
High School Undergraduate	5	12.5
High School Graduate	16	40
College Undergraduate	7	17.5
College Graduate	10	25
Employment Status		

Employed	11	27.5
Unemployed	14	35
Self-Employed	15	37.5
Length of Service as BHW		
1 – 3	15	37.5
4 – 6	8	20
7 – 9	3	7.5
10 – 12	2	5
13 – 15	3	7.5
16 – 18	9	22.5
Total	**40**	**100**

Civil Status. Data on civil status shows that 33 or 82.5 percent were married; 5 or 12.5 percent were widowed, and 2 or 5 percent were single. This implies that the majority of BHWs are married. Their age group suggests that that they are already married with families. Married BHWs may have undergone more learning situations and experiences to share, which may be more than enough to provide lessons not only to young residents of the barangay but to younger BHWs as well. Furthermore, married people are expected to be more competent and knowledgeable on issues related to providing care.

Educational Attainment. results on educational attainment reveal that 16 or 40 percent were high school graduates; 10 or 25 percent college graduates; 7 or 17.5 percent college undergraduates; 5 or 12.5 percent high school undergraduates and 2 or 5 percent elementary graduates.

A person's educational level has a significant influence on work quality and performance. It is expected that the higher level of education a worker has, the more efficient his or her performance, both in terms of skills and decision making. Thus, educational background for a prospective job is always considered as one of the criteria requirements which is supported by a study by Santos (2011), according to which the competence of a BHW partly depends on background knowledge about their functions and responsibilities as health care service providers. These main functions require a BHW to possess adequate information and skills to perform the job effectively and efficiently.

This is further supported by Kok (2012), according to whom the selection of CHWs with specific characteristics, such as higher education level, experience with health conditions, fewer household duties, and lower wealth lead to better competencies, positive attitudes, and less drop-outs amongst community health workers.

Employment Status. 15 or 37.5 percent of respondents were self-employed; 14 or 35 percent were unemployed and 11 or 27.5 percent employed. There is a high percentage of BHWs who are self-employed, indicating that they are working solely as BHW, thereby totally dedicated and focused on their job. This also means that they spend their entire day performing their duties and functions as BHW solely in-charge of their schedule. Since the data regarding profile-age shows that most are already in the 51 and above age bracket, this may also indicate that they have given up their previous work in favour of being a full-time BHW.

Length of Service as BHW. Data regarding length of service as BHW revealed that 15 or 37.5 percent were in service in the range of 1-3 years; 9 or 22.5 percent for 16-18 years; 8 or 20 percent for 4-6 years,3 or 7.5 percent for 7-9 and 13-15 years in service; and 2 or 5 percent had 10-12 years of service as BHW.

The data also showed that the highest percentage of BHWs are relatively young in the service with 1-3 years of experience, which indicates that most are new to this kind of work. However, length of service may not guarantee competence since training, seminars, and the right attitude towards work can boost such ability. Similarly, mentoring can also enhance the competence of these young BHWs by working closely with those who have served for 16 years and above. For those who have been a BHW for a longer period, better performance is expected since they are now enriched with experiences. This result corresponds with a study by Hung et. al. (2014) indicating that younger BHWs will partner with more experienced ones to work in the same sitio so that training and support can be provided. It is also the responsibility of the midwife to provide direct supervision of BHWs, forming an effective network not only to disseminate essential health information but also to collect it.

Furthermore, the findings are strengthened by Santos (2011), according to whom length of time should provide workers with the opportunity to adapt to the system, be more organised, and become comfortable in the job. Having lived and worked in the same locality for several years may give workers the chance to become familiar with clients and residents of the community in identifying their needs as well as barangay officials, families and the community to develop a harmonious working relationship.

Competence of Barangay Health Workers

Knowledge. Table 2 shows the competence of BHWs in terms of knowledge. BHWs felt that they are highly competent in the following indicators: 'topics on maternal & child care, including breastfeeding, immunisation and family planning, oral rehydration in case of diarrhea, good nutrition, and others with a weighted mean of 3.40 in rank 1. Second in rank is an indicator, 'referral of patients with complications and those suspected to have a communicable disease to the appropriate health centre or hospital,' (3.28) while indicators for

'proper access and utilisation of hospital care as centres of wellness (2.78) and 'links between the community and local health agencies' (2.78) were ranked last. The average weighted mean (AWM) in terms of knowledge is 3.02 and interpreted as moderately competent.

Conducting health education and teaching of the community is a great responsibility for the BHW. Thus, they must be well-equipped with knowledge and skills to be able to impart the right information to the community. According to an ordinance authored by Legacion et. al. (2012), barangay health workers render essential primary health care services in the community, such as topics on maternal and child care, including breastfeeding, immunisation and family planning, oral rehydration in cases of diarrhea, good nutrition, educating people about prevailing health problems, methods of prevention and control, including provision and proper use of essential drugs and herbal medicines.

The findings reveal that BHWs were highly competent with the referral of patients to appropriate health centres. This is in contrast to Tampis' (2009) regarding the level of satisfaction concerning the health care services provided by barangay health workers, where it was recommended that BHWs should coordinate more with other Government or non-government agencies to improve their referral system.

Table 2: Competence of BHW in terms of Knowledge

Indicators	**Weighted Mean**	**Descriptive Interpretation**	**Ranking**
1. topics on maternal & child care, including			
breastfeeding, immunisation & family			
planning, oral rehydration in cases of diarrhea, good nutrition, and others.	3.40	highly competent	1
2. provision and proper use of essential			
drugs and herbal medicines	3.03	moderately competent	5
3. safe water supply, waste disposal and			
use of toilet	3.25	highly competent	3
4. promotion & prevention of oral-dental			
Diseases	2.83	moderately competent	8
5. prevention and management of diseases			
of simple illnesses and home remedies	2.90	moderately competent	6
6. proper access to and utilisation of hospitals			
care as centres of wellness	2.78	moderately competent	9.5
7. updated relevant health issues	3.05	moderately competent	4
8. appropriate information, education and			
communication materials	2.88	moderately competent	7

9. referral of patients with complication &			
those suspected to have communicable			
disease to the appropriate health centre	3.28	highly competent	2
or hospital			
10. links between the community &			
local health agencies	2.78	moderately competent	9.5
Average Weighted Mean	**3.02**	**moderately competent**	

Legend: 1.00 – 1.74 not competent
1.75 – 2.49 competent
2.50 – 3.24 moderately competent
3.25 – 4.00 highly competent

Furthermore, the findings show that BHWs are not equipped with the know-how of links that may be helpful to their roles and functions. Complemented by the results collaborative improvement implemented by USAID Health Care Improvement Project (HCI) in Ethiopia reveals that the Health Care Improvement Project (HCI) used a community health system strengthening approach to address these issues and focus on the following objectives: improving the competence and performance of HEWs; strengthening linkages between the community and the health post; and improving the capacity of community groups to take ownership of health programs in their catchment areas and strengthen the existing community health system (www.usaidassist.org).

Skills. Table 3 shows the result of the competence of BHW in terms of skills. BHWs evaluated their competency skills as highly competent in the following indicators, first ranks as 'keeping of records of health activities in the community and the health station' with a weighted mean of 3.35 and second in rank, 'primary health care services to the community, such as maternal and child care' (3.28).

Table 3: Competence of BHWs in terms of Skills

Indicators	**Weighted Mean**	**Descriptive Interpretation**	**Ranking**
1. primary health care services to the			
community, such as maternal & child care	3.28	highly competent	2
2. treatment of common diseases & injuries	2.90	moderately competent	8.5
3. discussing/explaining the reason behind			
each action	2.90	moderately competent	8.5
4. application of good communication	2.93	moderately competent	7

skills			
5. promotion of adequate food supply &			
proper nutrition	3.08	moderately competent	6
6. monitoring the health status of			
household members under area of	3.25	highly competent	3.5
service coverage			
7. giving advice and care to anyone who			
comes to you	3.25	highly competent	3.5
8. keeping of records of health activities in			
the community and the health station	3.35	highly competent	1
9. utilising the management process in			
the delivery of health care services	3.20	moderately competent	5
10. management practices of minimising			
cost expenditure in medical supplies,			
materials & equipment while delivering	2.65	moderately competent	10
health care services			
Average Weighted Mean	**3.08**	**moderately competent**	
Legend: 1.00 – 1.74 not competent 1.75 – 2.49 competent 2.50 – 3.24 moderately comp.t 3.25 – 4.00 highly competent			

Indicator 'management practices of minimising cost expenditure in medical supplies, materials, and equipment while delivering health care services' (2.65) were last in rank, and interpreted as moderately competent. The AWM for the competence of BHWs in terms of skills is 3.08 and interpreted as moderately competent.

Results show that BHWs place high regard on the importance of record keeping. Aside from legal reasons and use, records are used by professional caregivers to fulfil their health care functions and co-ordinate with other health team members regarding health concerns and community activities. Giugliani et. al. (2014) emphasise the importance of records made by CHWs, whether in the notification of diseases or counting the number of people living in each micro-area, leading to improved government access to local data.

They also reveal that BHWs are expected to give advice and care to anyone who comes to them since it is part of their function as BHWs. They should be able to discuss topics and provide health care services based on the needs of clients such as maternal and child care, including breastfeeding, immunisation and family planning. This is similar to a study

completed by Iturralde (2010) on the effectiveness of BHWs in counselling lactating mothers towards exclusive breastfeeding practice.

Furthermore, the result is supported by an ordinance authored by Legacion et. al. (2012) stating that barangay health workers render essential primary health care services in the community, including educating people on prevailing health problems, methods of preventing and controlling them; promotion of adequate supply of safe water; basic environmental sanitation, as well as maternal and child care including family planning and immunisation.

The data also shows that monitoring the health condition of household members in their coverage area is a vital role of the BHW. This is supported by WHO (2010), maintaining that participation of community health workers (CHWs) in the provision of primary health care has been experienced globally for several decades. Evidence shows that they can add significantly to the efforts of monitoring and improving the health condition of the population, particularly in settings with the highest shortage of motivated and capable health professionals. These results are also related to research conducted by Kok (2012), indicating that the community health worker's role in facilitating community monitoring of health programs and the health status of the constituents in their areas can empower communities. In Uganda, CHWs reported community feedback to be more influential in enhancing performance than feedback from their formal supervisors.

Attitude. Table 4 shows the results of the attitude of BHWs. BHWs evaluated their attitude as very satisfactory in all indicators, firstly 'readiness to be of service with a smile' with a weighted mean of 3.70 and lastly 'offering service as the need arises' (3.28). The AWM for BHWs' attitude towards their work is 3.47 and interpreted as highly satisfactory.

The data also reveals that the BHWs serve their constituents readily and with a smile if they feel confident and are well-equipped with knowledge and skills. A study by Quitevis (2011) states that BHWs should be given more training on providing essential health care services to be equipped in performing their roles, as these trainings boost the morale of BHWs and ultimately increase confidence.

Table 4: Competence of BHWs in terms of Attitude

Indicators	**Weighted Mean**	**Descriptive Interpretation**	**Ranking**
1. willingness to conduct voluntary service			
for the community	3.45	very satisfactory	6
2. love for work (perform work religiously)	3.60	very satisfactory	2.5
3. self-fulfilment when providing service	3.52	very satisfactory	4
to people			

4. increases morale when community			
recognises BHW work	3.60	very satisfactory	2.5
5. encouraged to work harder when changes			
in the health condition/perception of the	3.33	very satisfactory	8.5
clients are visible			
6. need to feel that they are part of the			
health system through supportive	3.45	very satisfactory	6
supervision & appropriate training			
7. offers service as the need arises	3.28	very satisfactory	10
8. strongly believes and accepts the values			
of the organisation	3.45	very satisfactory	6
9. one who is willing to exert extra effort			
for the sake of the organisation	3.33	very satisfactory	8.5
10. readiness to be of service with a smile	3.70	very satisfactory	1
Average Weighted Mean	**3.47**	**very satisfactory**	
Legend: 1.00 – 1.74 poor 1.75 – 2.49 good 2.50 – 3.24 satisfactory 3.25 – 4.00 very satisfactory			

The indicates that BHWs love their work of serving the community even though they expect nothing in return, which is supported by Rodriguez (2014), according to whom although classified as volunteers, BHWs deserve more support in exchange for their services to the local communities. A BHW who served for 30 years said that she never gave up her passion for a higher-paying job. At times she thought of quitting, but when she helped families and the community, even if getting nothing in return, made her feel good.

Furthermore, as stated in an ordinance by Legacion et. al. (2012), Barangay Health Workers are rendering primary health care services for the community and as such, are exposed to extreme health risks. Despite the heavy tasks undertaken and the constant rise in the cost of living, they remain inspired and exhibit a positive attitude in the performance of their duties and responsibilities.

In addition, results indicate that there are conditions and situations where motivated BHWs are encouraged to work harder, thus increasing their performance. These findings are related to research by Kok (2012), stating that community and health system links are related to higher CHW performance,. while community support, selection and monitoring are associated with increased CHW motivation and self-esteem. Recognition by health staff leads to recognition from the community, leading to greater CHW motivation and self-esteem. Coordination and

communication with other health staff were associated with a better quality of care in Myanmar and higher coverage in hard to reach areas in Mozambique.

Factors Affecting the Competence of Barangay Health Workers

Personal Factors. Table 5 shows the personal factors affecting the competence of BHWs. BHWs assesses the following indicators as greatly affecting their competence: 'need for training and seminars' with a weighted mean of 3.75; s 'need for materials, books, modules for reference purposes' (3.25) and finally 'honorarium is compensating; received on time' (3.00) interpreted as of moderate influence.. The AWM of personal factors is 3.32 and interpreted as significant.

The need for training and seminars was found to be a significant factor since training programs elevate the competence in the performance of their duties and functions. Hence, for BHWs to become competent, efficient, and effective, there is the need to hone their knowledge and skills by attending training and seminars. This is reinforced by a study conducted by Quitevis (2011), stating that BHWs should attend more training and seminars on teaching and providing basic health care services to be better prepared and equipped to perform their roles in providing health care services to the community. Furthermore, Go et. al. (2011) maintain that there is a need to improve the education and training of BHWs on primary healthcare since they act as a bridge between the healthcare delivery system and the community. Moreover, reinforcing the important elements of support to BHWs includes comprehensive initial training, effective supervision, regular continuing education and access to further information including modules pamphlets, and self-learning kits as needed for reference purposes.

Table 5: Personal Factors Affecting the Competence of BHWs

Indicators	**Weighted Mean**	**Descriptive Interpretation**	**Rank**
1. formal education related to current			
work	3.55	great effect	3
2. need for training and seminars	3.75	great effect affecting	1
3. personal beliefs/attitudes/interests/			
practices towards work are different	3.23	moderate effect	4
from the client			
4. communication skills, verbal and			
non-verbal	3.15	Moderate effecting	5
5. honorarium is compensating; received			

on time	3.00	moderate effect affect	6
6. need for materials, books, modules	3.25	great effect	2
for reference purposes			
Average Weighted Mean	**3.32**	**Great Effect**	

Legend: 1.00 – 1.74 no effect
1.75 – 2.49 has an effect
2.50 – 3.24 moderate effect ng
3.25 – 4.00 great effect g

Incentives received, such as honoraria, were not found to be a significant indicator. This implies that volunteer barangay health workers accepted their role in the call for service, exercising the spirit of volunteerism without waiting for a large amount as remuneration. On the contrary, they are content with the honoraria given to them by the government. According to Rodriguez (2014), sometimes she thought of quitting, but when she help families and the community, even if getting nothing in return, it makes her feel great. . However nowadays, no one wants to be a BHW. Most have children so they won't volunteer. She hopes for better allowances and benefits so that people are encouraged to join.

Environmental Factors. Table 6 shows the environmental factors affecting the competence of BHWs. The BHWs rated the following indicators as greatly affecting their competence: 'fund allocation of barangay officials to training and seminars of BHW' with a weighted mean of 3.55; while the indicator, 'change of BHW when barangay officials change' (2.50) was last in rank and interpreted as being of moderate effect. The AWM of environmental factors is 3.15, interpreted as being of moderate effect.

The need for training and seminars was found to be a significant personal factor affecting the competence of barangay health workers. Nevertheless, support from barangay officials is greatly required particularly in allocating funds for training and seminars. For these BHWs to become competent, efficient and effective, they need to attend training, and seminars to be able to provide quality healthcare services to the community.

Results reveal that the relationship with the people of the barangay and barangay officials greatly affects the work of barangay health workers. The BHW must have a harmonious relationship with the barangay officials, members of the health team and barangay people for the BHW to perform her duties and responsibilities effectively and efficiently. In support, Community Health Workers are more likely to be effective if they are truly representative of the community, chosen by the community and well supported by community officials (www.imva.org/pages/chws.htm).

Table 6: Environmental Factors Affecting the Competence of BHWs

Indicators	**Weighted Mean**	**Descriptive Interpretation**	**Rank**
1. support of barangay officials to health			
programs and activities	3.43	great effect	2
2. fund allocation of barangay officials			
for training and seminars of BHW	3.55	great effect	1
3. interrelationship with people of the			
Community	3.38	great effect	3
4. enough supplies, materials & equipment	3.08	moderate effect	4
5. honorarium is sufficient, paid on time	3.00	moderate effect	5
6. change of BHW when barangay officials	2.50	moderate effect	6
change			
Average Weighted Mean	**3.15**	**Moderate Effect**	
Legend: 1.00 – 1.74 has no effect 1.75 – 2.49 has an effect 2.50 – 3.24 moderate effect 3.25 – 4.00 great effect			

Since BHWs are working to earn a living, it is also necessary for incentives be given to them. This will boost their morale and encourage them to perform well in their job. In support of the findings, Giugliani et. al. (2014) state that for people to enhance their desire and strength to work, the incentive needs to improve and be paid on time, even if it's a small amount. if received each month, it will develop goodwill in our communities. In addition, Kok's study(2012) about community health workers in Bangladesh who reported as being dependent on the income they earned through their work as a CHW were more active and less inclined to drop out.

Relationship between the Profile and Competence of Barangay Health Workers

a. Relationship between Age and the Competence of BHW. Table 7 presents the results of testing the relationship between profile age and the competence of BHW. As shown in the data, knowledge, skills and attitude, all showed as non-significant since the computed values were lower than the tabular value at 0.05 level of significance. Hence, the decision on the null hypothesis was accepted, where knowledge had a computed value of 3.094 and a tabular value of 3.841; skills with a computed value of 2.824 and a tabular value of 3.841; and attitude with a computed value of 2.634 and a tabular value of 3.841. It can be deduced from these results that there is no relationship between age and competence of BHW.

Table 7: Test of Relationship between Age and Competence of BHW

Variable	Comp χ^2	Tab $\chi^2_{.05}$	df	p	Decision on Ho
Knowledge	3.094	3.841	1	0.0785	Accept Ho
Skills	2.824	3.841	1	0.0924	Accept Ho
Attitude	2.634	3.841	1	0.1046	Accept Ho

b. Relationship between Sex and Competence of BHW. Based on the data collected, there is no need to test the relationship between the profile sex and competence of BHW since all participants were female.

c. Relationship between Civil Status and Competence of BHW. The collected data shows that testing for the relationship between civil status and competence of BHW has no bearing since there is a very small sample size for the indicator window in the profile civil status.

d. Relationship between Educational Attainment and Competence of BHW. Table 8 presents the test of the relationship between the profile's educational attainment and competence of BHW. Data show that knowledge, skills, and attitude all showed as being non-significant since the computed values were lower than the tabular value at 0.05 level of significance. Hence, the decision on the null hypothesis was accepted, where knowledge had a computed value of 0.496 and a tabular value of 3.841; skills with a computed value of 0.614 and a tabular value of 3.841; and attitude with a computed value of 0.051 and a tabular value of 3.841.Therefore it can be concluded that educational attainment does not affect the competence of BHW.

Table 8: Test of Relationship between Educational Attainment and Competence of BHW

Variable	Comp χ^2	Tab $\chi^2_{.05}$	df	P	Decision on Ho
Knowledge	0.496	3.841	1	0.4814	Accept Ho
Skills	0.614	3.841	1	0.4336	Accept Ho
Attitude	0.051	3.841	1	0.8219	Accept Ho

e. Relationship between Employment Status and Competence of BHW. Table 9 presents the test of the relationship between profile employment status and the competence of BHW. The findings reveal that knowledge, skills and attitude have no significant relationship with the competence of BHWs since the computed values were lower than the tabular value at 0.05 level of significance.

Hence, the decision on the null hypothesis was accepted, where knowledge had a computed value of 3.838 and a tabular value of 5.991; skills with a computed value of 0.445 and a tabular value of 5.991; and attitude with a computed value of 2.891 and a tabular value of 5.991. It can

be deduced from the data that employment status is not a significant indicator of the competence of BHW.

Table 9: Test of Relationship between Employment Status and Competence of BHW

Variable	Comp χ^2	Tab $\chi^2_{.05}$	df	P	Decision on Ho
Knowledge	3.838	5.991	2	0.1467	Accept Ho
Skills	0.445	5.991	2	0.8003	Accept Ho
Attitude	2.891	5.991	2	0.2356	Accept Ho

f. Relationship between Length of Service and the Competence of BHW. Table 10 presents the test of the relationship between the profile length of service as BHW and the competence of BHW. The findings indicate that knowledge, skills and attitude have a significant relationship with the competence of BHWs since the computed values were higher than the tabular value at 0.05 level of significance. Hence, the decision on the null hypothesis was rejected, where knowledge had a computed value of 7.016 and a tabular value of 3.841; skills with a computed value of 6.155 and a tabular value of 3.841; and attitude with a computed value of 5.507 and a tabular value of 3.841.

It can be deduced from the foregoing results, that the length of service is a significant indicator of the competence of BHW. Those who stayed longer in their jobs are expected to be mature, responsible, and experienced to be able to share knowledge with their constituents. They have developed deep roots or shared life experiences with the constituents they serve. More so, if they have been able to serve town people for a longer period, they become more confident in giving health information and providing quality health care services to the community. They can handle various situations that may unexpectedly arise with ease.

Table 10: Test of Relationship between Length of Service and Competence of BHW

Variable	Comp χ^2	Tab $\chi^2_{.05}$	df	p	Decision on Ho
Knowledge	7.016	3.841	1	0.0081	Reject Ho
Skills	6.155	3.841	1	0.0131	Reject Ho
Attitude	5.507	3.841	1	0.0189	Reject Ho

Recommendation to Enhance the Competence of Barangay Health Workers

The study results indicate that barangay health workers are found to be moderately competent and weak points were identified in their competence. Some factors were also found to be greatly impacting the delivery of healthcare services to their constituents. However, there are certain matters that should be developed and enhanced amongst barangay health workers. These

BHWs may be recommended to attend training and seminars to update their knowledge and skills; providing them with materials, such as books, modules, and self-learning kits, which can be used as a ready reference and resource book that can be accessed as needed. This kit may engage BHWs in self-learning and self-practice to boost their confidence and improve their overall performance.

Conclusions

All BHWs were female. The majority were married and most of BHWs were in the age range of 51-60 years old, high school graduates, self-employed, and had 1-3 years of service as a BHW. BHWs assessed their competence along with knowledge and skills as moderately competent, and a highly satisfactory rating for attitude. Personal and environmental factors affecting the competence of BHWs include length of service, as BHW profile alongside knowledge, skills and attitude were found to be significant. The proposed self-training kit developed in this study may enhance the competence of Barangay Health Workers.

Recommendations

Barangay Health Workers

a. Continuous attendance of seminars and training is greatly encouraged to enhance knowledge, skills, and attitude, which can eventually improve self-confidence and performance in providing healthcare services to the community.

b. Barangay Health Workers must be well-equipped with the necessary knowledge and skills and must fully recognise their duties and responsibilities as members of the health team. Harmonious working relations with co-workers, supervisors, barangay officials, and the clientele may be established for work to be effective.

c. It is advised that they use the self-learning kit, which will serve as a ready reference and resource book in their delivery of healthcare services to their constituents.

Residents of the Barangay

a. Trust and co-operation to be extended to BHWs regarding health advocacies, promotion of wellness and prevention of diseases.

b. As recipients of health care services of the BHWs, it is highly encouraged that they treat them as an indispensable member of the health team. They must co-operate in whatever activities being undertaken in the barangay in the belief that through the spirit of unity and oneness, many worthwhile achievements may be accomplished.

Rural Health Unit Personnel

a. Regular performance evaluation of BHWs should be conducted to serve as baseline data on their competence to continuously uplift BHWs' level of performance.

b. Must appreciate the role of BHWs as members of their team. Need to assign them towards performance improvement.

c. May provide BHWs the opportunity to learn new knowledge and skills through orientation and training regarding various programs of the Department of Health.

Barangay Officials

a. It is encouraged that the criteria for the selection of BHWs be well defined to ensure the effectiveness of service.

b. May give awards, recognition, incentives, appreciation, or acknowledgment for good performance.

c. May propose policies and barangay ordinances for the welfare and benefit of BHWs.

Local Government Unit Officials

a. Formulate policies for the welfare of BHWs, so that they will be encouraged and motivated to perform well in their work.

b. Must consider BHWs as a priority in appropriating budgetary allocation. Benefits and bonuses due must be distributed.

c. Full implementation of R.A. 7883, known as "An Act Granting Benefits and Incentives to Accredited Barangay Health Workers and for Other Purpose." Implementation of these R.A 7883 will boost morale and encourage them to perform their duties and functions to the maximum.

d. Accreditation of BHWs should be considered to ensure the quality of health services provided by BHWs to the barangay.

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