YANGON UNIVERSITY OF ECONOMICS
MASTER OF PUBLIC ADMINISTRATION PROGRAMME

AN ASSESSMENT ON MOTIVATION AND SUSTAINBILITY OF VILLAGE HEALTH WORKERS ON HEALTH INTERVENTION IN KAYIN STATE

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December, 2019

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MASTER OF PUBLIC ADMINISTRATION PROGRAMME

AN ASSESSMENT ON MOTIVATION AND SUSTAINBILITY OF VILLAGE HEALTH WORKERS ON HEALTH INTERVENTION IN KAYIN STATE

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Public Administration (MPA)

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YANGON UNIVERSITY OF ECONOMICS
MASTER OF PUBLIC ADMINISTRATION PROGRAMME

This is to certify that this thesis entitled **"AN ASSESSMENT ON MOTIVATION AND SUSBTANIBILITY OF VILLAGE BASED HEALTH WORKERS IN HEALTH INTERVENTION IN KAYIN STATE"** submitted as a partial fulfillment in the requirements for the degree of Master of Public Administration (MPA) has been accepted by the Board of Examiners.

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ABSTRACT

This study explores motivating factors and examine retention mechanism of Village Based Health Workers (VBHWs) on community health intervention. To achieve these objectives, a quantitative, descriptive method was used. The structure questionaries' are used to gather data from 200 respondents who provide health care services in hard to reach and conflicted affected areas from Hpa-An, Kyarinnseikgyi and Myawaddy Townships. In addition to that In-depth interview with 12 VBHWs and 4 Field Supervisors are also conducted. The study results showed that 89.5% of respondents enjoyed working as respondents in the community because they were willing to help sick community to relieve their health problems in community. Among them, 59.5% of them reported that respondents carried out more than three activities such as Malaria, TB, Health Education, Nutrition, Mobile health care etc. The overall assessment of performance of respondents showed that 57% of respondents scored high performance and also 59.7% of respondents described that community support/recognition was key factor that motivate them to carry out health activities at the community level. More than half of the respondents reported that paid salary/incentive (monetary) as retention mechanism used to retain and sustain respondent activities.

ACKNOWLEDGEMENTS

Firstly, my sincere thanks are extended to Master of Public Administration Programme Committee, Yangon University of Economics for providing me with the opportunities to undertake this thesis. I am deep grateful to Professor Dr. Tin Win (Rector) and Professor Dr. Ni Lar Myint Htoo (Pro-Rector) of Yangon University of Economics for their kind permission to the Degree of Master of Public Administration Programme.

I am also grateful to Professor Dr. Kyaw Min Htun, Pro-Rector (Retired) of Yangon University of Economics. My special thanks also go to Professor Dr. Phyu Phyu Ei, Programme Director and Head of Department of Applied Economics, Yangon University of Economics. I would like to acknowledge deepest gratitude to my thesis supervisor Dr. Zin Zin Naing, Professor, Department of Applied Economics, Monywa University of Economics for her practical advices and invaluable guidance and valid suggestions and inspirational advice to accomplish my thesis.

I wish to acknowledge my thankfulness to Community Partner Organization (CPI) and Karen Department of Health and Welfare (KDHW) for allowing me to study MPA course. I would like to express my deepest appreciation to Dr. Si Thura (Executive Director, CPI), Dr. Aung Hpone Myint who provide valuable suggestion and guidance to complete the thesis on this study, Dr.Merdin M.Kyaw (Senior Executive Officer, KDHW) and Dr. Myat Wint Than (Program Manager, KDHW) who accepted my requests and provided me with necessary information.

I offer deep gratitude and gratefulness to all the persons who contributed in different ways to my thesis. My thanks go to all respondent passengers who gave me response answer for this thesis. I am also thankful to each individual who has given me kind help throughout the compilation period of this research.

Last but not least, my deepest thanks with all my heart are saved for my parents, my parents in law and my kids who were always supporting me. Finally, I would like to thank my wife. She was always there standing by me through the good times and bad times, travelling a life journey together as my friend.

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LIST OF ABBREVIATIONS

3MDG	Three Millennium Development Goal Fund
AMREF	African Medical and Research Foundation
AMW	Auxiliary Midwives
ARI	Acute Respiratory tract infection
BHS	Basic Health Staff
CBNBC	Community Based Newborn Care
CCM	Community Case Management
CHW	Community Health Workers
CSO	Civil Society Organization
DP	Development Partners
EHO	Ethnic Health Organization
EPHS	Essential Package of Health Services
GAVI	Global Alliance for Vaccines and Immunizations
ICMV	Integrated Community Malaria Volunteer
KDHW	Karen Department of Health and Welfare
LLINs	Long Lasting Insecticide Net
LMIC	Low and Middle Income Countries
MCH	Maternal Child Health
MMC	Myanmar Medical Council
MNMC	Myanmar Nurse and Midwife Council
MOHS	Ministry of Health and Sports
MW	Midwives
NCD	Non-Communicable diseases
NGO	Non-Governmental Organization
NHP	National Health Plan
PHS	Public Health Supervisor

RDT	Rapid Diagnostic Test
RHC	Rural Health Center
SRMNAH	Sexual, Reproductive, Maternal, Newborn and Adolescent Health
TB	Tuberculosis
UNICEF	United Nations Children's Fund
UHC	Universal Health Coverage
VBHWs	Village Based Health Workers
WHO	World Health Organization

CHAPTER 1
INTRODUCTION

1.1 Rationale of the Study

There is global, significant shortage of health workers in counties that have low- and middle-income, especially in rural and remote areas (Henderson, 2008). The inadequate of health workers in Myanmar is classified as “critical” at only 1.6 health workers per 1000 population, which is below the World Health Organization recommendation of 2.3 health workers per 1000 population to ensure adequate coverage of essential services (BM, 2007) (Kanchanachitra, 2011). Shortages of all health workforce in Myanmar has led to national and regional policies that emphasize decentralization and task-shifting of care, and an increasing reliance on lay providers who can deliver services within their own communities (Sommanustweechai, 2016). Village-based health providers (VBHWs) act as the first point of contact with the health system for many care-seekers, especially in rural, conflict-affected, and hard-to-reach areas of the country. The primary role of VBHWs is to bridge villages and facilities to improve utilization of formal services, and they do so by providing health education sessions and improving access to essential interventions at the village level. VBHWs receive brief technical trainings to provide specific health services from one of the managing authorities in Myanmar’s healthcare system (e.g., MOHS, EHOs, NGOs, private providers). Such a minimally trained cadre usually requires an enabling environment and quality supervision to ensure productivity. However, supervision of VBHWs is often minimal because of shortages of supervisory cadres and the expectation that VBHWs will work independently at the community level.

Health worker shortages can be further compounded by underutilization and low productivity of health workers. There is a need to objectively understand the real-world time use and workload of multiple levels of providers at both facility- and community-levels to inform national and regional policies to optimize health worker productivity. The attrition rate of AMWs was 20% compared to the MW attrition rate of 1% (UNFPA, 2017). Increasing health worker productivity and improving health worker retention has the potential to improve the impact of existing resources, which is especially important in a country that spends only 2.3% of its GDP on health.

Understanding health worker productivity in the context of health worker shortages is especially important as Myanmar pursues an accelerated national roll-out of an integrated Essential Package of Primary Health Services (EPHS) to achieve Universal Health Coverage (UHC) by 2030. Productivity and efficiency can be both positively and negatively affected by greater integration of services. For example, integration of services may improve the efficiency of health workers and the accessibility of health services for beneficiaries. However, services may be integrated without understanding the additional time and effort required to complete the full package of activities, and therefore unintentionally create a significant burden on the health worker. This overburden can in turn affect health worker motivation levels, attrition, performance, and the quality of health services provided.

Historically VBHWs in Myanmar have been tasked with single vertical program health services (e.g., malaria volunteers), and have been effective in increasing malaria knowledge, increasing care-seeking, and reducing the malaria burden in rural and hard-to-reach (Ohmar, 2012) areas where Karen Department of Health and Welfare (KDHW) work However, in order to provide better integrated community-based primary health care under the National Health Plan 2017-2021 (NHP), VBHWs will increasingly be tasked with responsibilities for multiple programs/diseases. As Myanmar starts integrating services in stepwise fashion under the NHP, policy makers and programmers have a unique chance to evaluate the impact of integration of health services on health worker productivity.

In 2017, Karen Department of Health and Welfare (KHDW) piloted the integration of malaria and TB health services at the community level of Ethnic controlled areas. Anecdotally partners express that their village-based cadres are already overburdened and cannot handle adding TB, let alone other disease programs. Similar anecdotes can be heard from every cadre of health worker from each sector in Myanmar.

To sustain, and build upon, the important achievements of VBHWs in reducing the malaria burden in Myanmar, policy makers and program managers alike will require accurate, real-world, and up-to-date data to improve health worker productivity. Understanding how health worker productivity is affected by the integration of additional services will be especially valuable to inform effective

strategies for improving VBHW performance in an era of integration of services under the NHP. However, services may be integrated without understanding the additional time required to complete all assigned activities, which may exacerbate challenges for VBHW motivation levels, performance, and attrition.

There was also human resource shortage of health care provider in ethnic minorities areas. Besides, there was high drop out of VBHWs in health intervention in ethnic minorities areas. Studies have not been conducted in townships to assess the motivation and sustainability of VBHWs and factors influencing sustainability in community in ethnic minorities areas. The main aim of this study therefore, is to explore the factor influencing sustainability of VBHWs activities in ethnic minorities areas, Kayin State

1.2 Objective of the Study

The objective of the study are as follow:

(1) To identify motivating factors for sustainability of VBHWs on community health intervention

(2) To examine the retention mechanism of VBHWs on community health intervention

1.3 Method of Study

This is descriptive method analysis using of primary data and secondary data. The target sample size is 200 VBHWs randomly selected from Hpa-an, Kyarinseikkyi and Myawaddy Townships. VBHWs will be interviewed with structured questionaries. In-depth interviews with VBHWs and Field supervisors were conducted. In addition, the secondary data used in this study are collected from books, journals articles, and relevant topics from internet.

1.4 Scope and Limitation of Study:

The study conducted in villages which are under Ethnic controlled areas in Kayin State where government health services are not available. Moreover, there was transportation and communication challenges during data collection. Moreover, there was language barrier during collection data.

1.5 Organization of the Study

This study is organized into five chapters. Chapter one is presenting the introduction of the subject matter, which describes the rationale, objectives, scope and limitations, method of study and organization of the study. Chapter two presents the literature reviews. Chapter three is health system and Challenges in Myanmar and based on the data available. Chapter four describes survey analysis on VBHWs motivation and sustainability on community health intervention. Finally, findings, and recommendations are presented in Chapter five.

CHAPTER 2
LITERATURE REVIEW

2.1 Factor influencing sustainability of VBHWs in community health intervention

Sustainability is defined as continuation of health program after the initial funding has come to an end (Altarum Institute, 2009). A UNICEF report shows that program managers or government fails to take ownerships of health program and insufficient financial support at local level mostly lead to the end of volunteer activities few years after the introduction (UNICEF, 2004 ; Argaw, 2007).

The factors influencing retention and sustainability of VBHWs activities have been related to community ownership, clear job description, support technical assistance such as training, intensive supervision and on job training, recognition and community participation in designing and implementation phases of program (UNICEF, 2004) (Bhattacharyya, 2001). It was suggested that community and local authorities or leader's is crucial for sustainability of community based health intervention (Chatio, 2012). If community members are not part of the selection processes of the volunteers, their interest in supporting the activities of health volunteers might reduce and this can affect the performance and retention of the volunteers (UNICEF, 2004).

In addition, community-based health invention should be included community involvement including design project, CHW selection and supporting community based health intervention carried out by CHW and contribute in-kind payments (Chatio, 2012). In community health intervention, regular supportive supervision is essential activities for VBHWs to provide quality services, including by VBHWs themselves (Sommanustweechai, 2016). The Job Descriptions for BHS indicate that MWs are responsible for supervising AMWs and PHS2 are responsible for supervising CHWs. Both Malaria and TB Implementation Partner staff are engaged in supervising Malaria and TB volunteers, although the Malaria focal point within a Township Health Department may supervise 2-3 volunteers per quarter. There is

evidence that this varies widely across contexts and programs, depending on implementation partner arrangements, collaboration with BHS and availability of funds for transport and programs specific supervision checklists (MOHS, 2017).

Supervision is noted as a challenge in a number of programs for reasons of accessibility, security, time and skills. Poor transportation conditions and a length rainy season face challenges for reaching all village location on a regular basis and security concerns limit freedom to travel in some parts of the country (MOHS, 2017). In some cases the length and complexity of supervision checklists and frequency of required supervision visits have been considered too burdensome by BHS.

However, it was to be considered that supervision is the most important factor for maintaining a functional cadre of motivated CHW stressing its potential for conveying a sense of belonging and connectedness to the program. It was mentioned that community increased trust and confident on health program and supervisor who provide intensive supervision to CHW (Strachan & Kallander, 2012).

There are intrinsic and extrinsic factor that attracts or motivate, CHW in community-based health intervention. Intrinsic factor includes individual's work-related goad and personal interested on health care services, job satisfaction, health knowledge. (Rahman, 2010). Extrinsic factors are incentive (monetary or non-monetary), recognition at community, received support supervision and medicine and equipment that motivate CHWs into community health interventions (Chatio, 2012). These factors also influence in CHW's motivation and retention in local income countries (Rahman, 2010). It is identified that community recognition is the most important factors of CHW motivation and sustainability in health care intervention (Argaw, 2007).

Retention of CHWs is influenced by various inherent characteristics of CHWs. In terms of age, the age group of 30 to 40 appears to be the appropriate for selection of CHWs in order to obtain optimum results and higher retention rates. Younger and much older CHWs are reported to produce sub-optimal performance (Kithuka, 2010)

Sex of the CHW has been associated with higher retention rate and productivity. It has also been shown that female community health workers are more preferred than the male workers making them feel less important and this may lead to their dropping out (Kithuka, 2010).The importance of CHW sex may lie in a combination of preference for female providers and the ability of female CHWs to persuade other women in the community to use modern skilled reproductive health

services. The importance of CHW sex is likely to be greater in environments with strong normative pressure regulating the movement of women and their interaction with men.

Marriage and child bearing which play a central and prominent role in the traditional African culture may serve as an additional burden on the health workers, affecting their performance and retention (Chatio, 2012). Family responsibilities influence decisions of CHWs, especially among women than men. Evidence available on performance and staff retention due to a personal situation such as marriage is inconclusive . According to (Kok, 2014) who conducted a study examining intervention design factors which influence performance of community health workers in low- and middle-income countries, marital status was found to be associated with performance of CHWs. The study found a married CHW to receive support from household members.

On education, a study by (Antwi, 2013)which examined factors influencing the delivery of intermittent preventive treatment of malaria in pregnancy in the Bosomtwe District of Ghana found no statistically significant relationship between educational level and retention as well as performance of a CHW. Level of education of a CHW plays a key role in influencing their retention in the community health program. Higher educational attainment has been associated with increase in attrition rates among CHWs. Educated CHWs were motivated by higher paying jobs which were commensurate with their qualification. Volunteering was perceived to be a platform for gaining experience and skills key for successful job search in future (Chatio, 2012). (Rowe, 2007) reported the importance of CHWs‟ educational status, including literacy level, in maintaining their high performance.

Among the factors that contribute to the performance of VBHWs are positive family attitude, recognition and the influence they have at the community level, being opinion leaders at the community level among others are very important factors that can play a positive role in their performance (Robinson, 1990). However, if the volunteers are not getting the needed support from the community members and their own family members, lack of effective supervision and incentive can all directly affect performance of health volunteers (Alam, 2011). Other factors that can have negative influence on performance of health volunteers include inconsistent medical supplies, inadequate stipends, lack of career development structure, training, educational level, workload and previous experience (Bigirwa, 2009).

In addition to that, providing free medicine and supplies, training on health care management, received intensive supervision, self-development, willing to participate in community health care activities are also included in motivation of CHW in community health intervention (Chatio, 2012). In a qualitative study by (Bhattacharyya, 2001), the opportunity to work outside home and also to use idle time productively also came up as factors that attract health volunteers into health program at the community level. The volunteer program gives young women an opportunity to work in an area which gives them social recognition, legitimates their moving around the locality, and identifies them with relatively high-status health professionals. (Bhattacharyya, 2001).

Globally, a study done to assess retention of CHWs across many countries found attrition rates to range between 3.2 percent and 77 percent; low retention was reported among CHWs with no financial compensation for their work such as stipends, allowances and reimbursement of expenses incurred when executing their duties found retention rates of 70 percent over nine months in Senegal and 50 percent over two years in Nigeria. CHWs who depend on community financing had twice the attrition rate as those who receive a government salary (Kithuka, 2010).

Retention of village health volunteers in health intervention program greatly influence its sustainability because if the attrition rate among health volunteers is high, it will be difficult to sustain the program (Olang'o, 2010). Factors that also directly influence retention and attrition rates of health volunteers apart from those mentioned earlier are respect from formal health workers, positive and supportive co-worker relationship, appreciation by patients and family members support (Chatio, 2012). When spouses are not in support or show interest in their relations to become volunteers, it will be difficult for them to carry out their activities and this may lead to high dropout rate (Rahman, 2010). When there is also strong relationship among the health volunteers themselves where they are prepared to help one another, it will encourage and motivate them in the work. About 31% to 44% dropout rate in few years after the start of volunteers program has also been reported by (Khan, 1998). The factors responsible for attrition rate of health volunteers include lack of time, high targets set by program managers, lack of support from spouses and other family members, termination of service by program managers due to poor performance, workload, lack of promotion and ambition to pursue higher education (Chatio, 2012).

Lack of skills-based training is frequently mentioned as a barrier to effective CHW performance hence lower retention (Kithuka, 2010). Observers of community - based contraceptive distribution program agree that the quality and intensity of agents‟ training is the one important single determinant of program quality and impact. Training can provide CHWs with the opportunity to learn skills, receive education, interact with higher levels of professional staff, and obtain other benefits that they would not be able to obtain otherwise. Learning skills is one of the main reasons CHWs volunteer (Kithuka, 2010).

Reimbursing CHW transport to attend regular meetings among CHWs in a County or given geographic area at a referral health center can promote problem-solving, knowledge sharing, peer-to-peer support, and increase CHW accountability and motivation for retention (Kithuka, 2010). Lack of locally available transport means such as bicycles and or reimbursement of associated cost specially in vast areas remains as one of key challenges facing retention of CHWs. CHWs are expected to execute their routine duties and attend to their personal commitments, it becomes difficult when time constrains in balancing personal commitment and work roles become evident. Long distance between households is perceived to increase workload; a burden to the CHWs who have no effective means of transport. This has been linked to low retention rate. A survey by AMREF to evaluate the performance of CHS indicated that community health workers expect to be supported with bicycles and motorbikes to make their work easier and motivating. The findings also indicated that CHWs are getting disappointed and frustrated due to lack of support for transport hence low retention (AMREF, 2007)

The easiest way to strengthen a CHW‟s affiliation with the MOHS or supporting organization is to provide some form of identification. Identification cards and badges can provide security in politically volatile situations and are status symbols in the community which enhances recognition hence retention (Kithuka, 2010). Many NGOs have given CHWs branded t-shirts, notebooks, caps and bags that promote recognition and facilitate entry into households during a project. Some program provide bicycles or motorcycles for CHWs to use but usually not owned. People who completed the Red Cross training program were allowed to purchase and wear the Red Cross smock or T-shirt. The Red Cross symbol identified them as Red Cross volunteers and provided recognition and respect from their communities (Republic of Kenya, 2010).

Job aids are provided to help CHWs perform the required tasks. While providing a sense of affiliation and enhancing the CHW‟s authority, appropriate job aids strengthen skills and are invaluable in increasing confidence. Job aids have included medicines, health education materials such as counseling cards, first aid kits, and pots for demonstrating preparation of weaning foods, pens and pencils, flipcharts, notebooks, and boxes to store records. These frequently cited incentives are important to CHWs‟ self-esteem and ability to fulfill their role (Kithuka, 2010). Reviews have shown that CHWs have been particularly effective in linking communities to health care by providing information, assessing illness and conducting referral (Kisia, 2012).

CHWs is key health worker to provide basic health care service in community level. They are the bridge between the community and the health system, although they are not fully time salaried. Community recognition is a major expectation that influence retention of CHWs. If CHW are to play as bridge between health system and community, the relation with community must receive great attention (Bhattacharyya, 2001). Several program demonstrate appreciation for CHWs' work through preferential treatment, such as access to credit program, literacy classes, or first-in-line treatment at health posts (Kithuka, 2010). In India, the CHW must show success with an income-generating activity to gain recognition as a health worker. Rather than receiving a salary or wage, the CHW is given access to credit for income generating activities through a bank loan. Other NGO program give CHWs, especially women, priority for inclusion in other development program, such as group-guaranteed lending and savings program (Arole, 2007). In all such cases, preferential treatment of CHWs must be monitored carefully to ensure that community members do not special treatment of CHWs.

Other motivating factor for CHWs is personal growth and development. Acquisition of knowledge and skills is seen as a stepping stone to future employment and a necessary component in meeting community health needs. Their jobs put CHWs living in rural areas with little chance of employment on the path of lifelong learning. Ongoing skill development (acquisition and promotion of preventive messages, basic curative services, problem analysis, personal development skills and problem solving skills) is viewed as important to job satisfaction (Bhattacharyya, 2001).

Evaluation of community strategy by the Ministry of Health (2010) showed that the community based health information management system was not working very effectively due to lack of data collection tools and referral forms at the at the

community level. The study show that reporting tools were inadequate making monthly reporting a challenge which created a demotivation among CHWs. CHWs were forced to photocopy reporting tools at their own expense resulting to de-motivation and discouragement as they perceive their work to be unappreciated. In regards availability of referral forms, lack of adequate referral forms forced CHWs to escort clients to the facilities or even use word of mouth to their de-motivation. This was linked to increased workload, time and income loss as the CHWs are forced to leave their subsistence commitment to attend to clients without any reimbursement

2.2 Role of Village Based Health Workers and Service Package

Global literature on community health uses the term "Community Health Worker" (CHW) to describe a health worker who performs a set of essential health services, receives standardized training outside the medical curricula, and has a defined task within the community and the larger health system. Community Health Workers has played a key role in satisfying the and demand for essential health services. The Alma-Ata Declaration states that primary health care "relies, at local and referral levels, on health workers, including physicians, nurses, midwives, auxiliaries and community workers as applicable, as well as traditional practitioners as needed, suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community" (WHO, 2013).

Witmer (1995) defined village based health workers as community members who work serve as focal person to promote health among communities that have traditionally hard to get access to adequate health care. community health workers can respond community problem by identifying needs developing appropriate solutions, and translating them into practice, VBHWs involves in basic health services such as malaria control activities, Tuberculosis, maternal and child health and family planning, community awareness raising and provide appropriate treatment of common diseases and provision of drugs.

Kelly (2001) provided that, Evidence shows that Community health worker can be extremely effective to work as a complimentary force promoting utilization of available health services and the link between the community and the health system. However with regards to their roles, whether the Community health worker should have a single or multiple focuses, maintaining a delicate balance between the curative and Preventive role seems to be of critical importance. The evidence from

Nepal and Bangladesh shows that prevention is extremely hard to sell while curative care is generally more welcomed and appreciated by the community members.

Van Le K (2006) provided, that Community health workers are lay members of communities who work either for pay or as volunteers in association with the local health care system in both urban and rural environments and usually share ethnicity, language, socioeconomic status and life experiences with the village members they serve. There are different titles such as community health representatives, community health advisors, peer health promoters, and peer health educators, lay health advocates, “promoters ,”outreach educators.

Sanghvi H (2006) , CHWs have also been used to deliver postnatal care services to recently delivered women to prevent In fact; CHWs play important roles in achieving Millennium Development Goals targets and in addressing the human resource shortage (Hermann, 2009) found, that “Community health workers as a community-based extension of health services are essential for antiretroviral treatment scale-up and comprehensive primary health care. The renewed attention to community health workers is thus very welcome, but the scale-up of community health worker program runs a high risk of neglecting the necessary quality.

Village based health worker activities and their role in health care services at the community level over the years have contributed significantly to caregivers knowledge in treating fever and diarrhea with the correct regimen in 40% and 11% cases respectively in communities where volunteers offer health education (Perez, 2009). Again a comparative analysis was also conducted between households with and without VBHWs visits showed a positive influence of volunteers on family practices and knowledge on management of child fever (Perez, 2009). Village based health workers over the years have contributed significantly in access and the use of health care services and have also played a role in immunization and outreach activities and treatment of tuberculosis (Haines, 2007). Evidence suggests that village based health workers’ involvement in health activities has helped to reduce cost of care (Swider, 2002).

2.3 Recruitment, Training and Incentive of VBHWs

Village leaders or village committee identified VBHWs who reside in village, is active participation in community activities, ready to work under the supervision of the community leader (Bhattacharyya, 2001). In addition to that, age and gender are

also considered in the selection process of VBHWs. Moreover, VBHWs are effective where the community has been involved in the recruitment, when they have volunteer and/or leadership experience and when they are married and respected member.

Pre and post-tests before and after training for either knowledge or skill do not appear to be a standard practice for training of VBHW cadres in most cases. The training guide for AMWs suggests provision of tests after each chapter and at completion of training and the training guide for CHWs suggests provision of tests at completion of training, but standard tests are not provided. Few studies focus on evaluating the skills of VBHWs, although some do assess key areas of knowledge (Than, 2017). Altogether, this makes it difficult to determine if VBHWs have the necessary skills to provide safe, effective, quality care. Length of refresher training also varies depending on the type of VBHW or training program as well as availability of funding and approach of the organization providing support. For example, refresher training for both AMWs and CHWs is typically once a year for five days in length, but provision of this training depends on availability of funding often from donors such as GAVI and 3MDG, so this is not nationwide (WHO, 2008). Refresher training for Malaria Volunteers is typically once a year for two days, which is a shortened length from the initial five-day training (Cho, 2015) . Refresher training for TB Volunteers is normally conducted for two days per year.

(Kithuka, 2010) stated that diversity approaches, location, organization and initial and refresher training are also important. It was found that if regular refresher training is not available, trained skills and knowledge are rapidly lost and that, however, good continuing training may be more important than who is selected. Trainings has been cited to improve knowledge on health issues which motivates CHWs to remain in the program. Providing Regular and relevant training is one of important factor for CWH retention and motivation. Providing certificates after training is a major motivation factor for community health workers (Kithuka, 2010)

Incentive is one of the motivation factor of VBHW in community health intervention. There are two types of incentives which are balanced incentive package of monetary (e.g stipend, bonuses and other defined financial supports) and non-monetary (e.g training, recognition, certification, medicine and equipment etc). Incentive is recommended to be appropriate to job expectation, for instance, tasks, workload and time spent). There is various incentives scheme between different types of VBHWs. While AMWs and CHWs do not typically receive monetary incentive,

both malaria and TB volunteer do receive these kinds of incentive, which have varied in term of amount and mode of allocation, for instance, monthly or annual lump sum; performance or output base) across implementing organizations.

There are many advantage to providing VBHW with monetary incentive. Paid VBHW can be asked to work longer hours to achieve specific objectives within a specific time frame and higher commitment on work and provide quality health care services (Phillips, 1999).

The source of VBHW payments can be the community (contributions from individual households), the government, and NGO. Several NGOs have tried to establish community revolving drug funds or other types of community-based credit funds specifically for health incentives. When associated with profits that are the "incentive" for the VBHW, few of these schemes have been successful or achieved any level of scale. When compensation is tied to drug sales, VBHWs tend to focus on curative care, while VBHWs with salaries maintain both preventive and curative activities. Fee-for-service schemes often result in an increase of curative over preventive activities and the over prescription of medications (Karabi Bhattacharyya, 2001).

Incentives are an important factor that attract, retain, motivate, satisfy and improve the performance of employees. They can be applied to groups, organizations and individuals and may vary according to the type of employer (Otieno, 2012). On the other hand, incentives can be positive, negative, financial or non-financial, tangible or intangible. The relevance of an incentive is influenced by a number of factors: age, value system, location, number of dependents, income, professional background, career stage, sex, labor market conditions, economic conditions and workforce profiles (ICN, 2007). Moreover, CHWs need recognition, community support in their communities has been shown to override the direct financial incentives especially payments. Non-monetary incentives are equally critical to the success of any CHW program since they provide feasible and sustainable options for maximizing the retention of CHWs (Kithuka, 2010).

CHWs consider reimbursements of cost incurred during community work such as travel and airtime refund and provision of facilitative materials such as bicycles, T-shirts and bed nets a motivation for continuing the service while other value recognition by community members and opportunities for skills development (AMREF, 2010). As an incentive, CHWs can be motivated through exchange visits to

neighboring CUs, opportunities to upgrade their knowledge and skills, continuous lifelong training based on CHWs‟ expressed needs, needs-based support supervision and coaching, priority when there are paid jobs, logistical support and CHW associations including savings and credit as non-financial rewards. Financial incentives is one of key factor in commitments and reducing attrition especially among CHWs recruited from socio-economically underserved populations (Takasugi, 2012), although non-financial rewards are important in retaining and maintaining the motivation of voluntary CHWs.

Many program has been used financial incentives motivate staff for a long time. Evidence has shown that paid CHWs can work for longer hours to achieve specific objectives within a specified time frame (Chatio, 2012). This is possible as the money paid would be used to cater for their basic needs which make it difficult for a CHW to volunteer entirely without pay. These needs include needs for clothing, food, housing, financial stability among others. Where CHW get financial incentives as monthly stipends, there would be many advantages accruing to the program such as an opportunity to exercise close and rigorous supervision, program can be implemented rapidly, work routines can be standardized and service quality can be maintained. This would enable use of negative reinforces such as firing or punishment to encourage desired performance among those working in the program (Antwi, 2013).

Financial incentives can be used to build economic equity in a minimally literate or economically disadvantaged population such as the CHWs. The main programmatic advantage to cash incentives is high retention rate among paid CHWs (Chatio, 2012). Rural Health Program of the Christian Reformed Church found that Voluntary Health Workers (VHWs) drop out their posts after one to three years in Gongola, Nigeria. The VHWs worked one or two hours a day and received a small salary. According to the case study, men with lower monthly incomes worked two years and women with lower incomes worked one year, while men with higher pay stayed an average of 3.25 years and higher paid women stayed 1.5 years (Egwuatu, 2007). Lack of financial incentives and or giving of very small stipends were mentioned often as the reason why CHWs find volunteer work difficult (Estelle, 2012). From a CHW perspective, providing appropriate, respectful, and regular financial compensation is a sign of acknowledgment of their selfless commitment and approval that allows them to earn a living or supplement other personal income.

Reviews found that cash incentives are provided in different forms. In some countries, CHWs form part of the formal civil service and paid a salary.

In other countries, CHWs are given a small stipend as an appreciation of their volunteer work. Financial incentives are offered as per diem and travel allowances to attend training and other important events where the CHWs are given the first priority (Chatio, 2012). CHWs are also accorded the first priority in filling up temporary and casual job opportunities within the MOH such as community mobilization during polio campaigns, taking up cleaner jobs, community education on key projects among others. Participation in these activities helps generate income which can be viewed as an appreciation for their work. In some countries, cash incentives are tied to drug sales by giving them a commission on the revenue disbursed at a small fee to the community.

The source of CHW payments can be the community (contributions from individual households), the government, an NGO, or even a for-profit company. The source of funds may affect the role and allegiance of the CHW in the program. Proper structures and operationalization of the payment system is important in preventing conflict within and among the CHWs and other stakeholders (Olang'o, 2010). Some NGOs have created community revolving drug funds or other types of community-based credit funds specifically for health incentives. When such initiatives are associated with profits that make the incentive for the CHW, its success becomes difficult due to conflicts resulting from personal interest of the stakeholders. When compensation is linked to drug sales, CHWs will focus on curative care, while CHWs with salaries maintain both preventive and curative activities.

Where the financial rewards system entails a fee-for-service scheme, there occurs a tendency to focus more on curative activities over preventive activities and the over prescription of medications which has harmful effect to the community and the clients. Decentralization of community health system has the potential to increases the flexibility of county government to respond to issues of CHW remuneration in a sustainable manner (Chatio, 2012). Where decentralization of community health system has succeeded, there is evidence of provision of honoraria and travel allowances to CHWs. This is possible in some countries due to success of health services implementation from the provincial level to the county and community levels. In these cases, the community health program are provided with local support at each level of service delivery from the government coffers.

There exist challenges in administering financial incentives. For example, although paying CHWs regularly can solve many problems such as work-balance challenges, experience in many countries shows that such payment can have unforeseen negative consequences depending on how it is administered and managed. Use of financial incentives has some negative consequences since the CHWs would inevitably demand more money, benefits, and opportunities for promotion. Lack of consistency in stipends and allowances may spark desire for quitting the program (Chatio, 2012). If CHWs do not consider their financial rewards adequate, their performance and retention levels may by negatively affected. A study indicated that a major problem with monetary compensation is that payment is often irregular and may end altogether when project funding runs out. As a result, use of more "secure" modes of payment like per diem, transport and field allowance can help create fewer expectations which reduces drop out in case the expectations are not met (Chatio, 2012).

Money can be a divisive factor for CHWs and can undermine individual CHW‟s commitment and the relationships they have already forged with the communities. CHWs often cite lack of remuneration as a key factor which increases attrition rates among other reasons such as lack of community support and lack of supervision. Where financial incentives are provided, it is important to ensure that the program can be sustainable in the long-run to avoid frustrating and disappointing the CHWs which can result into low rate of retention. When the government or an NGO offers monetary support, special effort is needed to compensate for possible distrust or heightened expectations in the community (Teralynn, 2014). Inequity in administration of financial incentives can create discord among CHWs which lead to disunity among the CHWs. Where payment is inconsistent among CHWs working in program supported by different partner who perform similar duties and work alongside each other, jealousy, enmity and suspicion ensures which creates tension and de-motivation. Irregularity in provision of financial incentives among CUs creates tension between the paid and unpaid groups (SM, 2010).

Incentives are necessary for effective service provision by CHWs. The community health strategy recommends that CHWs should be reimbursed for direct costs they incur in their work, although the same policy has not established a recommended frequency of visits or working hours per week for CHWs. The policy document identifies a lack of incentives as a demoralizing factor for voluntary

providers and recommends that, to encourage accountability, the incentives given to volunteers should be handled by local committees and not the central government. Some NGOs have a regular remuneration package for the CHWs with whom they work, and this has resulted in disillusionment for the CHWs working on government program (Chatio, 2012).

Several reviews suggest problems with performance- or output-based incentives contributing to distortion of health worker priorities, neglect of unpaid tasks and lack of motivation when incidence of disease decreases where identification or treatment of cases has been monetized (Cho, 2015). Several program reviews and the National Strategic Plans Malaria, Newborn and Child Health, and TB call for harmonized incentive systems, which consider not only monetary incentives, but other factors that contribute to motivation such as rationalized roles/responsibility/service packages, refresher training, continuous supplies, regular supportive supervision as well as recognition and career advancement opportunities (Merlin, 2014S ; Save the Children, 2015).

CHWs consider reimbursements of cost incurred during community work such as travel and airtime refund and provision of facilitative materials such as bicycles, T-shirts and bed nets a motivation for continuing the service while other value recognition by community members and opportunities for skills development (Kithuka, 2010). As an incentive, CHWs can be motivated through exchange visits to neighboring CUs, opportunities to upgrade their knowledge and skills, continuous lifelong training based on CHWs‟ expressed needs, needs-based support supervision and coaching, priority when there are paid jobs, logistical support and CHW associations including savings and credit as non-financial rewards (Kithuka, 2010).

Although non-financial rewards are important in retaining and maintaining the engagement and motivation of voluntary CHWs, financial incentives are important in enforcing commitments and reducing attrition especially among CHWs recruited from socio-economically deprived populations (Kithuka, 2010).

2.6 Review on previous studies

Putthasri (2016) studied community health workers in very remote areas of rural areas of Myanmar: filling primary health care service gap. This study aimed to assess the socio-economic profiles, contributions of CHW to primary health care services and their need for supports to maintain their quality contributions in rural

hard to reach areas in Myanmar. It was found that community recognition and support, adequate supervision and incentive from government and the community values the CHW contributes are important factors to influence the production and retention of CHWs in health care intervention. Moreover, CHW also reflected a strong need for technical supervision, replenishment of CHW kits, refresher course, and financial support for their transport cost outreach to the household.

Linn (2018) examined how are the village health volunteer deliver malaria testing and treatment services and what are challenges they are facing? The key barrier identified are work-related (challenges in reporting, referral, management of malaria especially primaquine therapy and lack of community support) and logistic related (challenges in transportation, financial constraints, time and shortage of drug). However, village health volunteer also enjoys good community support and acceptant in most areas. To improve their performance, programmatic support is needed in terms of logistics, transportation allowance and supervision.

Aung (2018) studied perceived role and its enhancing factors among the village health volunteers regarding malaria control in rural Myanmar. The study showed that the success of health intervention needed the effectiveness of volunteer actions provided with adequate training, supervision and resources. Participation of village chief, church leader and community health care team were also important factors to implement successful health intervention. It was described that lack of trust in the community health workers due to frequent drug stock out. In addition to that it was found that developing community ownership, and sustainability of community volunteer through appropriate supports including incentive, equipment and supplies are needed.

CHAPTER 3
HEALTH STATUS AND CHALLENGES OF HEALTH SYSTEM IN MYANMAR

3.1 Overview on Myanmar Health System

Myanmar's health system follows the country's administrative structure, with health departments at regional/state, district and township levels. At township level there are township hospitals, station hospitals, and rural and sub-rural health centres (RHC and sub-RHC). Primary care infrastructure starts with sub-RHCs at the grassroots level, In RHCs ambulatory care and outreach services, including delivery care, are provided. Curative services in rural areas are provided in 16-bed station hospitals. These are headed by station medical officers, and provide emergency care as well as general medical care. Most townships have a 25-bed (in some cases, a 50-bed) township hospital providing emergency care and treatment, primary care for prevalent diseases, clinical care such as general medicine, surgery, obstetrics and gynaecology, paediatric care, and general administrative and auxiliary services. Some townships have urban health centres providing ambulatory care and dental care, and Maternal and Child Health (MCH) Centres for pregnant mothers and children under five (UNFPA, 2017).

Township health departments serve a population of approximately 100,000 to 300,000. Each department is headed by a township medical officer. Urban areas are served by township hospitals, urban health centres, MCH centres and school health teams. In rural areas, township health departments oversee 1-3 station hospitals and 4-9 RHCs. Each RHC has 4-7 sub-RHCs. Each sub-RHC is staffed by a midwife and a public health supervisor grade 2 (PHS-II), while outreach services are provided by midwives supported by volunteer auxiliary midwives (AMWs) and community health workers (CHWs).

The regional/state-level hospitals offer a wider range of secondary-level specialities (medicine, surgery, obstetrics and gynaecology, paediatrics, anaesthesia, orthopaedics, ophthalmology, ear-nose-throat, radiology, pathology, psychiatry,

dentistry, forensic medicine, microbiology, physiotherapy, neuro-medicine and neuro-surgery). Supportive radiology and clinical laboratories are also provided at this level.

Tertiary-level care hospitals exist in Yangon, Mandalay and Nay Pyi Taw with over 20 specialist disciplines, fully equipped for tertiary-level care services including intensive care. Some of these also function as teaching and training hospitals for both undergraduate and postgraduate medical students. Specialist hospitals, such as women's hospitals, children's hospitals, orthopaedic hospitals, eye/ear, nose and throat hospitals and psychiatric hospitals are situated in the cities of Yangon, Mandalay and Taunggyi (Shan State).

In the public sector RHCs, sub-RHCs, MCH centres and urban health centres provide ambulatory care and are patients' first point of contact with the health system. Health promotion activities (concerning e.g. nutrition for mothers and children, exclusive breastfeeding and safe motherhood measures) are also carried out, particularly in the course of antenatal care (ANC).

In 2014, there were 16.4 doctors, nurses and midwives per 10,000 population in Myanmar, an increase from 14.9 in 2010–11. However, the 2006 World Health Report stated that countries with fewer than 22.8 doctors, nurses, and midwives per 10,000 population were unlikely to be able to provide even the most basic health services. The MoH is responsible for coordinating the health workforce at the national level, and for coordinating mechanisms at the national, subnational and district levels, according to the guidelines provided by central government. External partners (e.g. UN organizations, non-governmental organizations (NGOs), international organizations, donor organizations, international academic organizations and civil society organizations (CSOs) are involved in workforce planning and activities (WHO, 2006). The nature of their involvement varies and may include financial support, service provision and/or education and training. External (non-MoH) groups such as CSOs and NGOs coordinate workforce activities between community and facility, or facility and district levels. They work mostly on community-based MNH programmes, and help to build capacity by training basic health staff and health volunteers. They also support the MoH through coordination and partnership activities, and support first-level and referral-level health facilities by providing training, drugs, equipment and supplies, and with aspects of service provision. Many of their projects are focused on training midwives and volunteers for community-

based projects designed to update knowledge and awareness of maternal and child health and nutrition.

All categories of public-sector health workers are government-salaried employees. The salary is set by the Ministry of Finance as stipulated in the rules and regulations relating to the civil service. Gender has no effect on the level of salary. Salaries are adjusted every 2 years for the first 10 years in a given post.

In addition, financial incentives are available: health workers in hard-to-reach areas are entitled to an additional hardship allowance. Since salary is standardized across ranks, salaries across different professions within the health sector and across ministries are similar for the same rank. Health workers in underserved areas are given special consideration in terms of postgraduate studies, promotion and/or studying overseas

Auxiliary Midwife (AMWs receive six months of training (three months theoretical; three months practical) based on MoHS curricula with trainers from local THDs; CHW**s** receive 28 days of training based on MoHS curricula with training from local THDs; Malaria Volunteers receive five day modular training based on MoHS curricula for malaria diagnosis and treatment, provided by local THDs or staff of the organization providing support; TB Volunteers receive a two-day MoHS training course for drug sensitive TB and may receive an additional two-day training course for multi-drug resistant TB both provided by NTP trainers and/or additional training on other topics depending on the community-based model of the organization providing support; Trained Traditional Birth Attendants receive a seven-day curriculum developed by EHOs and centered on evidence-based antenatal care, essential newborn care, clean delivery and the importance of their role in strengthening communication and working effectively with maternal health workers and health workers (Mullany, 2008).

In Myanmar, there are different type of village based health care providers with different role and responsibilities. The followings are overview of the main type of VBHWs in Myanmar.

1. Auxiliary Midwives are trained to provide antenatal care, safe and clean home delivery for mothers who are unable to go to health centers; assist midwives in MCH services; assist in immunization activities; provide health education; detect and report epidemic outbreaks; organize and assist in sanitation and immunization activities as well as coordinate with health centers for early referral of cases and other health

activities. Certification is by completion of a six month MoHS training course, which includes three months theory and three month practical training at the Township Health Department or Rural Health Center level (Min, Mya, & Oo, 2015).

The total number of AMWs currently existing and the percentage quoted as functional varies in the literature. According to Public Health Statistics 2015-2016 there were 24,160 AMWs existing in 2016; the NHP 2017-2021 states that two thirds of trained AMWs (21,034 out of 31,580) in 2011 were functional.

2. Community Health Worker are trained to provide health education; surveillance diseases outbreaks; assist in sanitation and immunization activities as well as coordinate with health centers for early referral of cases and other health activities. There were 15,112 CHWs existing in 2016 as per Pubic Health Statistic 2015-2016, the NHP 2017-2021 states that about of half of trained CHWs (20,956 out of 40,910) in 2011 were functional.

3. Malaria Volunteer (sometimes referred to as Community Health Workers or Village Health Volunteer) are trained to provide malaria diagnosis and treatment using Rapid Diagnostic Tests (RDT) and Artemisinin-based Combination Therapy (ACT) at community level. In addition to that they are also engaged in prevention activities such as Long-lasting insecticidal Net (LLIN) distribution and community awareness raising activities (Cho, 2015).The NSP 2016-2020 for Malaria states that 40,000 VHVs have been trained and around 38% are still active.

4. TB Volunteer are trained to provide TB screening and referral, assist in sputum collection and in follow up treatment support, provide home based DOTs. The total number of TB Volunteers in the country could not be determined from the available literature, but according to the monitoring systems and progress reports of the 3MDG Fund and Global Fund Principal Recipients (i.e. Save the Children and UNOPS) there were a total of 6,277 TB Volunteers being supported by these major donors as of June 2017.

5. Village Health Workers are trained in ethnic areas across Myanmar by a number of EHOs. The training and service delivery scope of these health workers has evolved overtime ranging from environmental sanitation, diarrhea, malaria as well as

maternal, newborn and child health. Review of one existing "Village Health Worker Handbook" indicates that services provided by Village Health Workers are similar to the environmental and disease control services provided by the MoHS trained CHWs.

6. Maternal Health Worker are trained in remote areas covered by ethnic health organizations (EHOs). Maternal Health Worker are trained on basic aspect of basic emergency obstetric care (Mullany, 2008). Maternal Health Worker can also advance with additional training to be facility based Maternal and Child Health Worker and Basic Emergency Obstetric Care Workers.

3.2 Health Status and Health System Challenges in Myanmar

Health Status

The health status of the Myanmar population is poor and does not compare favorably with other countries in the region. Life expectancy at birth in Myanmar is 64.7 years, the lowest among ASEAN countries. The maternal mortality ratio (MMR) is the second highest among ASEAN countries at 282 deaths per 100,000 live births. Every year, around 2,800 women die during pregnancy or childbirth (Myanamr Census, 2014). The under-five mortality rate (U5MR) is 72 deaths per 1,000 live births – compared to 29 in Cambodia and 12 in Thailand – and the infant mortality rate is 62 per 1,000 live births, compared to 25 in Cambodia and 11 in Thailand. Malnutrition is highly prevalent, with more than one third of the children under the age of five stunted.

Both HIV prevalence and TB incidence are second highest among ASEAN countries. Burden of disease associated with non-communicable diseases (NCDs) is increasing at alarming rates; it is estimated to already account for more than 40 per cent of all deaths. Diabetes and hypertension are particularly prevalent and have so far been largely neglected. Hidden behind the national averages are wide geographic, ethnic and socio-economic disparities. For example, the MMR in Chin State is 357, compared to 213 in Yangon, and the U5MR ranges from 108 in Magwe Region to 48 in Mon State. Children from poorer households are more than twice as likely to be undernourished than those from better-off households (Myanamr Census, 2014). One of the factors contributing to this situation is the failure of the health system to ensure the availability and accessibility of quality essential health services and interventions.

Health System Challenges

The Myanmar health system currently faces many challenges. These relate to the availability and distribution of inputs (e.g. human resources, physical infrastructure, supply chain, financial resources) and to weaknesses in key functions such as supportive supervision, referral, health management information system, and public financial management. The lack of oversight, leadership and accountability further exacerbates these challenges.

a) Human resources for health

The Myanmar health system currently faces many challenges. These relate to the availability and distribution of inputs (e.g. human resources, physical infrastructure, supply chain, financial resources) and to weaknesses in key functions such as supportive supervision, referral, health management information system, and public financial management. The lack of oversight, leadership and accountability further exacerbates these challenges. rural retention. As of November 2016, there were 1.33 health workers (doctors, nurses and midwives) per 1,000 people, well below the WHO minimum recommended threshold of 2.3 (BM, 2007). In terms of distribution, health workers were largely concentrated in urban areas, including Yangon and Mandalay. Lack of clear recruitment and deployment policies further complicate matters. Additionally, there is limited clarity around roles and responsibilities of the different health cadres at all levels of the system. This explains to some extent why midwives are overburdened. Even though they are trained exclusively to carry out midwifery functions, addition tasks not related to midwifery are commonly assigned to them.

b) Infrastructure

Having human resources for health is not enough. There needs to be a balanced distribution of infrastructure such as buildings and equipment. Currently, there is no clear nationwide infrastructure investment plan. There is often a mismatch between health administrative maps and catchment areas of health facilities, leading to challenges in estimating catchment population. Design of health facilities can vary depending on the funding source. This means that not all health facilities have critical amenities such as clean water, sanitation, electricity, warehousing facilities, staff housing and communication facilities. Furthermore, restrictions imposed by financial rules and regulations have led to delays in the tendering process, and lack of an

operational budget for maintenance. Efforts to allow budget flexibility for maintenance purposes are ongoing. Transportation between health facilities is still challenging, increasing barriers to accessing health services.

c) Service delivery

Service delivery in Myanmar relies on a mix of public, private for-profit, private not-for-profit and EHO providers. MoHS has been leading a technical exercise since 2014 to define an Essential Package of Health Services. The plan is to have a Basic- EPHS by 2020, an intermediate-EPHS by 2025 and a comprehensive-EPHS by 2030. The current public sector health services provision focuses on tertiary care, which means station hospitals and below have received less attention over the past few decades. This underinvestment has led to various shortcomings in service availability, readiness and coverage. Furthermore, there is limited public sector service delivery in both conflict-affected and postconflict affected areas.

Existing procurement and supply chain arrangements are highly fragmented along vertical programs and funding sources. This fragmentation complicates coordination and creates inefficiencies. Weak policies and regulations, their limited enforcement and lack of clarity in existing guidelines pose further challenges. Underinvestment in the MoHS procurement and supply chain management system has translated into limited management capacity, infrastructure, and technology. The existing paper-based LMIS prevents timely aggregation of data and limits its use.

There is poor alignment between the Government of Myanmar's Public Financial Management (PFM) system and the financing objectives related to health service delivery at the primary health care level. Existing PFM system and processes hamper rather than enable effective service delivery. There are bottlenecks throughout the budget cycle. To begin with, there is a complete disconnect between planning and budgeting functions and cycles. Budget is not allocated within MoHS based on a clear and transparent formula; it is prepared with little to no consultation with implementers at lower levels and ends up being mostly historical and delinked from actual needs. Communication from central level to the lower levels about available annual budget envelope for coming fiscal year tends to be unclear and untimely. The budget is structured around line items that largely focus on inputs and are disconnected from programs or outputs.

d) Health financing

Myanmar currently allocates 3.65 percent of its total budget on health, which is extremely low by global and regional standards (MoPF). Some reprioritization towards social sectors in general, and the health sector in particular, has already taken place in recent years. The nine-fold increase in absolute amount (from 94 million US$ in 2010-11 to 850 million US$ in 2016-17) was mainly used to finance delivery of health care and expansion of service coverage with a focus on free medical care in hospital settings (MoHS). Funding from other sources, including from development partners (DPs), is largely channeled through parallel systems. In addition to making oversight and coordination challenging, this results in inefficiencies and it does not contribute to strengthening the government's institutional capacity.

3.3 Human Resource for Health in National Health Plan (2017-2021)

The existing Human Resources Information System needs to be strengthened and updated to better reflect current situation, including numbers of health workers and their distribution, to allow effective planning and forecasting. In addition, non-medical support professions (e.g. biomedical engineers, civil engineers, IT experts, accountants…) will be included in HR plans.

a) **Accreditation of training Institutes**

Accreditation bodies will be developed and promoted. Building on ongoing efforts initiated by MMC, MNMC, MoHS will further support the accreditation of training institutions, both private and public. Moreover, additional opportunities for private health care providers to attend government training institutions will be developed. Institutions located in or close to Townships where the NHP is to be operationalized will be prioritized. MoHS, together with MMC and MNMC should also seek collaboration with EHOs to develop compatible accreditation mechanisms of educational programs in EHO areas.

b) **Pre-service training**

The Health Workforce Strategic Plan (2012-2017) expressed the importance of strengthening training institutions' pre-service capacity to provide quality education. Clinical skills and active competency-based learning with a focus on job-related skills will be promoted. Some efforts in that direction are already taking place.

Pre-service curricula for all health workers (salaried or voluntary/BHS or village-based health worker (VBHW)) will focus on the core competencies and skills that are needed to effectively deliver the Basic EPHS.

c) **Production and management**

HRH data and information for planning and forecasting are limited. Further improvements in the nationwide Human Resources Information System (HRIS) are needed to better support decision-making. Eventually, information on HRH employed in the private sector will also be captured by the MoHS HRIS. The production of every cadre of health workers will be based on projected needs, considering the NHP goals. Increased investments are needed to establish new training institutions for BHS cadres in different parts of the country.

Attrition among VBHWs, i.e., AMWs and CHWs, is high. In 2011, for example, only half of the trained CHWs (20,956 out of 40,910) and two-thirds of the trained AMWs (21,034 out of 31,580) were functional. While more recent numbers are not yet available, preliminary information suggests that this situation has not improved dramatically. Causes for the high attrition within the country have been documented. They include, for example, the lack of resources for recurrent costs (e.g. for refresher training, for the replenishment of drugs, for supportive supervision and for travel). Steps to address attrition and improve performance will be taken (e.g. in the short term, ensuring recurrent costs are included in Township plans and budgets; in the long term, exploring options for career development).

Training of VBHWs, including those in EHO areas will gradually be harmonized with national standards. The training will be designed based on the skills and competencies needed to deliver the Basic EPHS at the community level.

d) **Recognition**

The Health Workforce Strategic Plan (2012-2017) recognizes that health professionals outside of the public sector will need to be engaged and partnerships will need to be strengthened with the private sector, NGOs, CSOs, EHOs, and DPs around issues such as planning and management of the health workforce. MoHS has recently shown interest to recognize nongovernment health workers in ethnic areas. EHO representatives were invited to MoHS and government officials also paid a visit to Myanmar's eastern borders. MoHS officials, implementing partners and EHO

representatives then reached an agreement that clinical skills standardization would be one of the first steps towards recognition of EHO health workers. MoHS should express its commitment to take further steps towards recognition of EHO health workers. Relevant stakeholders should subsequently agree on a framework that clearly outlines the competencies and skills required for the delivery of services and interventions included in the Basic EPHS. The framework will encompass the different types of health workers and it will be linked to their respective roles and responsibilities.

e) **Recruitment and deployment**

A key challenge in human resource management is the disconnect between production and deployment of health workers. The insufficient number of human resources, which applies to all cadres, is not due to a lack of production; the problem is with recruitment and deployment. In other words, there are more health workers produced than can be recruited by the public sector. It would also be beneficial to discuss this issue with the Union Civil Service Board to clarify existing policies around quotas on filling sanctioned posts and to identify steps to address delayed deployment. Newly graduated health workers who are not able to find employment in the public sector should be allowed to work outside the public sector to ensure their skills are maintained. At the same time, human resource management will be improved to overcome current disconnect between production, recruitment and deployment. Decision-making with respect to the deployment of human resources will be gradually decentralized to States and Regions. It will be based on the local needs with a focus on the delivery of the Basic EPHS at Township level and below.

There are ongoing efforts to overcome human resource gaps through a so-called ‘temporary employment’ program, which allows health professionals that are not civil servants to be appointed in hard-to-reach areas, based on needs expressed by Regional/State Public Health Directors. An example is the midwives model where screening and recruitment is done by the Myanmar Nurses and Midwives Association (MNMA); funding is provided by DPs; MoHS coordinates and manages the program. Use of such mechanism on a larger scale will be promoted as a temporary measure to fill human resource gaps for the delivery of the Basic EPHS, prioritizing the Townships in which the NHP is being operationalized.

f) Distribution and targeting of public health oriented VBHWs has largely followed the principle of population-based coverage on a village-by-village basis (i.e. one BHS or VBHW per village). When AMWs and CHWs were first introduced as VBHW cadres to bring primary health care to every community in the country, it was intended that there would be one CHW per village (approximately one for every 200 households) and one AMW for every two villages (approximately one for every 500 households) where there was not already a Midwife. In 2014, the MoHS trained additional AMWs with the aim to achieve the target of one AMW per village (Merlin, 2014).

g) Based on a cross-sectional census survey of 715 CHWs working in 21 townships, more than half of the CHWs (53%) reported that they applied for CHW training on their own, while 21% were proposed by the midwives in the sub-center, 15% were nominated by the village head, and 11% by the villager (Sommanustweechai, 2016). This highlight the variation noted in the literature around the involvement of BHS and communities in the recruitment of VBHWs.

Table 3.1. Overview of selection of criteria for VBHWs

Type of VBHW	Selection Criteria
Auxiliary Midwife	A women from a village where there is no health facility or health staff, interest in health and social work, desire to stay and serve in the village after the training, completed middle school education and in good health, no more than 30 years of age and recommendation from the local midwife and/or village leader (MOHS, 2017).
Community Health Worker	A person who is interested in delivering health care and messages to the rural community, preferably those who are under the age of 35, having middle school-level education at least, and living in the rural area, but not the village where a sub-centre exists, in order to have sufficient education to read and write the Burmese language and speak the local dialect (MOHS, 2017).
Malaria Volunteer	Malaria volunteer must be able to read and write, pass primary school level, be recommended by village health committee, must live in the community, not too young not too old, interested in the volunteer work, live in a hard to reach village, a malaria endemic village, a village where there is no BHS (MOHS, 2017).
TB Volunteer	Selected in collaboration with BHS and Township Medical Officers and work collaboratively with BHS (MoHS, 2016b); individual implementing partners have developed more specific selection criteria (MOHS, 2017).
Integrated Community Malaria Volunteer	Minimum literacy (can read and write), neither too old nor too young, selected or approved by village health committee, stays permanently in selected village and interested in volunteer works. Selection criteria for villages with ICMV: hard to reached village, malaria cases loaded village, lack of health staff in this village and prioritized to more populated villages (MOHS, 2017).

Source: Comprehensive literature review on village based health workers in Myanmar

h) **Task shifting**

A rigorous skills needs assessment will be conducted at the different levels of the health system and for the different cadres to identify areas where task shifting should be considered. Job descriptions will then be revised accordingly. Accompanying training materials will be developed to upgrade health workers' skills and prepare them for their new roles. The staffing norm that was recently agreed upon of having a Public Health Supervisors (PHS-II) for every midwife will be adopted more broadly as a form of task shifting. As recommended in the final report of the Myanmar SRMNAH Workforce Assessment (UNFPA,2016), all tasks relating to disease control and environmental sanitation should be removed from the job description of midwives to become the responsibility of the PHSIIs. This will allow midwives to spend more of their available working time carrying out the duties for which they were specifically trained.

i) **In-service training and continuous professional education**

In-service training will be fully institutionalized and better integrated; it will be tailored to the different cadres' needs in terms of skills and competencies to deliver the Basic EPHS according to their respective roles and responsibilities. The roll-out of the in-service training will be tuned to the prioritized operationalization of the NHP. Close collaboration with Program Managers will be essential in this area. Consideration will also be given to coordinating training dates amongst various programs to avoid taking the health workers away from their duties for too long. Continuous professional education to support the delivery of the Basic EPHS will reach all health workers, including those outside MoHS. Training curriculum of VBHWs, in particular CHWs and AMWs, as well as refresher courses for existing cadres also need to be reviewed and updated so as to be tailored to the delivery of the Basic EPHS.

j) **Retention**

Training institutions for health professionals should be established in locations other than major cities and students should be recruited from rural areas around those institutions (including from ethnic communities) to enhance rural retention. Graduates from these training institutions should be immediately deployed, preferably to their native area. Locally based recruitment and deployment of health workers will help to

ensure understanding of the local context and languages. Particularly for VBHWs, priority should be given to speaking the languages most relevant to the communities. This will require making necessary language accommodations in curricula and trainings.

Additional consideration will be given to ensuring rural retention as 70% of the Myanmar population resides in rural areas. Appropriate financial incentives will be provided for those serving in rural and hard to reach areas. Transportation allowances, daily allowances and overtime compensation also need to be updated to better reflect the local context. Non-financial incentives are needed as well, such as training opportunities, accelerated promotion, better living conditions, a conducive environment to ensure job satisfaction, etc. Moreover, a clear career path linked to performance and educational background needs to be offered, also to AMWs and CHWs. Additional and more flexible career development opportunities need to be offered to health workers in rural areas, such as distance learning and certificate courses. In addition, there is a need for introducing appropriate delegation of authority with respect to human resource management to the State/Region level.

Table 3.2. Summary of VBHW Monetary and Non-Monetary incentive scheme in Myanmar

Type of VBHW	Monetary incentives	Non-Monetary incentives
Auxiliary Midwife	None, except for transport funds to attend trainings or meetings when specific donor support is available for this in a Township or when fees/incentives are given by community members (Myint, 2011)	Initial AMW kit and sometimes other supplies; social recognition and moral Support given in a variety of ways depending on the engagement of communities, TMOs and donor supported programs (Saw, 2016a)

Table 3.2. Summary of VBHW Monetary and Non-Monetary incentive scheme in Myanmar (Cont'd)

Community Health Worker	None, except for transport funds to attend trainings or meetings when specific donor support is available for this in a Township or when fees/incentives are given by community members (Saw, 2016a).	Initial CHW kit and sometimes other supplies; social recognition and moral support given in a variety of ways depending on the engagement of communities, TMOs and donor supported programs (Saw, 2016a).
Malaria Volunteer	60,000 Kyats per quarter, but will be reduced to 50,000 Kyats per quarter in 2018.	Initial kit and other supplies; in kind materials such as t-shirts, umbrellas, etc. depending on organizational and donor support (Cho, 2015).
TB Volunteer	20,000 kyats per month for travel costs; 2,000 kyats per TB case referred; other transport funds to attend trainings or meetings when donor support is available in a Township.	Social recognition, recognition trips, in kind materials, etc. depending on organizational and donor support (Saw, 2016a).
Village Health Volunteer (Only supported in EHOs)	Appears that no monetary incentives are given by EHOs (or MoHS in the past), but not explicitly stated in the available literature.	Appears that some supplies are provided by EHOs, but details not clear in the available literature.

Source: Comprehensive literature review on village based health workers in Myanmar

3.4 VBHWs in Myanmar

3.4.1 Equipment and supplies for VBHWs in Myanmar

The Central Medical Store Depot procures and distributes medicines to hospitals all over the country, but supplies are insufficient and management of the supply chain needs to be strengthened. Availability of supplies particularly at the primary health care levels of Rural Health Centers and Sub-Rural Health Centers is noted to be weak. For example, only 20% of sampled public Rural Health Centers and Sub-Rural Health Centers were found to have Amoxicillin in the 2015 WHO Service Availability and Readiness Assessment survey. The Essential Drugs List was last updated in 2005 (updated 2017 version is pending circulation), but drugs and commodities by level of care do not in all cases align with current treatment guidelines, especially at community level. Procurement and distribution of medicines/supplies to be used by VBHWs are not entirely integrated into the government procurement and distribution systems. The majority of drugs and supplies used by VBHWs are procured by international donors and development partners (e.g. UNICEF and 3MDG for AMWs and CHWs, including for CCM of Diarrhea & Pneumonia; GF and USAID for Malaria Volunteers) and then implementing partners use specific supply chain management systems and standard operating procedures as required by their individual donors. Procedures for distribution of supplies, reporting on stock consumption and maintaining buffer stocks vary across partners.

Table 3.3: Summary of VBHW kits and other supplies

Type of VBHW	VBHW kits	Other supplies
Auxiliary Midwife	AMW Kit after completion of initial AMW training.	Usually no additional supplies are provided, unless specific donor support is available for this in a Township (with the exception of clean delivery kits, annually distributed by MoHS nationally). Other medicines and supplies provided when trained in **CBNBC** or **CCM DP** and donor support is available for this in a Township
Community Health Worker	CHW Kit after completion of initial CHW training.	Usually no additional supplies, unless specific donor support is available for this in a Township. Other medicines and supplies provided when trained in **CCM** **DP** and donor support is available for this in a Township
Malaria Volunteer	CHW Kit after completion of initial CHW training.	Medicines and supplies are provided on a monthly Basis; Other medicines and supplies provided when trained in **iCCM** or **ICMV** with donor support.
TB Volunteer	No defined kit.	IEC Materials.
Trained Traditional Birth Attendant (primarily supported byEHOs)	No documentation found.	Appears that some supplies are provided by EHOs, but details not clear in the available literature.
Village Health Volunteer (only supported by EHOs)	No documentation found.	Appears that some supplies are provided by EHOs, but details not clear in the available literature.

Source: Comprehensive literature review on village based health workers in Myanmar

3.4.2 Supervision of VBHWs in Myanmar

Regular supportive supervision is recognized as essential for VBHWs to provide quality services, including by VBHWs themselves However, the available literature is limited on the details of current arrangements in place for this, such as whether supervision is done during outreach visits, health facility meetings or other times. The Job Descriptions for BHS indicate that MWs are responsible for supervising AMWs and PHS2 are responsible for supervising CHWs. Both Malaria and TB Implementation Partner staff are engaged in supervising Malaria and TB volunteers, although the Malaria focal point within a THD may supervise 2-3 volunteers per quarter. There is evidence that this varies widely across contexts and programs, depending on implementation partner arrangements, collaboration with BHS and availability of funds for transport and programs specific supervision checklists.

The NSP 2016-2020 for Malaria notes that the frequency and quality of supervision provided for Malaria Volunteers varies considerably from one agency to another and this is likely reflected in the quality of both the care provided and the data submitted. As far back as 1985, a Situation Analysis of Training and Utilization of Auxiliary Midwives recommended development of a standardized supervision form that can be used by BHS in supervising AMWs.

3.4.3 Linkages to Health System

The Myanmar Health Sector Coordinating Committee (M-HSCC), established as a part of the Nay Pyi Taw Accord in 2013, has the broad mandate as the coordinating body for all public health sector issues. The M-HSCC, chaired by the Minister of Health and Sports, oversees implementation of the NSP and has participation of other ministries, United Nations organizations, NGOs, development partners and community organizations. The M-HSCC has seven Technical and Strategy Groups (TSGs), including those focused on HIV/AIDS; TB; malaria; maternal and child health and reproductive health; monitoring and evaluation; health system strengthening and emergency and disaster preparedness.

The mandate of these TSGs is to provide technical guidance in the development of national strategies, to provide coordination among partners, and to provide clarity on major technical and policy issues. The TSGs meet periodically to discuss, review and endorse certain proposals (particularly in the case of HIV, malaria

and TB for Global Fund proposals), reports and other documents and carry out the assignments given to them. The TSGs also provide broad oversight of the implementation of grants and projects as required. While each of these TSGs engage in concerns regarding the VBHW cadres associated with their particular intervention areas, there is no single central body providing direction or oversight across intervention areas. Insufficient coordination across implementation partnerss on issues around VBHWs.

Following the development of the NHP 2017-2021, the NHP Implementing Monitoring Unit under the Minister's Office was established to monitor the implementation of the NHP AOPs based on the current NHP 2017-2021. The NHP 2017-2021 also outlines the establishment of a system of inclusive Township, Village Tract and Village Health Working Groups to support improved coordination and collaboration from Township to Village levels. Linkages of VBHWs and communities to the larger health system are weak, unclear or inconsistent with significant variation in the roles that BHS and communities play in VBHW recruitment, training, supervision, provision of equipment and supplies, provision of incentives, use of data and support to referrals.

CHAPTER 4
SURVEY ANALYSIS

4.1 Survey Profile

This survey was conducted in Hpa-an, Kyarinseikyi and Myawaddy townships in Kayin State. Hpa-an township is capital of Kayin State. According to 2014 Census data, total population of 421,575 and sex ratio was 94 (males per 100 females). There were 9 wards in Hpa-an township. The literacy rate of those age 15 and over in Hpa-an township is 79.9 per cent. It is higher than the literacy rate of Kayin State (74.4%) and lower than the Union (89.5%). Female literacy rate is 76.2 per cent and for the males it is 84.4 per cent. 42. per cent of the employed persons aged 15-64 are skilled agriculture forestry and fisher workers and is the highest proportion, following by 14.9 per cent in services and sale workers. In Hpa-an township, the portion of employed persons working in the industry of "Agriculture forestry and fishing" is the highest with 46.7 per cent. The infant and Under 5 mortality rates in Hpa-an Township are lower than those in Kayin State and Hpa-an District. The infant mortality in Hpa-an township is 39 per 1,000 live birth and Under 5 mortality is 45 per 1,000 live birth.

In Kyarinseikkyi township, total population was 106,427 and sex ratio was 95% (males per 100 females). There were 6 wards and 20 village tracts in Kyarinseikkyi township. The literacy rate of those aged 15 and over in Kyarinseikkyi is 72.6 per cent. It is lower than the literacy rate of Kayin State (74.4%) and the Union (89.5%). Female literacy rate is 69.1 per cent and for the male it is 76.5 per cent. In Kyarinseikkyi Township, 60.9 per cent of the employed persons aged 15-64 are skilled agricultural, forestry and fishery workers and is the highest proportion, followed by 18.7 per cent in elementary occupations. The proportion of employed persons working in the industry of "Agriculture forestry and fishing" is the highest with 76.4 per cent. The infant and Under 5 mortality rates in Kyarinseikkyi Township are higher than those in Kayin State and lower than those in Kawkareik District. The infant mortality in Kyarinseikkyi is 55 per 1,000 live births and Under 5 mortality is 63 per 1,000 live births.

In Myawaddy township, total population was 195,624 and sex ratio was 104% (males per 100 females). There were 5 wards and 11 village tracts in Myawaddy township. The literacy rate of those aged 15 and over in Myawaddy is 85.6 per cent. It is higher than the literacy rate of Kayin State (74.4%) and but lower than the Union (89.5%). Female literacy rate is 83.0 per cent and for the male it is 88.2 per cent. In Myawaddy Township, 24.2 per cent of the employed persons aged 15-64 are skilled agricultural, forestry and fishery workers and is the highest proportion, followed by 21.4 per cent in services and sales workers. The proportion of employed persons working in the industry of "Agriculture forestry and fishing" is the highest with 28.2 per cent. The infant and Under 5 mortality rates in Myawaddy Township are lower than those in Kayin State and equal to Myawaddy District. The infant mortality in Myawaddy is 41 per 1,000 live births and Under 5 mortality is 47 per 1,000 live births.

4.2 Survey Design

In this chapter all the collected primary data of the questionnaire survey and In-depth interview (IDI) with key informant were analyzed. The empirical data were collected during August and September 2019 at Hpa-an, Kyarinseikkyi and Myawaddy townships. Total 200 respondents were randomly selected from Hpa-an, Kyarinseikkyi and Myawaddy townships. The number of respondents who were asked to answer survey questions was 200 respondents. They are Village Based Health Workers (VBHW) from Hpa-an, Kyarinseikkyi and Myawaddy. A quantitative research method was applied for this survey by using well-structured questionnaires including respondent's information in Section (A) background characteristic of respondent, Section (B) activities of VBHWs and attraction, Section (C) selection, training and supervision and performance of VBHWs, Section (D) retention and sustainability of VBHWs.

For In-depth interview, purposive sampling method was used to select the field supervisor for VBHW's activities and VBHWs. There were three sections under In-depth interview which are Section (A) health intervention, VBHW's activities and attraction of VBHWs, Section (B) selection, training, supervision and performance of VBHWs and Section (C) funding, retention mechanism and sustainability of VBHW's activities.

4.3 Survey Results

The survey findings are analyzed and shown as so characteristics of respondents, respondents training and supervision, health intervention carry out by respondents, multi-task health intervention of respondents, factors motivating respondents, and factor influencing attrition of respondents.

4.3.1 Characteristics of respondents

The result showed that 65% (130) of respondents who participated in assessment were female while 35% (70) of VBHWs were male. All of VBHWs attended school and 41% (83) of VBHWs completed tertiary education. It was found that most of VBHW 85% (170) were Buddhist. About 67% (129) were married and 36% (71) were single. Majority of ethnicity of VBHWs 84% (168) were Sagaw Kayin. 42% (84) of VBHWs worked as health worker, 27% (53) were farmer, 14% (27) of them worked as VBHWs in villages as their main occupation. Most of VBHWs who took part in assessment 89% (175) are 36 years and above. The mean ages of VBHWs were 27.2 years.

Table 4.1 Characteristic of respondents

Variable	Number of respondents	Percent
Age		
17 - 35	2	1.0
36 - 55	175	87.5
56+	23	11.5
Sex		
Male	70	35.0
Female	130	65.0
Education		
Primary	40	20.0
Secondary	74	37.0
Tertiary	83	41.5
Others	3	1.5
Ethnicity		
Sagaw Kayin	168	84.0
Pwo Kayin	26	13.0
Bwe Kayin	3	1.5
Other	3	1.5
Marital status		
Never married	71	35.5
Married	129	64.5
Main Occupation		
VBHWs	84	42.0
Trader	8	4.0
Housewife	27	13.5
Civil servant	10	5.0
Farming	53	26.5
Other (Specify)	16	8.0

Source: Survey data, 2019

4.3.2 Respondents training and supervision

Respondents were trained on Malaria and Tuberculosis and other health care service such as diarrhea, leprosy, etc. study showed that most of respondents were selected by Community group leaders 35.5% (71) and community member 32% (64). 16% (32) and 6% (12) respondents were selected by village elders and family member respectively in Table 4.2. In relation to respondents training, almost respondents 97% (194) in this study received training from respective organization before starting VBHW's work in villages. In regard to length of training, about 46% (93) respondents

had training less than one week. Almost 96% (194) of respondents reported that they received adequate training for health intervention in the villages.

Table 4.2 Selection and training of respondents

Variable	Number of respondents	Percent
VBHW selection		
By the elders	32	16.0
Community members	64	32.0
Community Group Leaders	71	35.5
Relatives/family members	12	6.0
Program officers	9	4.5
By choice	12	6.0
VBHW Trainings		
No	6	3.0
Yes	194	97.0
Training Duration		
Less than one week	93	46.5
One week	84	42.0
Two week	17	8.5
Other (specify)	4	2.0
Not Answer	2	1.0
Adequate of training		
No	6	3.0
Yes	192	96.0
Not Answer	2	1.0

Source: Survey data, 2019

The study showed that majority of supervision 44% (89) for respondents was done by Field Supervisor. 59% (118) respondents reported that they were supervised once per month. Of those who are supervised, 53.5% (107) of them are reported that supervision was very effective. Almost of respondents 63.5% (127) reported that supervision make them to work on health intervention very well. The result showed that 44.5% (89) respondents submitted their report on weekly basis while 31.5% (63) respondents submitted report on monthly basis. More than half of VBHWs 54.5% (109) has regular meeting with their supervisors and project staff.

Table 4.3 Supervision of respondents

Variable	Number of respondents	Percent
Frequency of supervision visit		
Once a week	4	2.0
Once in two weeks	40	20.0
Once a month	118	59.0
Twice a month	14	7.0
Once every three months	8	4.0
Other (Specify)	14	7.0
Not answer	2	1.0
Level of supervision		
No supervision	34	17.0
Field supervisor	89	44.5
Clinic in charge	38	19.0
KDHW project staff	33	16.5
Community mobilizer	4	2.0
Not Answer	2	1.0
Grading of supervision		
Very effective	107	53.5
Effective	50	25.0
Somewhat effective	28	14.0
Not-effective	13	6.5
Not Answer	2	1.0
Effect of supervision		
Helps me do the work well	127	63.5
Motivate me to work harder	28	14.0
Makes me feel important	19	9.5
Makes me more committed	3	1.5
Other (Specify)	18	9.0
Not Answer	5	2.5
Report submission schedule		
Every week	89	44.5
Every two weeks	5	2.5
Every month	63	31.5
Every quarter	29	14.5
Other (Specify)	10	5.0
Not Answer	4	2.0
Frequency of regular meeting		
Once every week	67	33.5
Once every two weeks	16	8.0
Once a month	109	54.5
Other (Specify)	8	4.0

Source: Survey data, 2019

4.3.3 Health intervention carried out by respondents

Respondents were performed health intervention such as health education, malaria testing and treatment, TB case detection and DOTs follow up, Screening malnutrition for children, treatment of diarrhea, distribution of CDK kits, mobile health care and reporting and referral. Out of 200 VBHWs who participated in assessment, 90 % (181) respondents performed health education session at the community level. Almost 88.5% (177) respondents provided malaria testing and treatment in the village. On the other hand, only 3.5% (7) of respondents measured screening of malnutrition under 5 years at the community level. Regarding to TB service intervention, only 30.5% (61) respondents provide TB case detection and DOTs/follow up for TB patients in the villages.

Table 4.4 Health intervention of respondents

Health Interventions	Number of respondents	Percent
Health Education		
No	19	9.5
Yes	181	90.5
Malaria testing and treatment		
No	23	11.5
Yes	177	88.5
Malnutrition children for Children		
No	193	96.5
Yes	7	3.5
TB case detection		
No	139	69.5
Yes	61	30.5
TB DOTs/follow up		
No	139	69.5
Yes	61	30.5
Mobile health care		
No	128	64.0
Yes	72	36.0
Treatment of minor diarrhea		
No	97	48.5
Yes	103	51.5
Reporting and referral		
No	96	48.0
Yes	104	52.0

Source: Survey data, 2019

The study showed that 36% (72) of respondents conducted mobile health care activities to hard to reach areas. In addition to that, around 51% (103) of respondents provided treatment of diarrheas at the community level. Moreover, 52% (104) of respondents performed reporting to supervisor and referral of severe illness patient to nearest health facilities

In the qualitative interview with field supervisors and respondents it was found that there were similar health activities implemented by respondents. Field Supervisors and respondents reported that VBHWs carried out health intervention, for instance, malaria testing and treatment, TB case findings, TB DOTs follow up, Nutrition, diarrhea and health education etc. The following was extracted from qualitative interview by field supervisor.

They did blood testing for people who came to see them. Moreover, if patient with fever could not come to them, they went patient house and did blood testing for malaria. For TB, if patient has suspected TB sign and symptom, they referred to field supervisor. Moreover, they also involved in sputum collection and sent to field supervisor. If patients diagnosed as TB infection, they performed DOTs follow up on TB patients. In addition to that they also assisted in TB mobile screening (mobile health care services) in nearby villages organized by State Health Department. They also performed health education. VBHWs also described that

They provided malaria testing and treatment. They referred patients with TB suspected sign and system to nearest for further investigation. Moreover, they also collected sputum and sent it to their supervisors. The community increased awareness of TB control and prevention due to health education session in the village. In addition to that they provide health services such as child health and nutrition in the community level. Sometime, they participated in mass drug administration of filariasis campaign in the village (IDI-VBHWs).

4.3.4 Multi-task health intervention of respondents

Out of 200 respondents, 59.5% (119) of respondents were involved in more than three activities. On the other hand, only 11% (22) of respondents carried out one health activities at the community level. It was stated that VBHWs had responsible for carry out multi health activities at the same time.

4.3.5 Factors motivating respondents to implement health intervention

In regard to factors that motivate respondents to carry out health interventions, 89% (179) of respondents reported that working as respondents in the communities was main factors to motivate to be a VBWHs. 86% (172) of respondents also described that receiving medicine and supply is one factor that motivate to work as VBHWs in the communities (Table 4.5). 84% (168) of respondents reported that regular refresher trainings were one of motivating factor for respondents in the community level. The least attractive factors respondents described as an attraction was the desire to earn income.

Table 4.6: Factors attracting respondents to implement health intervention

Variables	Number of respondents	Percent
Help community members /sick people		
No	43	21.5
Yes	157	78.5
To earn income		
No	132	66.0
Yes	68	34.0
Respect from community		
No	85	42.5
Yes	115	57.5
Community recognition		
No	91	45.5
Yes	109	54.5
Enjoy working as VBHWs		
No	21	10.5
Yes	179	89.5
Receive refresher training		
No	32	16.0
Yes	168	84.0
Receive medicine and supply		
No	28	14.0
Yes	172	86.0

Source: Survey data, 2019

In the qualitative interview, both field supervisor and respondents shared the same that it was mainly desire to work as VBHWs to help the health of community member that motivate them to offer their services. A respondent mentioned that

They felt happy and confident when patient got relieved from illness after completed treatment. Moreover, they could save patient life when they sent severe patients to nearest health facilities on time for further investigation.

Field supervisor who took part in study described that community recognition and receiving refresher training are other factor of motivation to provide health care services in the community. The views are supported by the following statement made by field supervisor

They provided health service for community to improve their health. They also received training that gained their knowledge. Moreover, community trust them because they were local person who can speak same language and are available to provide health services for community anytime.

4.3.5.1 Performance of respondents

Performance of respondent were considered in term of number of times respondents attended meeting, report submission, participated in mobile health care services and their involvement in health education. The result showed that 96% (192) of respondents always attended meeting and submitted report to their supervisors, 36% (72) of respondents who took part in the study participated in mobile health care services and 90.5% (181) of respondents performed health education session in the community level.

The overall performance of respondents was accessed on combination of respondent's ability to always attend meetings, always submitted report to their supervisor, participation of mobile health care services and their involvement in health education session. High performance rating were categorized as respondents who reported always taking part in these four activities. respondents who reported somehow took part in these four activities were considered low performing respondents. The result showed that 57% (115) of respondents scored high on performance, on the other hand, 40% (80) of respondents scored low on performance.

In the qualitative interview, field supervisor described that performance of respondents was positive. Following statement was extracted

When patients with fever came to them, they would be able to do blood testing for malaria very well and provided anti-malaria medicine correctly, if patient was malaria positive. Sometime, they discussed with their supervisor to make sure treatment before they give medicine to patient. I believe, it is good practice otherwise patient would receive wrong treatment without prior discussion with supervisors. Community recognized and trusted in health services of respondents because VBHWs were selected by community member and village leader. Sometime, VBHWs assisted in gathering people for group health education in the community.

4.3.5.2: Factors affecting performance of respondents

Table 4.7 Factors influencing performance of respondent's activities

Variable	Number of respondents	Percent
Salary		
No	135	67.5
Yes	65	32.5
Community support		
No	119	59.5
Yes	81	40.5
Motivation		
No	156	78.0
Yes	44	22.0
Training		
No	146	73.0
Yes	54	27.0
Supervision		
No	170	85.0
Yes	30	15.0
Time		
No	153	76.5
Yes	47	23.5

Source: Survey data, 2019

The result showed that 40.5% (81) of respondents reported that lack of community recognition and supports affected performance. In addition to that, 32.5% (65) of respondents who took part in the study described that lack of enough salary/incentive affected performance of respondent's activities.

In qualitative interview with field supervisor described community support and recognition and transportation that affected performance of respondents.

The community assisted in gathering people for group health education and meeting because respondents were busy with other jobs. For example, if pregnancy mother did not come to them for follow up, village leader or communities informed pregnant women to go VBHW for follow up. Moreover, community also communicated and informed VBHWs severe parents who could not walk in the village. So they would be able to perform home based care service at patient house. During qualitative interview with respondents, similar options were also stated as

They pointed out that the main challenge of health intervention was transportation for patient referral due to hard to reach areas. They don't have own motorbike and enough money to buy fuel. However, sometime, either community or clinic in charge helped them for patient referral.

The community encouraged them to carry out health activities in villages. Moreover, last year community supported them to attend training in township.

4.3.6 Factors influencing attrition of respondents

Result of factors affect attrition is more or less the same with factors affect performance. About 60% (120) of respondents reported that no community support or recognition and motivation/incentive are main cause of VBHWs attrition. The majority of the respondents were of the opinion that respondents were more likely to drop out the work if they are not recognized by community or paid incentive (Table 4.8**)**

Table 4.8: Factors influencing attrition of respondents

Variable	Number of respondents	Percent
No salary		
No	134	67.0
Yes	66	33.0
No community support/recognition		
No	80	39.8
Yes	120	59.7
Old age		
No	172	86.0
Yes	28	14.0
illness/death		
No	176	88.0
Yes	24	12.0
No enough training		
No	170	85.0
Yes	30	15.0
No effective supervision		
No	176	88.0
Yes	24	12.0
Workload/difficulty		
No	173	86.5
Yes	27	13.5
Got job elsewhere		
No	158	79.0
Yes	42	21.0
No time		
No	183	91.5
Yes	17	8.5
Motivation/incentive		
No	83	41.3
Yes	117	58.2

Source: Survey data, 2019

In qualitative interview, respondents showed that got new job in other places and no community recognition and no incentive were major factors of VBHWs attrition. The view was expressed by respondent who was replaced for former VBHWs in the village.

It was found that if community did not support them, they reduced motivation to do their works. In addition to that, no incentive contributed to drop out VBHW and they got better jobs outside the villages.

It was noticed that there was no enough time to provide health care services because they were assigned other job, for instance, school teacher.

4.3.7 Retention mechanism of respondent's health activities

Similar factors that affected performance and attrition of respondents were also reported as retention mechanism for sustaining respondent's activities. The result showed that 80% (149) of respondents reported that community support or recognition was the main mechanism used to retain VBHWs and their activities.

Table 4.9 Retention mechanism of respondents

Variable	Number of respondents	Percent
Should be paid salary		
No	69	34.5
Yes	131	65.5
Community support/recognition		
No	51	25.5
Yes	149	74.5
Community involvement in program activities		
No	72	36.0
Yes	128	64.0
Motivation/incentive		
No	105	52.5
Yes	95	47.5
Give Awards		
No	126	63.0
Yes	74	37.0
Means of transport		
No	149	74.5
Yes	51	25.5

Source: Survey data, 2019

About 66% (131) of respondents reported that payment of salaries is one factors to retain and sustain activities of respondent's activities at community level. 64% (128) of respondents mentioned that community involvement in program activities as way that could also motivate respondents to remain committed to VBHW's work (Table 4.9)

In the qualitative interview, following statement from respondent highlight the above mentioned point of view:

They strongly believed that community involvement and supervisor was crucial to carry out health activities in the village. It was mentioned that more patients visited VBHWs because of community recognition. Moreover, community felt that they had enough health knowledge to provide treatment in the villages. Providing refresher training was one factor that motivate them to carry out health care services for long term. From the view expressed by field supervisor and VBHWs in this study,

It was described that monetary incentive may not always be an efficient approach to retain VBHWs. However, it was suggested that village leader should encourage community to involve and help them. Moreover, regular supervision was also needed so that they became more confident to carry out health activities and reporting. It was mentioned that community did not want to go them who only provide malaria testing and treatment service because community wanted to receive not only malaria service but also other health services such as TB, diarrhea treatment etc. more health service provision and medicine supplies, increased communities trust in the village.

CHAPTER 5
Conclusion

5.1 Findings

Many respondents (90.5%) performed health education, malaria testing and treatment (88.5%), treatment of minor diarrhea (51.5%), TB case detection and TB DOTs/follow up (30.5%). Other activities like reporting and referral and nutrition were also carried out by respondents. respondents in this study performed multi health activities. 59.5% of respondents did more than three tasks or health activities.

The study result showed that 89.5% of respondents enjoyed working as VBHWs in the community because they were willing to help sick community to relieve their health problem in community. In addition to that, receiving medicine and supply and refresher trainings that also motivate respondents to carry out health activities in the village. Moreover, it was also reported that community recognition was also factor to motivate respondents, for instance, respondents are only one heath care providers in the village and they provided medicine for their illness.

The performance of respondents is analyzed on the combination of respondent's ability to always attending meetings, always submit report to supervisor, participating in mobile health care and conducting health education campaign activities. respondents who always carried out in these activities are performing better than respondents who somehow taking part in these activities. The result showed that 57% (115) of respondents scored high on performance, on the other hand, 40% (80) of respondents scored low on performance. 40.5% of respondents mentioned that lack of community supports is major factor that affect their health activities. 32.5% of respondents described that not enough or no incentive for respondents also affected performance of respondents. This study also reported that refresher training and transportation is also associated with performance of respondents.

The main factors influencing attrition and sustainability of respondent's activities in this study were community support/recognition and incentive. 59.7% of respondents in this study who wanted community support/recognition, were more

likely to drop out VBHW work. 58.2 % of respondents who wanted to received incentive were also more likely to abandon respondent activities. Lack of enough training and supervision by some respondents are also reported in this study as factor that influence respondents' activities. For retaining respondents, main retention mechanisms of respondent's activities were community support/recognition (80%), paid salary (66%) and community involvement in respondent's activities (64%)

5.2 Recommendation

According to the findings of this study, the followings action plan are highly recommended.

Community support and recognition is main factor to sustain respondent's activities in the community level. Community engagement activities should be included in project planning, implementation and monitoring. In addition to that, community should involve in respondents' selection. Project staff should do advocacy meeting with community before project implementation so that community will increase awareness of health activities in the community. Moreover, trained respondents should provide quality health care service and proper referral support. Furthermore, village health committee (VHC) should be established/revitalized in the villages. VHC will be composed of village leader, selected communities and village elderly. VHC will support VBHW's health activities such as group health education session, medicine and supplies and patient referral. Community feedback mechanism should be implemented in the village under the supervision of VHC so that community participation would increase in VBHWs health activities.

Effective supervision and regular meeting with respondents should be improved by field supervisor and project staff at township level. This will make respondents feel that they are key players in health care intervention in community level. Providing incentive/salary is one key factor that motivate respondents to carry out health activities for long term. Moreover, non-monetary incentive, for instance, rain coat, T-shirt, medicinal kit box, touch light etc were also recommended to provide. Therefore, sustain amount of incentive/salary be provided as well as non-monetary incentive. Project manager should provide means of transports for respondent's work. This will help improve on their performance as VBHWs.

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Appendices

Appendix 1: Survey Questionnaire

Survey Questionnaires

Influencing Factors that Sustain Village Based Health Workers Activities in Kayin State

SECTION 1: IDENDIFICATION

Date of Interview (dd/mm/yy) ……..
Name of Interviewer…….
Name of Interviewee…….
Township name

Hpa-an ……. 1
Hlaing Bwe……2
Kawkariek……..3
Kyarinn…….…….4
Myawaddy…….……5
Other……..…….6

Interview result

Complete, Interview ……1
Incomplete, Refused…….2
Incomplete, Other……3

_____

SECTION 2: BACKGROUND CHARACTERISTICS OF RESPONDENTS

No	Questions	Coding Categories	Skip to ≠
1.	How old are you now?		
2.	Sex of volunteer	Male…… 1 Female…… 2	
3.	Have you ever attended school?	Yes.....1 No.....2	
4.	What is the highest level of school you attended?	Primary..... 1 Secondary…..2 Tertiary..... 3 Other (specify)..... 5	
5.	What is your religion?	Buddhist. .....1 Christian. .....2 Muslim..... 3 Other (specify)..... 4	
6.	What is your ethnicity?	Sagaw Kayin .....1 Pwo Kayin..... 2 Bwe Kyin .....3 Other (specify)..... 4	
7.	What is your marital status now?	Never married.....1 Married.....2 Devoiced..... 3 Widowed. ..... 4 Other (specify)..... 7	

8.	What is your main occupation?	VBHWs. .....1 Trader .....2 Housewife..... 3 Civil servant ..... 4 Farming…… ..... 5 Other (specify)…… 6	

SECTION 3: ACTIVITIES OF CBHVs AND ATTRACTION

9.	How long have you been working as a health volunteer in this community?	☐☐	
10	What health intervention programs are you involved in this community? Probe : malaria, TB,	1 ---------- 2 ---------- 3 ----------	
11.	What exactly do you do as a health volunteer in this community? **CIRCLE ALL THAT APPLY**	**Yes No** Health education/talk..... 1 2 Malaria testing and treat..... 1 2 Malnutrition screening for Child …….. 1 2 TB case detection…… 1 2 TB DOTs/follow up..... 1 2 Mobile health care visit..... 1 2 Distribution of Clean Delivery Kit……..... 1 2 Treatment of minor diarrhea… 1 2 and reporting/referral..... 1 2 Other…… 1 2 (specify).....	
12.	What motivated you to work as a health volunteer? **CIRCLE ALL THAT APPLY**	**Yes No** Help sick people..... 1 2 To earn income..... 1 2	

		Respect from Community..... 1 2 Community recognition..... 1 2 Enjoy working as health volunteer….1 2 Receive refresher training……. 1 2 Received medicine and supplies ….. 1 2 Other ……. 1 2 (specify)	
13.	What will make you/somebody refuse to work as a health volunteer? **CIRCLE ALL THAT APPLY**	**Yes No** No salary..... 1 2 Workload/Difficult..... 1 2 No respect by comm. members..... 1 2 No support by supervisor ..... 1 2 No support by community..... 1 2 Spouse/family members refusal….. 1 2 No effective supervision…….. 1 2 No time……..…. 1 2 Other……... 1 2 (specify)…….....	
14.	What will make you/somebody agree to work as a volunteer and later dropout? **CIRCLE ALL THAT APPLY**	**Yes No** No salary..... 1 2 Workload/Difficulty..... 1 2 No respect by community..... 1 2 No support by superiors..... 1 2 No support by comm. members…... 1 2 Spouse/family members refusal…... 1 2	

		No effective supervision…… 1 2 Old Age…….. 1 2 No Motivation/Incentives……..… 1 2 No time……. 1 2 Got job elsewhere...…….. 1 2 Other……. 1 2 (specify)……	
15.	What do you think should be done to attract people to accept to work as health volunteers?	Should be paid salary 1 Receive regular training …… 2 Respect by community members….. 3 Motivation/Incentives. 4 Provide logistics for the work… 5 bicycles/boots/raincoat……. 6 Awards…… 7 (specify)……. 8	

SECTION 4: SELECTION, TRAINING, SUPERVISION AND PERFORMANCE

16.	How are health volunteers selected?	By the elders. ..... 1 Community members.....2 Community group leaders.....3 Relatives/family members..... 4 Program officers…….....5 By choice……6 Other (speify)…….... 8	
17.	How were you selected?	By the elders. ..... 1 By the assembly person. .....2 Community members.....3 Community group leaders. ……. 4 Relatives/family member. ..... 5 Program Officer…….…….....6 By choice……..……... 7 Other (specify). 8	

18.	What qualities must one have before you are selected as a health volunteer? **CIRCLE ALL THAT APPLY**	**Yes No** Hard working person.....1 2 Come from the community.....1 2 Understand the local language.....1 2 Have patience/respect for people.....1 2 Read and write.....1 2 Have interest in the work.....1 2 ready to work without pay.....1 2 Trustworthy person……..1 2 Others……..1 2 (specify).....	
19.	Did you receive training when you were first recruited? If "No" Skip to Q25	Yes. 1 No. 2	
20.	How long were you trained?	Less than one week.....1 One week ..... 2 Two weeks.....3 Three weeks. .....4 Other (specify). .....5 NA……88	

21.	What were you trained on? ***CIRCLE ALL THAT APPLY***	**Yes No** Health education ……...…… 1 2 Identify/treat simple malaria…….. 1 2 TB case identify and follow up……. 1 2 Maternal and Child Health……...… 1 2 Family planning ……..…….…... 1 2 Nutrition…… 1 2 Other……. 1 2 (Specify)…… NA…… 88	
22.	Do you think the training was adequate to help you do the work well? If "Yes", go to Q 24	Yes.....1 No…… 2 NA……... 88	
23.	If No, why? (please, write two reasons on the lines provided)	_____ _____ NA…… 88	
24.	Where were you trained?	At village 1 At clinic ……. 2 KDHW Hpa-an office 3 Other (specify). 4 NA…… 88	
25.	Are you supervised? If "No", go to Q30	Yes. 1 No. 2	

26.	How often are you supervised?	Once a week.....1 Once in two weeks.....2 Once a month.....3 Twice a month……. .....4 Once every three months…….5 Other (specify)……6 NA……..88	
27.	Who supervises you?	No supervision…….. .....1 Field supervisor.....2 Clinic in-charge. .....3 KHDW project staff.....4 Community mobilizer……. ....5 Other (specify)……. .....6 NA……..88	
28.	How will you grade the supervision your receive for your work	Very Effective……..……1 Effective……2 Somewhat effective…….....3 Noteffective……....4 NA……..88	
29.	How does supervision help in the work that you do?	Helps me do the work well…… ....1 Motivate me to work harder……...2 Makes me feel important…… 3 Makes me more committed….....4 Other (specify)……. .....5 NA……..88	

30.	How often do you do your work as a health volunteer?	Daily…….....1 Once every week……...2 Twice a week…… .3 Once every two weeks…… ...4 Once every month……..5 Other (specify)…… 6	
31.	Do you give reports to your supervisor? If	Yes…… .1 No……...2	
32	How often are you supposed to submit reports to your supervisor?	Every week……..……...1 Every two weeks month……..….....2 Every ……. 3 Every quarter…….....4 (specify)……5 NA……88	
33.	How often are you able to submit your reports to your supervisor?	Always…… ...1 Somehow…… ...2 Rarely…….....3 NA……..88	
34.	Are there regular meetings? If "No", go to Q37	Yes…… .1 No……...2	
35.	How often do you meet?	Once every week……..…1 Once every two weeks…… ..... 2 month……..…….…. ..... 3 (specify)……. ..... 4 NA…… 88	
36.	How often are you able to attend these meetings?	Always……. 1 Somehow…….....2 Rarely……..…….3 NA…….... 88	

37.	How often are you provided medical supplies?	Monthly…….....1 Quarterly…..…… …..…… .....2 Sometimes …….....3 Rarely …….. 4	
38.	What benefits does the community get from your work? **(Write three benefits on the lines)**	_____ _____ _____	
39	What are the factors that affect your performance in the work? **CIRCLE ALL THAT APPLY**	**Yes No** No salary…….. 1 2 No community support/ recognition…… 1 2 Lack of motivation/incentive… 1 2 No enough training…..... 1 2 No effective supervision…..... 1 2 Workload…….....1 2 No time…… 1 2 No medical supplies…… 1 2 No means of transport…… 1 2 Other…… 1 2 (specify)….....	

40.	What do you think if done will help you do the work well? **CIRCLE ALL THAT APPLY**	**Yes No** Should be paid salary……..... 1 2 Community support/ recognition..... 1 2 Motivation/incentive…… 1 2 Enough training…… 1 2 Effective supervision....…… 1 2 Reduce workload…… 1 2 Provide means of transport….. 1 2 Provide logistics…… 1 2 Other…… 1 2 (specify)….....	

SECTION 5: RETENTION AND SUSTAINABILITY OF CBHVs ACTIVITIES

41.	Are people sometimes selected and trained as volunteers and later leave the work? If "No", go to Q45	Yes….....1 No…..... 2	
42.	Do you know of any volunteer who has left the job?	Yes……1 No…… 2 NA…….…..…..8	
43.	In the past two years, how many volunteers do you know have left the job in this sub district?	[ ][ ] NA…… 88	
44.	What in your opinion makes them leave? **Circle all that apply**	**Yes No** No salary……...1 2 No comm. support/recognition …...1 2 Old age……...….....1 2 No motivation/incentive…….. 1 2 Illness/death…..... 1 2 No enough training….....1 2 No effective supervision….....1 2 Work is difficult/workload.....1 2 Got job elsewhere…….....1 2	

		No time……..…1 2 Other……..1 2 (specify)…. NA…….88	
45.	What in your opinion affects or influences sustainability of CBHVs activities in this sub- district? **Circle all that apply**	**Yes No** No salary……. 1 2 No motivation/incentives.....1 2 No community support/recognition.... 1 2 No effective supervision..... 1 2 No enough training……..... 1 2 No com. Involvement in activities….. 1 2 No family/spouse support…..…….. 1 2 Got job elsewhere……...…… 1 2 Other …….. 1 2 (specify)….....	
46	What do you think should be done to retain Village Health Worker? **Circle all that apply**	**Yes No** Should be paid salary…..…….....1 2 Com. support/recognition.....1 2 Community involvement in program activities….....1 2 Motivation/incentives…...…….1 2 Give Awards……..1 2 Means of transport…….1 2 Other……..1 2 (specify)…….....	

THANK YOU FOR YOUR TIME!!!

Appendix 2: Interview Guide for Village Based Health Workers

Interview Guide for Village Based Health Volunteers

Interview ID	:
Name of facilitator	:
Date of interview	:
EHO name	:
Township name	:
Number of years working as a malaria/TB volunteer for EHO	:
Educational background (highest level of completed education)	:
Gender	:
Marital status	:
Number of people in household	:
Number of children <18 yr in household	:

Age:

Preamble: CPI is conducting an assessment of working conditions for malaria and TB volunteers for 2 ethnic health organizations in Kayin State of Myanmar. Your responses will remain anonymous and confidential.

You are among the volunteers for KDHW that have been randomly selected to participate in this study as a respondent. Your participation is entirely voluntary with no direct benefits to you personally, although your honest responses may contribute towards improving volunteers' working situation and the quality of providing health care services in this area.

Any information you provide will be kept solely at CPI and treated in the strictest confidential manner. All information will be aggregated before sharing with KDHW to protect your identity.

If you need any further clarification, please feel free to ask me.

I. Tasks

1. Describe a typical day when you work as a volunteer. What type of work-related activities do you do during the day?
2. Tell me more about your daily tasks.
    a. What services are assigned to you?
    b. What services do your community members expect from you?
    c. What relationship is there, if any, between your assigned services and the services that are expected by your community?
3. Tell me about your job description. What is the relationship, if any, between the services you provide and your job description?
    a. Are there any tasks that are not within your job description but you still have to perform them? Why or why not?
    b. Are there any tasks that are within your job description, but you do not perform them? Why or why not?

4. What attracted or motivated you to accept to work as health volunteer?
    a. What exactly motivated you to work for these number of years as health volunteer

5. Tell me about the training(s) that you have received before. How many? How often? How, if at all, does your training relate to the services you provide?
    a. How were you selected and trained as a health volunteer?
    b. Did you receive adequate training for every service that you provide? In which tasks are you untrained or inadequately trained? Are there tasks that you must provide despite having no or inadequate training? Why or why not?
    c. How if at all do you cope with the tasks for which you are untrained, or not trained enough?
    d. Do you get the opportunity to utilize your training and skills effectively as a volunteer? Please explain. Which training or skills, if any, do you not get to use effectively as a volunteer?
6. What challenges, if any, do you face in fulfilling your tasks as a volunteer?
    a. How, if at all, do you manage these challenges?
    b. Do you think that you are adequately trained and prepared to face these challenges? Why or why not?
7. Tell me about other health providers that you interact with (supervisors, AMWs, etc.). What is your working relationship with them?
8. What is your opinion of the number of health providers, including volunteers like yourself, for the community you serve, and why?

II. Productivity

1. How do you perceive the bulk, intensiveness, or difficulty of your daily tasks? Please explain.
2. How, if at all, do you think that your workload affects your performance in general?

3. How, if at all, are your daily tasks shared with other village-based health providers (AMWs, etc.) who serve your community?
    a. How is the workload distributed between multiple providers?
    b. Is this distribution fair? Why or why not?
    c. How do you think that the workload should be distributed between multiple providers?
    d. In your opinion, do you think that there is a difference of workload between VBHWs like you and other community-based providers? Why or why not?
    e. How, if at all, do you think that other health providers' workload affects patient care?
4. What responsibility does the community have toward your work as a volunteer?
    a. What does the community do to help you work well?
    b. What does the community do that affect or affected your work as volunteer?

5. Tell me about how the workload is distributed between higher cadres and VBHWs.
    a. What tasks do higher cadres do?
    b. How is the workload distributed between the higher cadres (medics, supervisors) and volunteers?
    c. Is this distribution fair? Why or why not?
    d. What differences in workload, if any, are there between the higher cadres and volunteers?
    e. How, if at all, do you think that these differences affect each cadre's performance in patient care?
6. What other thing do you do apart from working as a volunteer? Probe: do you think that has an effect on your performance as a volunteer? Why?
7. In your opinion, which provider(s) usually bears the burden of the workload?

III. Work environment and motivation

1. How do you feel about your job? Are you satisfied with it? Why or why not?
2. What motivates you to remain in your post?
3. What do you like about your job? What, if anything, would you change about it?
4. How do you feel about the incentives that you receive as a volunteer?
5. What general factor do you thing affect sustainability of volunteer activities in this community? Probe
    a. Management level factors (funding, training, supervision)
    b. Community level factors (Community involvement in project planning, implementation, Community involvement in selection of health volunteer and Community recognition and support to volunteer)
    c. Individual level factors (Motivation, recognition, role, workload and spouse and family influence)

6. What do you think are the best ways to help sustain health intervention and activities of VBHWs in this townships?
7. In your opinion, what are the reasons why people who are recruited as health volunteer sometimes leave job?
8. What do you think can be done to help retain health volunteer in this township?

9. Where do you see yourself in 3 years?

IV. Recommendations

1. What, if anything, would you recommend be done at the community level to improve your ability to work as a VBHW?
2. What, if anything, would you recommend be done at the facility level to improve your ability to work as a VBHW?
3. What, if anything, would you recommend be done at the higher level within the EHO to improve your ability to work as a VBHW?
4. What, if anything, would you recommend be done at the township or state level to improve your ability to work as a VBHW?

Appendix 3: Interview Guide for Field Supervisor

Interview Guide for Field Supervisor

Interview ID	:
Name of facilitator	:
Date of interview	:
EHO name	:
Township name	:
Number of years working as a malaria/TB volunteer for EHO	:
Educational background (highest level of completed education)	:
Gender	:
Marital status	:
Number of people in household	:
Number of children <18 yr in household	:

Age:

Preamble: CPI is conducting an assessment of working conditions for malaria and TB volunteers for 2 ethnic health organizations in Kayin State of Myanmar. Your responses will remain anonymous and confidential.

You are among the volunteers for KDHW that have been randomly selected to participate in this study as a respondent. Your participation is entirely voluntary with no direct benefits to you personally, although your honest responses may contribute towards improving volunteers' working situation and the quality of providing health care services in this area.

Any information you provide will be kept solely at CPI and treated in the strictest confidential manner. All information will be aggregated before sharing with KDHW to protect your identity.

If you need any further clarification, please feel free to ask me.

SECTION 1: Health interventions, VBHWs activities and attraction of VBHWs into health programs

1. What are the health intervention programs you have in this district/sub-district? **Probe:** how long have these interventions been going on in this district

2. What role do you play on these health intervention programs in this district/sub-district?

Probe: Role on the activities of the VBHWs, how many staff are involved in the health interventions in the district or sub-district?

3. What are the health interventions VBHW are involved in this district/sub district?

4. What are the activities that the volunteers are expected to carry out?

5. What are the things that you think attract people to accept to work as health volunteers in this district/sub-district? (what motivated them to become health volunteers)

SECTION 2: Selection, training, supervision and performance of VBHWs

6. How were the community volunteers selected? Probe for the processes involved in the selection

7. How were they trained and deployed into the community?

8. What do you have to say regarding the level of supervision of volunteer activities?

9. What would you say concerning the performance of the health volunteers in this district/sub-district? **Probe:** are community needs met, are the aims and objectives of the interventions achieved, CBHVs commitment to the work, competencies, attending meetings etc.

10. What general barriers do you think volunteers face when trying to do their job

11. What responsibility does the community have towards the health volunteers? **Probe:**
    a. What do they do to help them
    b. What do they do that affect their work

SECTION 3: Funding Retention mechanisms and sustainability of VBHWs activities

12. What are the main sources of funding for the health intervention in this district? **Probe:** any alternative funding sources locally, what do you do to sustain these health interventions when the main funding ends?

13. How are the programs designed and implemented in this district or sub-district? **Probe:** What is the level of involvement of the community and stakeholders, what is the level of involvement of other health staff in the activities of community health programs in this district or sub-district?

14. What are the factors in your opinion affect retention and sustainability of VBHWs activities in this district or sub-district? (things that will make them stay or dropout as health volunteers) **Probe:**
    a. Management level factors
    b. Community level factors
    c. Individual volunteer factors

15. What do you think is the best way to sustain

a. Community-based health intervention programs

b. The activities of VBHWs in your district.

16. What is the rate of retention of health volunteers in this district? **Probe:**

17. What are the mechanisms put in place to retain health volunteers in your district or sub-district?

Do you have any questions? Thank you very much for your time