Barangay Health Workers' Perceived Factors that Affect Performance in Health Service Delivery in Five Upland Municipalities of Cavite

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ABSTRACT

Background and Objective. Barangay Health Workers (BHW) are a crucial part of the local health system. Health services at the barangay level are heavily dependent on BHWs. However, despite their significant role in the local health system, support has been minimal and not commensurate with their contributions. The study aimed to identify the perceived external and internal factors that affect the performance of BHWs.

Methods. The study identified the BHW-perceived external and internal factors affecting performance, through mixed quantitative and qualitative methods. A self-administered questionnaire with a 4-point Likert scale that will assess the factors was given to 561 BHWs from five different upland municipalities of Cavite. A focus group discussion using open-ended questions was conducted to gain an in-depth understanding of their experiences. Emerging themes were reported into narratives.

Results. BHWs maintained a strong level of participation at required health activities, but more than half were often late, owing to their volunteer status and external responsibilities. They were perceived to have a high sense of duty reflected by punctual submission of reports and confidence in delivering health services. Job satisfaction emerged as a substantial motivator while burnout was not a significant demotivator. Leadership and support from local government and health program management were perceived positively by most BHWs. Service delivery confidence was high among BHWs as reflected in their capability to provide expected services. BHWs perceived that challenges were present in terms of the adequacy of medicines and supplies, and on data transmission, although half were generally satisfied with the organization of health records. Human resources were perceived to be sufficient. Financial aspects showed that while most BHWs do not contribute personally to patient care, a significant minority shell out resources

for patients, reflecting financial strains within the health system. The study also revealed the varying motivations for volunteering, including community service, staff shortages, knowledge acquisition, and additional income.

Conclusion. External and internal factors affect the performance of BHWs at the local level. These were related to current health systems, political climate, personal household duties, and financial status. Despite facing these challenges, the BHWs showed commendable involvement in local health programs. BHWs remained motivated through training opportunities and positive community feedback but were hindered by a lack of health science knowledge and the need for supplementary income.

Keywords: barangay health workers, local government, human resources for health, performance management

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INTRODUCTION

In the Philippines, Community Health Workers were locally called Barangay Health Workers (BHWs). BHWs have been integrated into the local health system as a response to the shortage in human resources for health.¹ The presence of BHWs in local health systems has been shown to contribute to reductions in child morbidity and mortality by encouraging immunization uptake among residents, promoting breastfeeding, and improving outcomes of children with acute respiratory infections, tuberculosis, and malaria.^{2,3} Since the creation of BHWs in the 1980s, they have been part of the human resources of local health systems, especially in areas where barriers to accessing basic health services are present. The role of the BHWs eventually evolved from mere voluntary chores to full-time organized and sophisticated system-based work. Local-level barangay systems eventually became dependent on the services by BHWs.

Despite the significant contributions of BHWs in local health systems, support for them has been minimal and at times were not commensurate with their workload. The Republic Act 7883 (Barangay Health Workers Benefits and Incentives Act) in 1995, was put into law to address these issues, with its full implementation yet to be realized. In 2014, the Philippine Congress renewed the efforts to strengthen RA 7883; however, adherence to the law had remained varied depending on the local health systems. Presently, with the lack of human resources for health, the Republic Act 11223 or the Universal Health Care Act aims for an equitable access to essential health services, part of which are being provided by BHWs at the primary care level such as screening and houseto-house case finding or support to national immunization programs. In preparation for UHC Act, BHWs were foreseen to be part of the navigators under the health care provider network by providing support in the form of training and capacity building.

At the local level, there was few scientific research or publications that detailed the status and needs of BHWs. Most issues were recorded in news articles, reports, or unpublished documents. With this limitation, supporters of BHW-related bills relied on international data on CHWs. Moreover, these data were quantitative in nature and were based on records review. Local data derived from the perspectives of BHWs must be made. This must also detail the factors that they perceive to have impacts on their performance as health workforce. These factors can be divided into external and internal factors. Internal factors include intrinsic characteristics that influence the health worker. These are personal perceptions on job satisfaction and motivation, the six building blocks of a health care system, demographic, and educational status while external factors are support systems such as peer and family, work organizational structure, level of community support, and political atmosphere in the community.^{4,5}

In 2006, an academic-community partnership was forged between the University of the Philippines Manila, Community Health and Development Program (UP CHDP), and the provincial government of Cavite. The five upland municipalities involved were collectively known as AMIGA (Alfonso, Mendez, Indang, General Emilio Aguinaldo or Bailen, and Amadeo) all belonging to the Inter-Local Health Collaboration Council.⁶ Five years into the partnership, there was a noticeable decrease in interest among many BHWs in the health programs. These were manifested as delayed submission of reports, decreasing interest and participation in barangay health activities or programs, and low morale during patient care. These observations may potentially compromise long-term health service delivery in all five municipalities. The experiences with the partnership led to the concept of identifying the factors affecting their performance especially since BHWs are at the forefront of local health service delivery.

This research aimed to offer insights that could shape policy decisions at every governance level, from the barangay to the national level. The information gathered in this study was relevant for policymakers and health managers to further improve efficiency and motivation among BHWs. Future policies can then be drafted that are more responsive and relevant to the needs of the BHWs.

OBJECTIVES

The study aimed to identify the BHW-perceived factors that affect their performance in the local health programs in the five upland municipalities in Cavite. Specifically, the study aimed to:

- 1. Describe the nature and extent of non-participation and decreased interest among BHWs in the local health programs by measuring their motivation, performance, and level of participation;
- 2. Determine the internal factors perceived by BHWs affecting their performance such as: age, sex, educational attainment, economic status, marital status, political affiliation, years in service, and trainings attended; and
- 3. Determine the external factors perceived by BHWs affecting their performance in terms of: WHO building blocks of health, political situation, socioeconomic situation, geographical nature, presence of other organizations within the community, support for BHWs, and incentives/disincentives from the employer.

METHODS

The study was descriptive, cross-sectional in design, and involved all officially recognized BHWs (as defined by the BHW Act of 1995), in the AMIGA municipalities in Cavite. The AMIGA municipalities were selected as part of the then ongoing community-university partnership. Permission to conduct a study was secured by submitting a letter to the Local Chief Executive and the Municipal Health Officer (local health manager) of each municipality. After the approval, an invitation letter was sent out to the BHW Federation stating the voluntary nature of the study and that no negative effect on their status as BHW would happen if they withdrew from participating. These information along with the absence of risk, voluntary nature, and the confidential nature of the study were also included in the written consent distributed and explained individually to BHWs. A written informed consent approved by UP Manila Ethics Review Board, signed by the BHWs, was secured prior to data gathering. Privacy and anonymity were ensured throughout the process. Data collection was conducted simultaneously by trained research assistants. Both the self-administered questionnaire and the FGDs were conducted within the vicinity of the Rural Health Unit in the best time possible outside the usual office hours of 8:00AM to 5:00PM where the risk of their work getting disrupted was low.

Self-administered Questionnaires

To describe the nature and extent of BHW motivation, performance, level of participation, perceived internal and external factors affecting their performance, a selfadministered questionnaire with a 4-point Likert was provided. Socio-demographic characteristics were included such as civil status, gender, family and household size, educational status, monthly incentives, and annual income received, as well as political affiliation. Pretesting was done initially by the research assistants to ensure the validity of the tool. The self-administered questionnaire was estimated to be answered by BHWs for 30-45 minutes or less. BHW names remained coded.

Focus Group Discussion

A focus group discussion using open-ended questions was conducted to gain an in-depth understanding of their experiences as BHWs. The focus group discussion per barangay (with 5-8 participants chosen by convenience sampling based on availability on chosen dates, and upon recommendation of the local health manager) was conducted by a trained research assistant. Open-ended questions include their perceptions as BHWs, perceptions of the community members/barangay members on their work as BHWs, their insights if there were no BHWs, and their wishes as BHWs. FGD session lasted for an hour.

Data Analysis

Data obtained from self-administered questionnaires were processed using codes and analyzed using descriptive statistics. Data from FGD were transcribed, coded, and analyzed manually guided by Braun and Clarke's six phases of analysis.⁷ A separate research assistant encoded and conducted the data analysis. Emerging themes and concepts through identifying recurrent patterns were also analyzed. The resulting themes and patterns in answers were presented in the form of narratives.

Ethical Considerations

The study proposal was approved by the UP Manila Ethics Review Board (UPMREB 2020-151-01) and was done in accordance with the Data Privacy Act of 2012. The researchers also obtained informed consent from BHWs prior to conducting the in-depth interviews and FGDs.

RESULTS

Self-administered Questionnaire

A total of 561 BHWs provided consent to participate in the study with majority coming from Alfonso (34.9%, 196 respondents), Indang (23.5%, 132 respondents), Bailen (22.1%, 124 respondents), Mendez (13.2%, 74 respondents), and Amadeo (6.24%, 35 respondents). The average years in service of the BHW participants was 13 years.

Perceived participation, performance, and motivation

Majority of BHWs (93.8%) perceived that they always participated in activities relevant to their work; however, 64.2% admitted that they were always late while 35.8% admitted that they were sometimes late. For BHW participation, 85% perceived they submit reports always on time and 83.8% perceived that they were always capable of providing health services needed by their respective communities. In relation to BHW motivation, 80.6% of BHWs perceived that burnout was not a cause for low motivation, while 99.1% perceived that job satisfaction impacted on their motivation to work. Pertaining to the satisfaction derived from using personal abilities (intrinsic job satisfaction), 99.8% perceived that intrinsic job satisfaction impacted their motivation as well. Most BHWs (99.6%) admitted they were proud and committed to be working in the barangay health stations while 67.4% strongly agreed that they were conscientious health workers and that they complete their tasks efficiently and correctly.

Internal factors

Variations in the socio-demographic characteristics, specifically gender stereotyping, being married, having large family and household sizes, being high school graduates, having income less than 40,000 pesos/year, and having neutral political affiliations among BHWs were observed. Table 1 shows the socio-demographic characteristics of BHWs present in the five upland municipalities being assessed.

External factors

In terms of the WHO health systems building blocks, perceptions of BHWs on leadership, service delivery, medicines and vaccines, human resources, health information and financing were included. All BHWs acknowledge that they were supported by the head of the barangay health team (either a midwife or a nurse). A substantial 67.4% strongly agreed that they received active support from their barangay

Upland Municipalities in Cavite		
Socio-demographic Characteristics	Frequency	Percentage
Sex		
Female	556	99.11
Male	5	0.89
Total	561	100.00
Civil Status		
Single	42	7.49
Married	386	68.81
Separated	85	15.15
Widow/Widower	17	3.03
Live In	31	5.53
Total	561	100.00
Family Size		
Small	24	4.28
Medium	166	29.59
Large	205	36.54
None	166	29.59
Total	561	100.00
	501	100.00
Household Size	10	2.22
Alone	13	2.32
1-2 3-4	113	20.14
	217	38.68
5 or more Total	218 561	38.86
	501	100.00
Educational Attainment		
No Formal Schooling	0	0.00
Elementary Level	4	0.71
Elementary Graduate	25	4.46
High School Level	45	8.02
High School Graduate	229	40.82
College Level	106	18.89
College Graduate	72	12.83
Vocational	76	13.55
Post-Graduate	4	0.71
Total	561	100.00
Monthly Incentive		
Under Php 500	11	1.96
Php 501- 750	25	4.46
Php 751-1000	120	21.39
Php 1001-2000	299	53.30
Above Php 2000	106	18.89
Total	561	100.00
Economic Status (annual income)		
Under P 40,000	383	68.27
40,000 - 59,999	66	11.76
60,000 - 99,999	66	17.76
100,000 - 249,999	38	6.77
250,000 and over 250,000	8	1.43
Total	561	100.00
Political Affiliation		
Neutral	367	65.42
Supporter of current administration	188	33.51
Supporter of other party	6	1.07
Total	561	100.00

 Table 1. Socio-demographic Characteristics of BHWs in Five

 Upland Municipalities in Cavite

leaders while a fraction (4.1%) expressed dissent. In terms of barangay officials managing local health programs, 67.2% strongly agreed while 3.9% disagreed.

All BHWs perceived positively that they have provided adequate services expected from them to be delivered to their communities, while 97.7% believed that their health facilities were capable of providing the expected health services by the community. Most BHWs perceived that their health centers had an adequate supply of medicines (66.9%) while 33.2% disagreed. In terms of the availability of vaccines, 97.3% believed that vaccines were available while 2.7% perceived otherwise. Human resources for health were strongly perceived to be adequate by 66% of the BHWs with only 4.3% who disagreed. Only 1.8% of BHWs perceived that they were not well-equipped to provide health services as a health center staff.

The organization of health records in health centers was perceived positively (97%); however, 33.9% experienced having a hard time reporting health data to the Rural Health Unit.

In terms of health coverage of the community through the insurance system, 36.9% of BHWs perceived that their community constituents were not covered by health insurance and 31.9% perceived that they may shell out money for their indigent patients.

Other external factors pertaining to incentives and recognition, political situation, geographic barriers, peer and family support, and presence of various organizations were determined. Only 8% of BHWs admitted that they receive additional monetary incentives; however, 70.94% recognized the efforts and support of the barangay through non-monetary incentives (e.g., uniforms, snacks, office supplies, vitamins, umbrellas, use of transport services). Majority of the BHWs (85.2%) admitted that they did not receive service recognition from their barangay. The BHWs mentioned how the political situation also affected their participation in the health programs. For the BHWs, policies and programs change depending on the administration. However, the BHWs perceived that this does not change the goal of achieving better health for the community.

The geographical location of the areas assigned to each BHWs was not perceived to be of concern because they were assigned to households which were near their residences. The BHWs believed that the appreciation shown by the community motivated them to work harder for the health sector. On the other hand, the BHWs mentioned lack of support from their families (because of lack of time for the family), low income, and inadequate benefits for them as factors that demotivated them.

In the five municipalities, a total of 66 organizations were noted, 39 of which were non-governmental organizations, 13 government, and 14 religious groups. The presence of various organizations was perceived by the BHWs as important. This was related to the impact of these organizations on health by providing food, supplies, incentives for the BHWs, and campaigns towards better health for the community. The assistance provided by organizations were perceived by BHWs as a form of encouragement for the people to be more involved in the local health programs.

Focus Group Discussion

FGDs were conducted separately per municipality. This was attended by nine BHWs from Mendez, five from Alfonso, nine from Indang, eight from Bailen, and six from Amadeo. All participants gave written consent prior to the FGD process.

Reasons for volunteering

Four themes emerged relevant to the reasons of BHWs for volunteerism (service to the community, staff availability, knowledge acquisition, and additional income).

Being a BHW for them has paved the way to give back to the community, served as an opportunity to extend help, and served as a link to ensure health accessibility by the community. The low nurse- or midwife-to-patient ratio motivated the BHWs to volunteer. The BHWs wanted to extend help, especially in providing assistance in basic tasks such as blood pressure monitoring, weight recording, and record keeping. The daily experiences and knowledge gained from training and seminars boosted confidence among BHWs especially that most of them have background education that were not relevant to any health course. These allowed them to share basic knowledge and practical applications such as the benefits of "Sampung Halamang Gamot." The compensation of BHWs was perceived to be low. However, they still considered this as an additional income for their families. In one municipality, it was the local government's strategy to collect and hold the monthly honorarium and then give it as an annual honorarium so that it will have a larger monetary value. The monthly honorarium was perceived to be very important for the BHWs, especially during emergency situations.

Delay in reporting data

Five themes were extracted that were relevant to the issue of delay in submitting reports (high workload, absence of standardized reporting system, lack of education, uncooperative community members, outside work responsibilities)

The high workload specifically the fieldwork and data collection has consumed most of the BHWs time and this was perceived to be contributory to delays in report submission. The lack of a standardized system for reporting including sudden changes in submission formats, unavailable computers for use, and unclear instructions resulted in redoing the reports from time to time. Moreover, the lack of education of BHWs was also perceived by them as contributory, especially if reports were required to be in English. As a result, BHWs would seek help from other BHWs to accomplish the task immediately. The uncooperative nature of some community members resulted in prolonged data collection. Other responsibilities such as house chores and other work engagements (for

additional income), were observed by the BHWs as causes for delay in report submission.

Effects of insufficient supply of medicines

Three themes were noted on the perceived effects of insufficient supply of medicines in their barangay health stations (reduced credibility, poor health service delivery, and uncontrolled non-communicable disease or NCDs/ antimicrobial resistance proliferation). The BHWs admitted that they were blamed and criticized for having insufficient medicines and were even accused of keeping the medicines for personal consumption. The BHWs observed that medicines from the national level that were distributed to local governments arrived a few months before the indicated expiry date. This led the community to conclude haphazardly that distribution to patients was due to near-expiry status. Some patients refuse to receive medicines if the expiration is within the month. The lack of medicines also limited the services resulting in comments from the community to close the health stations. The BHWs also recounted instances where patients refused to be monitored for hypertension since no NCD medications were provided. On the other hand, the BHWs admitted that they would dispense an insufficient number of antibiotics to patients which could lead to antimicrobial resistance.

Events that lead to low motivation

High workload (including secretarial jobs) causing fatigue and stress were narrated by BHWs. Threats of not receiving the monthly honorarium were shared. This was coupled with the disrespect they received from the barangay officials. Poor work relationships resulted in emotional stress, lower self-esteem, discouragement, and resignation. Support from family, friends, organizations, and co-workers was deemed important for BHWs to maintain their motivation to work. Similarly, the lack of recognition from their leaders and from patients regarding their efforts (e.g., during the pandemic), and the delay in receiving compensations (e.g., hazard pay during the pandemic) led to low motivation.

Wishes of BHWs

The wishes of BHWs centered on the following: benefits and insurance (retirement benefits and membership in the Government Service Insurance System; honorarium increase; recognition and appreciation of their contributions; and incentives such as free vaccines, laboratory tests, and discounts from hospitalization).

DISCUSSION

Community health workers known as BHWs, like in the upland municipalities of Cavite, Philippines, have played a crucial role. Despite their pivotal role, the effectiveness of BHWs is not solely intrinsic; it is influenced by a complex interplay of external and internal factors.

The findings on the BHWs' participation, performance, and motivation suggested a strong commitment to community health work among the workers. The occasional tardiness and delay in submission of reports indicated areas where improvements could be beneficial. BHWs showed a high level of diligence and a sense of responsibility. The data indicated a highly motivated workforce, with strong indicators of job satisfaction, intrinsic motivation, organizational commitment, and conscientiousness, despite the presence of burnout in a subset of the workers. This suggested that while volunteer BHWs face challenges, their motivation remains robust. BHWs have a unique intermediary position between communities and the health sector.8 They were therefore uniquely positioned to promote healthy household practices and appropriate health-care-seeking behavior.9 The wide range of duties and responsibilities of BHWs may lead to burnout thereby decreasing motivation. It also dramatically influences effectiveness and motivation to stay on the job.¹⁰ It may also reduce employee organizational commitment, lower productivity and performance, reduced engagement, ill-health of employees, and increased absenteeism.¹¹ These may have been compensated by the series of trainings and lectures received by the BHWs which further improved their motivation, participation, and performance. Knowledge and understanding of some aspects of health including basic nutrition for instance is of great importance for the health workforce.12 Training also allowed them to exercise a curative role in the community.¹⁰

The identified internal factors that affected the performance, participation, and motivation of the BHWs were related to their demographic characteristics, political affiliation, and training attended.

A study in 2019 reported that most of the BHWs in the country were women aged 20-45 years old.¹³ Women also preferred to be BHWs, as they are therapeutic and can handle situations with utmost care and confidence. Therefore, gender plays a role in the function of BHWs. In the FGD, the willingness of the BHWs to extend help, especially in providing assistance in basic tasks such as blood pressure monitoring, weight recording, and record keeping are usually an internal motivation or are inherent within them as a volunteer. Being a BHW gave them opportunities to show their compassion to their community members. However, the ability of the BHWs to balance multiple roles may strain their time, especially with their families and personal needs. Such strain may have considerable effects on their capacity to perform each role effectively and on their overall well-being. A correlation was found between the magnitude of household duties and CHW engagement, noting that a reduction in domestic responsibilities corresponds with increased activity among CHWs and a lower rate of attrition.8

Barangay Health Workers engage in community service driven by their commitment to support local health efforts, augment the work of midwives and nurses, and enrich their own experiences. Their effectiveness was rooted in a profound understanding of the cultural norms, practices, beliefs, and people within their communities. Insights from focus group discussions revealed that historically, specific qualifications for becoming a BHW were not emphasized, with the primary role of assisting healthcare professionals rather than to provide direct care. However, with the passing of RA 7883, more defined duties and responsibilities were given to them. Moreover, many of the BHWs faced challenges in adapting to technology-driven methods of service delivery, and they typically rely on English and fundamental mathematics for reporting purposes. This underscored that while formal education is vital for BHWs to fulfill their roles effectively, it does not necessitate advanced degrees. However, evidence from a study in Ghana suggested that higher educational status of health volunteers was more likely to increase their performance.¹⁴ The majority of the BHWs included in the study also had no formal education in health sciences, hence training and seminars were conducted to develop skills and competencies. Training and upgrading the knowledge and skills of BHWs were a necessity especially with the rapid improvement in the healthcare system, emergence of diseases, and changing lifestyle and health of the community.¹⁵ Increased training corresponding to a broader scope of work and, in particular, having more curative tasks may increase motivation, service delivery time, and time spent working.¹⁶

In localized health settings, such as the AMIGA Local Health Collaboration Council, the political and health leadership within municipalities significantly impacted BHWs performance suggesting that local leadership played a supportive role in health activities. The fraction of BHWs that expressed dissent highlighted areas where leadership engagement could be improved. The World Health Organization emphasized that leadership and governance were critical for strengthening health systems, requiring clear strategic policy frameworks coupled with effective oversight, coalition-building, regulatory measures, system design, and accountability.¹⁷

The political decisions, such as those made by Barangay Chairpersons regarding BHW appointments, significantly influence local health service delivery brought about by health worker performance. Without rigorous qualification criteria, service quality may suffer, and BHWs may lack role clarity and the necessary skills. Additionally, shifts in municipal or health system leadership can result in policy changes, although the overarching objective of improved health management remains constant.

Beyond policy, the motivation from recognition by community leaders and members, and health staff was a potent driver of improvement for BHWs. This recognition from barangay officials and other members of the health team leads to enhanced recognition from the community leading to a greater BHW motivation and self-esteem.⁴ According to WHO, important motivating factors include recognition and appreciation.¹⁷ This was also observed by a study done by Mpembeni et al. where community support has been found to be critical for making CHWs feel welcome, acceptable, and appreciated in the communities.¹⁶ However, while negative feedback can occur, BHWs often use it constructively to improve their services.

The BHWs have understood that they were not entitled to receive salary and that there was not enough budget allocation for their honoraria hence the tendency to find additional jobs. Paying health workers sufficiently and on time was also identified as necessary for improving motivation. Efforts to improve health worker motivation have focused on financial incentives, including pay-for-performance.¹⁸ The lack of effective supervision and incentives negatively affect the performance of health volunteers.14 Non-financial incentives, on the other hand, include community recognition and respect, acquisition of valued skills, personal growth and development, accomplishment, peer support, and community factors like relations with communities and leaders.¹⁶ Additionally, the availability of essential medicines, directly impacts BHWs' ability to deliver services as community members tend to be more cooperative and receptive. Shortages in supplies undermine their efforts, especially when communities rely heavily on the free medications provided at health centers.

This research offered insights that could shape policy decisions at every governance level, from the barangay to the national level. The information gathered in this study may be relevant for policymakers and health managers to further improve efficiency and motivation among BHWs. Future policies can then be drafted that are more responsive and relevant to the needs of the BHWs.

Limitations of the Study

The study focused only on five upland municipalities of Cavite hence the perspectives elicited cannot represent the entire BHWs of the country. However, despite the limitation, the results and insights from this study can give a glimpse of the local level context and situation BHWs encounter.

CONCLUSION

Challenges and drivers that affected participation, performance, and motivation as BHWs were identified. BHWs demonstrated a strong presence and performance in local health initiatives despite facing challenges related to household responsibilities, political affiliations, and economic pressures. Dedication was evident through eagerness to learn and improve community health, bolstered by training and positive feedback. However, their educational backgrounds highlight a gap in health science expertise. Other external factors that affected their performance was the lack of incentives and support for BHWs which also contributed to low motivation. The dual burden of domestic responsibilities and the need for additional employment due to low financial incentives can impede participation and performance. Insights from this study could offer additional knowledge on policy decisions and across governance levels, all for the benefit, improvement, and motivation of BHWs.

Recommendations

The following recommendations were suggested to improve their efficacy and welfare. BHWs may influence policies by involving them in the policy-making process. This integration will legitimize their role, empower them, and ensure adherence to RA 7883. Moreover, with the implementation of the UHC Act, BHWs should not be exploited because of their capacity, availability, volunteerism, and convenience, but instead as a health ally with vast experiences to offer to local governance.

Financial burdens experienced by BHWs should be addressed at all levels (local to national) and a mechanism to secure their position, provide remuneration, or allowances, must be in place. This would not only ensure financial relief for the BHWs but also enhance their capacity to commit fully to their primary roles in local health service delivery. Education also plays a pivotal role in the empowerment of BHWs.

A sustainable educational program that provides continuous learning opportunities, particularly in health sciences should be ensured. This would equip the BHWs with the necessary knowledge and skills to effectively address the evolving health needs of their communities.

Moreover, the pressure on the existing workforce due to a disproportionate health worker-to-patient ratio necessitates urgent action. Expanding the workforce is essential to alleviate the burden on BHWs and to maintain a sustainable and effective healthcare delivery system. Enhancing the budget allocation for health centers would ensure that BHWs have access to the requisite medical supplies and infrastructure necessary to fulfill their duties proficiently.

Lastly, BHWs are generally well-motivated and perform effectively within a supportive local health system, hence, instituting formal mechanisms to recognize and reward BHWs can significantly boost motivation and satisfaction. Additionally, promoting the involvement of BHWs in multi-stakeholder consultations affirms value as local health experts and reinforces the integral role in the design and implementation of local public health initiatives.

Statement of Authorship

All authors certified fulfillment of ICMJE authorship criteria.

Author Disclosure

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REFERENCES

- Boniol M, Kunjumen T, Nair TS, Siyam A, Campbell J, Diallo K. The global health workforce stock and distribution in 2020 and 2030: a threat to equity and 'universal' health coverage? BMJ Glob Health. 2022 Jun;7(6):e009316. doi: 10.1136/bmjgh-2022-009316. PMID: 35760437; PMCID: PMC9237893.
- Lewin S, Munabi-Babigumira S, Glenton C, Daniels K, Bosch-Capblanch X, van Wyk BE, et al. Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. Cochrane Database Syst Rev. 2010 Mar 17;2010(3):CD004015. doi: 10.1002/14651858.CD004015. pub3. PMID: 20238326; PMCID: PMC6485809.
- Lewin SA, Dick J, Pond P, Zwarenstein M, Aja G, van Wyk B, et al. Lay health workers in primary and community health care. Cochrane Database Syst Rev. 2005 Jan 25;(1):CD004015. doi: 10.1002/ 14651858.CD004015.pub2. Update in: Cochrane Database Syst Rev. 2010 Mar 17;(3):CD004015. doi: 10.1002/14651858.CD004015. pub3. PMID: 15674924.
- Taburnal MV. Barangay health workers' level of competence. Asia Pacific Higher Education Research Journal. 2017 Aug;4(1). Available from: https://po.pnuresearchportal.org/ejournal/index.php/apherj/ article/view/437.
- Mallari E, Lasco G, Sayman DJ, Amit AL, Balabanova D, McKee M, et al. Connecting communities to primary care: a qualitative study on the roles, motivations and lived experiences of community health workers in the Philippines. BMC Health Serv Res. 2020 Sep;20:1. doi: 10.1186/s12913-020-05699-0.
- The UP Manila Community Health and Development Program (UP CHDP) [Internet]. 2017 [cited April 2022]. Available from: https:// up.edu.ph/the-up-manila-community-and-development-programup-chdp/.
- Kiger ME, Varpio L. Thematic analysis of qualitative data: AMEE Guide No. 131. Med Teach. 2020 Aug;42(8):846-854. doi: 10.1080/ 0142159X.2020.1755030. Epub 2020 May 1. PMID: 32356468.
- Kok MC, Broerse JEW, Theobald S, Ormel H, Dieleman M, Taegtmeyer M. Performance of community health workers: situating their intermediary position within complex adaptive health systems. Hum Resour Health. 2017 Sep 2;15(1):59. doi: 10.1186/s12960-017-0234-z. PMID: 28865471; PMCID: PMC5581474.
- Perry HB, Dhillon RS, Liu A, Chitnis K, Panjabi R, Palazuelos D, et al. Community health worker programmes after the 2013-2016 Ebola outbreak. Bull World Health Organ. 2016 Jul 1;94(7):551-3. doi: 10.2471/BLT.15.164020. Epub 2016 Jun 2. PMID: 27429495; PMCID: PMC4933142.

- Bhattacharyya K, Winch P, LeBan K, Tien M. Community Health Worker Incentives and Disincentives: How They Affect Motivation, Retention, and Sustainability. Basic Support for Institutionalizing Child Survival Project (BASICS II). Arlington, Virginia: United States Agency for International Development; 2001, pp. 1-38.
- Azeem SM. Conscientiousness, Neuroticism and Burnout among Healthcare Employees. International Journal of Academic Research in Business and Social Sciences. 2013, July;3(7):467-77. doi:10.6007/ IJARBSS/v3-i7/68.
- Agrawal PK, Agrawal S, Ahmed S, Darmstadt GL, Williams EK, Rosen HE, et al. Effect of knowledge of community health workers on essential newborn health care: a study from rural India. Health Policy Plan. 2012 Mar;27(2):115-26. doi: 10.1093/heapol/ czr018. Epub 2011 Mar 8. PMID: 21385799; PMCID: PMC3606030.
- Sison O, Castillo-Carandang N, Ann Ladia M, Sy R, Eduardo Punzalan F, Jasper Llanes E, et al. Prevalence of Metabolic Syndrome and Cardiovascular Risk Factors among Community Health Workers in Selected Villages in the Philippines. J ASEAN Fed Endocr Soc. 2019;34(2):171-179. doi: 10.15605/jafes.034.02.08. Epub 2019 Nov 10. PMID: 33442153; PMCID: PMC7784100.
- Chatio S, Welaga P, Tabong PT, Akweongo P. Factors influencing performance of community-based health volunteers' activities in the Kassena-Nankana Districts of Northern Ghana. PLoS One. 2019 Feb 20;14(2):e0212166. doi: 10.1371/journal.pone.0212166. PMID: 30785936; PMCID: PMC6382126.
- Dagangon LH, Perez GG, Tupas MS. Training needs analysis of barangay health workers of Davao City. UIC Research Journal. 2014;20(1):207-229. doi: 10.17158/555.
- Mpembeni RN, Bhatnagar A, LeFevre A, Chitama D, Urassa DP, Kilewo C, et al. Motivation and satisfaction among community health workers in Morogoro Region, Tanzania: nuanced needs and varied ambitions. Hum Resour Health. 2015 Jun 5;13:44. doi: 10.1186/ s12960-015-0035-1. PMID: 26044146; PMCID: PMC4458000.
- World Health Organization, Overview: Health Workforce [Internet].
 2023 [cited October 2023]. Available from https://www.who.int/ health-topics/health-workforce#tab=tab_1.
- Peters DH, Chakraborty S, Mahapatra P, Steinhardt L. Job satisfaction and motivation of health workers in public and private sectors: crosssectional analysis from two Indian states. Hum Resour Health. 2010 Nov;8:27. doi:10.1186/1478-4491-8-27.