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Assessment of Workplace of Barangay Health Workers in Selected Municipalities in the Province of Albay, Philippines

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Abstract

The barangay health workers (BHWs) play a significant role in the Philippine health care delivery system. They act as frontliners under the primary health care approach. They render primary care services such as first aid, maternal, neonatal, and child- and community-based interventions in the community. Individual work performance can be affected by individual motivation, work environment, and existing regulatory requirements. This study generally aimed to determine the working environment of BHWs in the province of Albay. Specifically, it identified the motivations of the BHWs, conducted inventory of barangay health stations, and determined the existing policies relative to BHWs. Questionnaires were used as the primary tool. Total enumeration was attempted among the midwives, whereas systematic random sampling was done for BHWs resulting to 88 midwives and 324 BHW respondents. The findings of the study showed that BHWs serve more than 20 households. The motivator factor is the primary motivation of BHWs in their work performance rather than the hygienic factor. It is evident that majority of the barangay health stations have necessary equipment, instruments, and supplies to provide health care services. However, water, sanitation, and hygiene facilities need to be enhanced. The BHWs are not fully equipped personally with paraphernalia needed for delivering services. The schedule of health services is dependent on the midwife. Local policies relative to BHWs are limited. The work environment can be more favourable if BHWs are equipped personally with resources necessary to provide quality services and if inadequacy in water, sanitation, and hygiene facilities will be addressed. More so, functionality of the barangay health station should be maintained. The BHWs' Benefit and Incentive Act (RA 7883) should be properly implemented to sustain BHWs' motivation to better work performance.

Keywords: *barangay health facility, frontline health providers, motivations, work environment, work policy*

Introduction

The barangay health workers (BHWs) play a significant role in the Philippine Health Care Delivery System. They are in the frontline in achieving maternal and childcare (Gilmore & McAuliffe, 2013), as well as in the control and prevention of diseases such as malaria (Matsumoto-Takashi & Kano, 2016). In 1979, the Philippines adopted Primary Health Care (PHC) as an approach to deliver health care services through Letter of Instruction (LOI) 949 and with a theme of "Health in the Hands of the People by 2020" (Rayala, 2000). It is a strategy that focuses on the responsibility for health on individuals, their families, and the community with the ultimate goal of developing self-reliance in health care. Under the PHC, there are two levels of PHC workers which are the BHWs and the intermediate level health workers. The BHWs are composed of trained health workers or health auxiliary volunteers providing services at barangay level. The intermediate level health workers refer to the general medical practitioners, public health nurses, midwives, and rural sanitary inspectors in Rural Health Units. More so, with the enactment of the Local Government Code in 1991, the Local Government Units (LGUs) run the local health system with the following objectives: (1) establish a local health system of health cares for effective and efficient delivery of the health care services, (2) upgrade the health care management and service capabilities of local health facilities, and (3) ensure the quality of health service delivery at the local level to name a few.

The barangay health station (BHS) is the primary health facility that provides health care services to the community. It serves as the workstation of a health team. It houses furniture, appliances, equipment, instruments, supplies, records, and related documents pertaining to health services delivered to the community. The health services are geared towards the promotion of health, prevention of illnesses, and management of minor injuries and illnesses. A registered midwife serves as the manager of the BHS, whereas a BHW assists the midwife (Reyes, 2006).

Every health team member plays a role and has their own respective contribution to the proper maintenance of the health station and its functioning. Competent, motivated, and resourceful health workers are needed to deliver appropriate, effective, and efficient health care services to the public. Work performances are affected by a number of factors that include motivation of the staff, policies, standards, and guidelines set, the size of the community being served by a health center, and the kind and number of personnel.

Motivation to perform tasks well can be affected by work environment, particularly the availability of resources and policies. Facilities and policies have significant effects in the work performance of BHWs. Health workers can perform their duties effectively when they are provided with adequate resources and well-defined policies. The presence of a permanent BHS can give health workers a favourable working environment. They can easily access equipment and medical supplies needed to perform their jobs. BHWs constantly make required reports. A designated workplace will help them do their paperwork easily, resulting to better work output. Moreover, BHWs should have adequate personal paraphernalia to perform health services to the community efficiently. Inadequate resources can limit the capabilities of the BHWs in rendering services.

Well-defined policies can guide and guard the BHWs in the performance of their duties in the community, especially that the BHWs are exposed to different types of people in the community. As a result, problems in connection with the performance of their duties may be encountered. When equipped with the knowledge of the policies, they will know how to react and face any situation accordingly. With policies in place, the BHWs will know the scope and limitations of their role in the community, therefore, allowing them to fully utilize their capacity to practice self-care and provide the proper health service.

Thus, this study generally aimed to assess the workplace of BHWs in the province of Albay. Specifically, it identified the motivations of the BHWs, conducted inventory of BHSs, and determined the existing policies relative to BHWs. The results of the study can be a basis for project proposal and policy recommendation, which can contribute to better health outcomes.

Materials and Methods

Research and Sampling Design

This is a descriptive study conducted in the province of Albay. Two municipalities per district having the highest and lowest performance in the LGU 2013 Scorecard along with the attainment of Health-Related Millennium Development Goals and three cities were included in the study.

Respondents and Data Gathering Methods

The study included two groups of respondents: (1) the BHWs who are registered or accredited or both by the Department of Health (DOH) from the cities and selected municipalities of the province of Albay as of 2017, selected through systematic sampling; and (2) midwives assigned in the catchment BHSs. A total of 324 BHWs and 88 midwives comprised the respondents of the study. The retrieval rate for the BHWs is 93.64% and 90.72% for the midwives.

A questionnaire was used as the primary data gathering tool. It has three parts: (1) the work motivations of the BHWs; (2) the inventory of barangay facilities and services rendered, which was patterned from the Quality Standard List for Rural Health Units and Health Center Level 1 (Sentrong Sigla Movement, 2000); and (3) inventory policy. Expert validation of the instrument was likewise conducted.

Before the actual data gathering, preliminary surveys to identify and determine study population were conducted. Letters were sent to the Provincial Health Officer and City and Municipal mayors through the City and Municipal health officers requesting permission to conduct the study. Distribution of questionnaires was done per district. Random visits of health facilities, focus group discussion, and key informant interview were undertaken to validate responses gathered through the questionnaire.

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Data Analysis

All retrieved questionnaires from the respondents were checked for any missing data or information. The raw data collected from the questionnaire were organized and entered into an excel table for analyses. Frequency, percentage, and rank were used to analyze the data. To compute for the ratio of the BHWs to the population and household the following equations were used:

$$\text{Number of Individuals per BHW} = \frac{\text{Total Population}}{\text{No. of BHWs}}$$

$$\text{No. of Households per BHW} = \frac{\text{No. of Individuals per BHW}}{\text{4.4 individuals per Households}}$$

The study has been structured in accordance with ethical consideration, such as the protection of the identity of all participants.

Results and Discussion

"Able to help the community" ranked first among the motivation. Barangay health workers are also known as Barangay Health Volunteers. As defined by Snyder and Omoto (2008), volunteerism is any form of helping activities that extend over time and that are performed through organizations and on behalf of receptive causes or individuals. This may explain why it is the primary motivation of BHWs. This can be seen in the study conducted by Yamashita and colleagues, (2015) that hospitality to help postpartum women and their family in the community is the number one motivation for BHWs in Muntinlupa City, Philippines.

Ranked second among the motivations is "Enjoying/loving the work." People could work more effectively, creatively, and collaboratively when they are happy at work. Work enjoyment can have connection with job satisfaction. It could lead to increased work productivity.

"Attendance to trainings and seminars" ranked third among the motivations. Having the opportunity to take classes and attend seminars motivates BHWs. The opportunity to take classes and attend seminars can make BHWs feel prepared and confident to do their work. Patel and Bhojak (2015) stated that planners and health authorities can address critical issues of workforce retention by professional education, which attract health workers more likely to serve in rural areas. More so, Taburnal (2017) highly encouraged continuous attendance to seminars and trainings to enhance BHWs performance. The present study showed similar results wherein the conduct of trainings and seminars become a motivation to the BHWs to serve the community. Being a BHW provides them opportunity to continue to learn and to develop personally.

Ranked fourth among the motivations is "Good relationship with other health providers." This result is consistent with the result of the study by Daneshkohan and co-workers (2014). In their study, it was determined that the third-most motivating

Table 1. Motivations of Barangay Health Workers

Motivations	Frequency N=324	Percentage (%)	Rank
Able to help the community	120	37.03	1
Enjoying/loving the work	88	27.16	2
Attendance to trainings and seminars	30	9.26	3
Good relationship with other health providers	15	4.63	4
Interaction with the people	10	3.07	5
Honorarium/incentives/annual benefits	3	0.93	6
Serve as a leader of the community	2	0.61	12
Feeling respected & recognized	2	0.61	12
Stepping stone for political ambitions	2	0.61	12
Civil service eligibility	2	0.61	12
BHW pension	2	0.61	12
Food/token	2	0.61	12
Complete facilities/supplies/materials	2	0.61	12
Scholarships	2	0.61	12
Expected regularization of BH	2	0.61	12

factor for health workers is good working relations with colleagues. Ariani (2015) concluded that good working relationship would cause the individuals to feel that the other members of organization give attention to them, support them, and contribute to them. Good relationship within the organization has indeed contributed to individual work motivations as seen in the studies conducted.

"Honorarium/incentives/annual benefits" ranked sixth among the motivations. Financial incentives alone are not enough to motivate health workers (Willis-Shattuck *et al*., 2008). In the study conducted by Akintola and Chikoko (2016), supervisors of community health workers (CHWs) were dissatisfied with low income but appeared determined to not allow it to demotivate them. Instead, supervisors kept their focus on intrinsic factors—making a difference, opportunities for development of managerial skills, building capacity of CHWs, and career advancement opportunities—that enabled them to stay motivated. Similarly, the present study showed that the motivations of BHWs are not primarily focused on honorarium, incentives, and annual benefits. The motivations are more of the ability to help the community, the work enjoyment, and the capacity to learn.

Other motivations identified by BHWs include reward for a job well done, feeling respected and recognized, steppingstone for political ambitions, and the expectations for incentives and benefits of BHWs. All of these motivation factors identified are with similarity with the seven major motivational themes identified by Willis-Shattuck and colleagues (2008), which are financial rewards, career development, continuing education, hospital infrastructure, resource availability, hospital management, and recognition and appreciation.

Herberz (2005) came up with a theory called motivation-hygiene theory or dual-factor theory. His theory states that people's job satisfaction depends on two kinds of factors: factors for satisfaction (motivators/satisfiers) and factors for dissatisfaction (hygiene factors/dissatisfiers). Performance, recognition, job status, responsibility, and opportunities for growth are motivators/satisfiers, whereas hygiene factors/dissatisfiers are about salary, secondary working conditions, the relationship with colleagues, physical workplace, and the relationship between supervisor and employee.

It can be noted that motivations identified by BHWs cover both motivation and hygiene factors. The top three motivations are motivator factors—namely, helping the community (responsibility), enjoying/loving the work (job status), and attendance to trainings and seminars (opportunities for growth); whereas the last three—namely, relationships with other health workers, interactions with people, and honorarium—are hygiene factors, though higher percentage was on the motivation factors.

The BHWs identified what they dislike in their work as shown in Table 2. "Uncooperative clients" is the topmost response. This may be explained by BHWs' feelings of frustration when they were not able to gain the cooperation of their clients, particularly when BHWs are so eager to help them. In line with this, it is therefore necessary for BHWs to identify strategies or ways to enable the community to participate.

Table 2. Factors that Barangay Health Workers dislike about their work

What BHWs dislike in their work	Frequency N=324	Percentage (%)	Rank
Uncooperative clients	103	31.79	1
Nothing (no dislikes)	60	18.51	2
Conflicting schedule	18	5.55	3
Criticism	15	4.26	4
Unrecognized efforts	8	2.46	5
Accompanying patients	2	0.61	6
Lying-in duty	1	0.30	7

The top three motivations ("Able to help the community," "Enjoying/loving the work," and "Attendance to trainings and seminars") fall under motivators/satisfiers, whereas the fourth, fifth, and sixth motivations ("Good relationship with other health providers," "Interaction with the people," and "Honorarium/incentives/annual benefits") are considered hygienic/dissatisfiers. In the application of the dual theory, motivating people really works when the things that bother them and the things they complained about disappear. Table 2 shows the things that challenge the BHWs. Looking into the motivations and dissastisfiers of the respondents, it can be noted that respondents' motivations overshadow their dislikes in the work. There are barely any complaints as supported by the responses reflected in Table 2.

The BHWs primarily work in BHSs. The BHS is a health care facility under primary level that comprises the basic structure of the Philippine healthcare

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Table 3. Ratio of Barangay Health Workers to Population as of 2015

Number	1st District			2nd District			3rd District			Total
	Sto. Domingo	Tabaco	Malinao	Daraga	Legazpi	Rapu-rapu	Polangui	Ligao	Jovellar	
Population	34,967	133,868	45,301	126,595	196,639	36,920	88,221	111,399	17,308	791,218
BHW	185	264	187	403	287	116	44	195	121	1,802
BHW per individual	189	507	242	314	685	318	2,005	571	143	439
Household Served per BHW*	43	115	55	71	156	72	456	130	33	100

**Each household with a 4.4 average number of members (PSA, 2015).*

delivery system usually managed by a midwife. BHWs are among the health workers working at this level. They serve as the first contacts of the community and the initial link to the health care system. Ideally, they are expected to serve 20 households.

Table 3 shows the ratio of barangay health workers to population. It can be noted considering the population of each municipality and city, the BHWs are serving 33 to 456 households. The ideal number of households per BHWs is 20. The BHWs are serving households more than 20. This means that there is shortage of BHWs in the barangays. This could have an effect on the capacity of the BHWs to perform quality services to the community.

Barangay Health Facility Inventory

Figure 1 shows data pertaining to inventory of barangay health facilities. At present, a total of 71 out of 88 or 86.80% of the study sites have permanent BHSs with a permanent assigned midwife. The goal of PHC is to have better health outcomes by making health services be made available, accessible, acceptable, and affordable in the community. The Philippines attempted to establish a BHS in every barangay. BHS is a place wherein health services of the DOH will be delivered. A midwife is assigned in a BHS. A midwife manages the BHS along with health workers from the barangay. The presence of a BHS in every barangay easily provides access to health care service to the people in the community.

The presence of complete and functioning equipment and adequacy of supplies contribute to the quality of care provided to the clients. As can be seen from Figure 1, the BHSs are not fully equipped with the needed materials and supplies. A total of 87.50% of the BHSs have blood pressure apparatus, thermometers, nebulizers, weighing scales, ice bags, and hot-water bags. As for medicine at the time of visits, informants claimed that medications for hypertensive clients were unavailable.

As assessed by the midwives, the majority of BHSs in the study sites are generally clean (76.14%), with sufficient seating space for client (81.82%), with examining area with bed (69.32%), with sign board listing facility board (73.86%), and sign board for available services (59.09%), and well ventilated with electric fan (64.77%) and windows (70.45%).

The study revealed that only 41 or 46.59% of the BHSs have regular supply of water. BHWs usually result to fetching water from a near source, which is added responsibility or work for them. Also, 80.68% of the BHSs have toilets for patients' use. Waste segregation is observed among 60.23% of the BHSs. Other BHSs still practiced using a compost pit both for biodegradable and non-biodegradable waste while burning and throwing near the river are other ways to dispose waste. These practices were observed during the actual visits to BHS. Used syringes are generally disposed in a syringe box to be collected by rural sanitary inspectors or to be brought to the Regional Health Unit (RHU) for disposal in septic vault. Additionally, 62.25% of the BHSs have an oral rehydration therapy corner. This is an area completed with supplies to manage clients with diarrhea.

According to Reyes (2006), the barangay health center must be a model of cleanliness and order to lend credence to what health workers teach clients about hygiene, sanitation, and order in the home. Floors and walls are free of dirt, dust, and litter. Facilities for the toilets should be available, clean, and in good condition, with faucets with safe and potable water for drinking. Clear instructions posted on walls will help ensure a smooth flow of clients and patients.

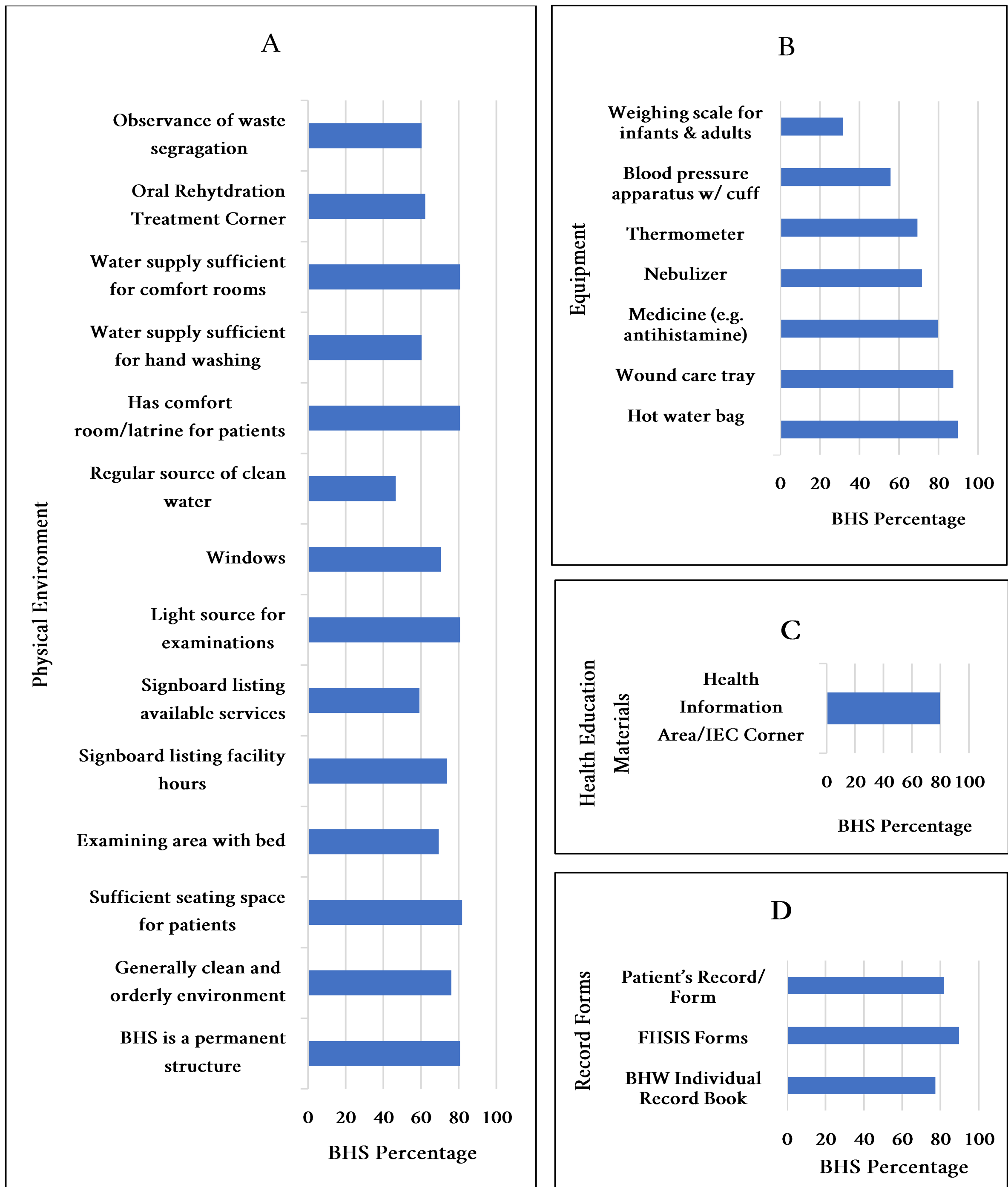

Figure 1. Barangay Health Station Inventory along Physical environment (A), equipment (B), health education materials (C), and record forms (D)

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At least 79.55% of the BHSs have health information area and materials for information, education, and communication. Presence of health posters and other health education materials provide opportunity for clients to learn something while at the station. Clients can read and be busy while waiting for their slot. In the study of Sumaylo (2013), one of the problems noted in the implementations of health programs is the lack of communication materials.

Majority of the BHSs have forms for recording and reporting. At least 89.77% have available field health service information system forms, 77.27% have patients' record forms, and 81.82% have BHWs individual record book. The availability of forms fosters a good recording system.

The result shows that 71 out of 88 or 80.86% of the BHSs provide regular services. The schedule of services varies with every BHS. One BHS provides 24/7 services to the clients, which include Basic Emergency Obstetric and Newborn Care (BEmONC). It was noted during the actual visits that some of the centers are closed. It is usually functional on the days the midwife-in-charge is present.

BHWs are supposedly trained in preventive health care (maternal and child care, family planning, reproductive health, nutrition and sanitation) and should be equipped with basic skills for prevention and management of common diseases. Tasks include assisting the midwife in the monitoring of the health of the client and community, coordinating the health problems of the client, recognizing the health needs of the client, keeping records and documents, submitting reports, providing correct information about the services, assisting in health activities (consultation, immunization, feeding program, giving of medications such as TB drugs) conducting home visit, demonstrating good health practices and lifestyles, providing adequate health educations, and motivating the client to submit for check-up.

BHWs to be effective in the performance of roles and responsibilities must be equipped personally with necessary equipment and materials, which can likely be used during the delivery of services during home visits. As health service provider, the BHWs assist the health team, particularly the midwife in the implementation of health programs. Under the non-communicable disease control program, assessing clients for blood pressure is vital to detect the risk status or conditions for hypertension. It can be noted that 50.62% of BHWs have their blood pressure apparatus (Table 4).

Table 4. Barangay Health Worker's Paraphernalia

Equipment/instruments	Frequency N=324	Percentage (%)
BP apparatus	164	50.62
Weighing scale	125	38.58
Thermometer	161	49.69
Wound care tray	78	24.07
Hot-water bag	49	15.12
Ice bag	47	14.51
Triangular	34	10.49
Medicines (paracetamol)	120	37.04
Patient record/forms	172	53.09

In the proper health assessment of clients, weighing scale, BP apparatus, and thermometer are basically necessary to capacitate BHWs to make decisions about clients' condition. It is deemed advisable that BHWs should carry with them the health kit to provide necessary care to clients in need.

Policies are important in a workplace as they help reinforce and clarify the standards expected of employees and help employers manage staff more effectively as it defines what is acceptable and unacceptable in the workplace.

Midwives assigned in every BHS serve as managers of BHS and supervisors to BHWs. They are expected to be knowledgeable of existing policies governing BHWs. Table 5 shows the different policies identified by midwives. The policies are limited to attendance to regular duty, monthly meeting, submission of report, additional incentives, wearing of uniform, facility-based delivery, and the creation of local health board.

Table 5. Inventory of Policies Relative to Barangay Health Workers

Policies	Percentage (%)
Regular duty	6.81
Monthly meeting	1.14
Submission of report	2.27
Additional incentives	2.27
No smoking policy	3.40
Wearing of uniform	1.14
Facility-based delivery	1.14
Barangay health board	2.27

Republic Act 7883, known as BHW's Benefit and Incentive Act, is in existence and is expected to be in full implementation as of 2009. The BHWs received honorarium ranging from ₱330.00 to ₱2,100.00 depending on the barangay as seen in the results of the study. Provincial health office provides ₱1,000.00 incentive for accredited BHWs annually. At present, it can be noted that RA 7883 has not been fully implemented in the study sites.

To summarize, the results of the workplace assessment revealed that the BHWs are primarily motivated to perform their work to provide health services to the community. There is no issue raised against their relationship with the supervisor and other members of the health team. The study even showed that good relationship between supervisors and health team is among their motivations. A limited number of BHWs presented dislikes or problems on their work.

The following workplace concerns are noted in the study, which can affect the work performance of BHWs: (1) BHWs are providing services to households more than the ideal number of 20. This increases their workload and can affect the quality of services. (2) BHWs are mostly challenged by the participation of the community people, though community participation has been observed to be one of the problems among the community health worker team, not only the BHWs. (3) The majority of the barangays have permanent BHS and with basic equipment, supplies, and materials necessary for delivery of services, but there are still some barangays with no permanent BHS, as well as with inadequate equipment, supplies, and materials. (4) The regularity of services of BHS is dependent on the presence of the midwife. (5) The absence of water source becomes a burden to majority of the BHWs. There are improper waste disposal practices noted on some BHSs. These are situations that can affect the WASH practices in the station. (6) Majority of BHWs are not equipped with personal paraphernalia, which are very essential in the delivery of services. The absence of paraphernalia or incomplete paraphernalia among BHWs can hamper the safety practices of BHWs and can pose risk to their health and the community. (7) There is limitation on the number of policies relative to BHWs. The implementation of the incentives and benefits of BHWs needs to be prioritized as a way to recognize the selfless efforts of the BHWs.

Conclusion and Recommendation

Based on the findings of the study, it can be concluded that the BHWs are highly motivated by a sense of responsibility to help the community in the spirit of volunteerism. The work environment can be made more favourable if BHWs are equipped personally with resources necessary to provide quality services and if inadequacy in WASH facilities of BHS will be addressed. Functionality of the BHS should be maintained. Deployment of permanent midwife per barangay can contribute to regularity of health services in the barangays. Republic Act 7883 should be properly implemented to sustain BHWs' motivation to work and contribute to better individual work performance.

It is therefore recommended that the municipal and barangay officials should work in close coordination to provide an efficient and effective local health system by sustaining BHWs' motivation to work. This can be done by providing equitable financial benefits and incentives to BHWs.

More so, the work environment can be made more favourable to BHWs. Provision of health kit for use can be prioritized, funded by an LGU at municipal or barangay level for BHWs to fully utilize their potentials in making quality health assessment and providing care to clients. More so, barangay health facilities should be continuously improved. WASH facilities must be given importance. LGU officials should strive to make a BHS model for WASH. Adequate funding must be appropriated.

Full implementation of RA 7883 must be observed. LGUs can utilize the results of the study to develop policies that are deemed of importance to safeguard BHWs' welfare, not resulting to abusing them. Whatever benefits due them must be given them. DOH should look into possible policies on health human resource including BHWs.

Academe can help in the motivations of BHWs. Provision of trainings to supplement DOH training for BHWs can be done. Extension programs can be established, focusing on capacitation of the frontline workers.

The Local Government Unit and Rural Health Unit Team must appreciate the role of the BHWs as members of the health team. They must assist them

in any way towards improving their performance through formal and informal teaching, providing them opportunities to improve their performance. Regular evaluation and assessment must be done to identify their strengths and weaknesses so that appropriate measures must be initiated.

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