Impact of the Expansion of the Health Surveillance Assistants Programme in Nkhatabay District of North Malawi

Simon Willard Ntopi

Student Number: 2826794

A mini-thesis submitted in partial fulfillment of the requirements for the degree of Masters in Public Health in the School of Public Health, Faculty of Community and Health Sciences, University

of the Western Cape

UNIVERSITY of the WESTERN CAPE

Supervisor: Professor Uta Lehman

November, 2010

Keywords:

Community health workers

Health Surveillance Assistants

Supervision

Continuing education

Roles of Health Surveillance Assistants

Support

Training

Health post

Challenges

Essential Health Package



Abstract

This study investigated the challenges facing a category of community health workers (Health Surveillance Assistants) in rural Malawi district of Nkhatabay following the expansion of their programme funding from the Global Funding to fight AIDS, Tuberculosis and Malaria (GFATM).

The objectives of the study were:

- 1. To describe the roles of HSAs in the community.
- 2. To understand the changes in the roles of HSAs after the expansion of the HSAs programme.
- 3. To explore HSAs needs for continuing education
- 4. To discuss infrastructure support and supervision required for the effective performance of the HSAs
- 5. To explore the challenges facing HSAs in the field after the expansion of the programme.

A qualitative phenomenological study was conducted. The data collection methods used were focus group discussions and in-depth interviews with key informants. The data was analyzed manually, using mainly content analysis.

The broader picture that has emerged from this study is that the challenges facing the HSAs existed even before the expansion. The major issues identified include: inadequate supervision of HSAs and that although supervision is considered as a vehicle for insuring quality assurance in the delivery of health services it receives little support from the District Health Management Team (DHMT).

For the effective delivery of the EHP at the community the HSAs require infrastructure support in form of buildings where they can carry out their activities, equipment such as refrigerators and supplies like drugs; that can enable the HSAs to adequately deliver the EHP at the community level. Further to this they also need other support in terms of bicycles, uniforms and construction materials for demonstration purposes and all other tools that can make the HSAs function at the health post.

The study has noted that HSAs are facing serious accommodation problems due to the lack of involvement of communities in their selection and that many HSAs are recruited from outside their catchment areas.

The study has put forward some recommendations to the Ministry of Health and other stakeholders like United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) to consider in making the HSAs programme in Nkhatabay district effective. Some of the recommendations made are that supervision of the HSAs by the EHOs and the ECHNs should be intensified and that infrastructure support should be provided to the HSAs for them to be able to deliver the EHP. Infrastructure like buildings and equipment like refrigerators and bicycles should be provided to HSAs and ensure that there is a plan for their maintenance.

Declaration

I declare that a study exploring the *challenges facing the HSAs after the expansion of their programme in Nkhatabay district of North Malawi* is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Full NameSimon Willard Ntopi	Date13 th November, 2010		



Acknowledgements

I owe profound gratitude to the Ministry of Health in particular to the Director of Preventive Health Services Dr S.Kabuluzi, the Chief Environmental Health Officer Mr. H.Masuku and the National PHC Programme Manager Mr. E.Nkhono for their support during the entire training period. I am also grateful to my supervisor Professor Uta Lehmann who has been very useful with her constructive criticism, comments and suggestions which have both made me able to achieve quality in my minithesis and also shape my future as a Public Health Researcher. Additional thanks go to the District Health Officer Nkhatabay for giving me permission to carry out the study in Nkhatabay district. A lot of thanks go to the key informants, the HSAs that participated in focus group discussions and most specifically the DEHO for ensuring that interviewees and participants in the focus group discussions were available. Also great thanks go to the people at my office for their support. Most specifically to Mr P.Munthali the District Health Officer for Rumphi and his predecessor Mr B.Chavinda for their support and understanding during the entire study period.

Finally, thanks to members of my family –Mary, Maurine, Carol, Gift –and others for their understanding and for bearing all the inconveniences caused while undertaking the research.



Acronyms

AEHO Assistant Environmental Health Officer

ANC Antenatal Clinic

CHAM Christian Hospital Association of Malawi

CHDs Child Health Days

CHV Community Health Volunteer

CHW Community Health Worker

DEHO District Environmental Health Officer

DHMT District Health Management Team

DHO District Health Officer

DOTS Directly Observed Treatment

ECHN Enrolled Community Health Nurse

EHO Environmental Health Officer

EHP Essential Health Package

GFATM Global Funding to Fight AIDS, Tuberculosis and Malaria

HA Health Assistant

HSA Health Surveillance Assistants RSTTY of the

HTC HIV Testing and Counselling

IPT Intermittent Presumptive Treatment

MOH Ministry of Health

NGO Non-Governmental Organization

OPD Out Patient Department

PHC Primary Health Care

PMTCT Prevention of Mother to Child Transmission

PRSP Poverty Reduction Strategic Paper

SHSA Senior Health Surveillance Assistant

TB Tuberculosis

UNICEF United Nations Children's Fund

VCCT Voluntary Counseling and Testing

VHC Village Health Committee

WHO World Health Organization

Table of Contents

Αl	ostract		3
1	Cha	pter 1: Introduction and background	10
	1.1	Introduction	10
	1.2	Background	11
	1.2	.1 The Structure of the Health System in Malawi	11
	1.2	.2 Health Post	11
1.2.3		.3 Health Centre	12
	1.2	.4 Rural Hospitals	12
	1.2	.5 District Hospitals/Christian Hospitals Association of Malawi (CHAM)	12
	1.2	.6 Central Hospitals	12
	1.2	.7 The Delivery of the EHP	14
	1.2	.8 Malawi's Emergency Human Resources Plan	14
	1.3	Statement of the Problem	15
	1.4	Purpose of study	
	1.5	Study Setting	
	1.6	Aim and Objectives of the Study	
2	Cha	pter 2: Literature Review	
	2.1	Chapter Overview	18
	2.2	The Roles of CHWs in Health Services Delivery Training of CHWs	19
	2.3	Training of CHWs	21
	2.4	Infrastructure Support & Supervision	
	2.4.	1 Infrastructure support for CHWs	22
	2.4.	2 Supervision of CHWs	23
	2.5	Career Structure for Community Health Workers	24
	2.6	Recruitment of Community Health Workers	25
	2.7	Use of Standardized Guidelines and Protocols	25
	2.8	Conclusion	26
3	Cha	pter 3: Research Design and Methodology	27
	3.1	Study Design	27
	3.2	Study Population	27
	3.3	Sample Size and Sampling Procedure	27
	3.4	Data Collection Tools	28
	3.5	Data Analysis	29
	3.6	Validity and Reliability	29
	3.7	Limitations of the Study	30
	3.8	Ethical Considerations	30

4	C	Chapter 4: Results				
	4.1	Т	he History of HSAs in Malawi	31		
	4.2	R	oles of Health Surveillance Assistants in Health Services Delivery	32		
	4.3	Н	ealth Surveillance Assistants Training and Needs for Continuing Education	36		
	4	.3.1	Health Surveillance Assistants Training	36		
4.3.2		.3.2	Health Surveillance Assistants Needs for Continuing Education	38		
	4	.3.3	Use of Standardized Guidelines and Protocols	38		
	4.4	S	upervision of Health Surveillance Assistants	39		
	4.5	R	ecruitment of HSAs	42		
	4.6	С	areer Prospects for HSAs	43		
	4.7	Ir	frastructure and Other Support for Health Surveillance Assistants	44		
	4	.7.1	Uniform and Protective clothing for Health Surveillance Assistants	45		
	4	.7.2	Construction Materials for Demonstration Toilets	46		
	4	.7.3	Funding for Training Village Health Committees (VHCs)	47		
	4.8		ummary of results			
5	С	hapt	er 5: Discussion	48		
	5.1	R	oles of HSAs in Health Services Delivery	48		
	5.2	Н	ealth Surveillance Assistants Training and Needs for Continuing Education	49		
	5	.2.1	Health Surveillance Training	49		
	5.2.2		Health Surveillance Assistants Needs for Continuing Education	50		
	5.3	Ir	ofrastructure and Other Support for HSAs	51		
	5	.3.1	Infrastructure Support for HSAs	51		
	5.3.2		Other Support for HSAs	52		
	5.4	С	areer Prospects for HSAs	52		
	5.5	S	upervision of HSAs	52		
	5.6	R	ecruitment of CHWs	54		
6	C	hapt	er 6: Conclusion	54		
7	Recommendations			55		
8	Appendices57					
9	R	Reference List:67				

List of Appendices

Appendix One: Interview Guide with the DEHO

Appendix Two: Interview Guide with EHOs and ECHNs

Appendix Three: Focus Group Discussion with Old Health Surveillance Assistants

Appendix Four: Focus Group Discussion with New Health Surveillance Assistants

Appendix Five: Participant Information Sheet

Appendix Six: Record of Informed Consent to Conduct Interview

Appendix Seven: Registration and Ethics Clearance Application Form



1 Chapter 1: Introduction and background

1.1 Introduction

In the Malawian health system, primary and community level care is primarily rendered by the Health Surveillance Assistants (HSAs). They are a cadre of community health workers who started operating in the 1950's and 1970's when they were recruited as "small pox vaccinators" and "cholera assistants" respectively (Kadzandira & Chilowa, 2001). Their main mandate in the early years was surveying health risks and providing basic care before referral to a health facility ((Hermann et al., 2009). Over the years the scope of their mandate has widened considerably and now includes vaccination of children under five, growth monitoring, sanitation, water source protection and water treatment, disease surveillance, health and nutrition advice, provision of family planning services and the follow up of tuberculosis (TB) patients (Kadzandira & Chilowa, 2001). They have been used successfully in combating other diseases like cholera, diarrhoea, malnutrition, the six childhood immunizable diseases and the promotion of sanitation at community level (MOH, Undated). In the context of HIV/AIDS, the HSAs roles have expanded to include additional tasks e.g., HIV prevention, VCT, basic care for opportunistic infections, administration of cotrimoxazole prophylaxis, ART defaulter tracing, prevention of mother-to-child transmission for the new born and general support to ART clients (Hermann et al., 2009).

In 2007, government through the Ministry of Health (MoH) and with support from Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM) recruited 5961 additional HSAs country wide. The number of HSAs before the expansion was 4800 and was increased to nearly 11000 to enable the HSA: Population ratio to reach 1:1000 (MoH, 2010). This expansion was aimed at addressing the critical shortage of health workers in Malawi. They were to deliver the Essential Health Package (EHP) at the community level.

This study intended to explore the impact of the HSAs programme expansion by GFATM. The impact of the extension of the HSAs programme and the challenges they face are at the centre of this study.

1.2 Background

1.2.1 The Structure of the Health System in Malawi

Health services in Malawi are provided at six levels of health delivery, namely: health posts, health centres, rural hospitals, district hospitals, central hospitals and specialist hospitals. The proprietors of these health facilities are: government, Christian Hospital Association of Malawi (CHAM), Non Governmental Organizations (NGO's), private practitioners and some large companies. A health facilities study conducted in 2003 revealed that there are 617 health facilities in Malawi and that the MoH is the largest provider of health services in Malawi responsible for 60% of the health facilities while 25% are CHAM facilities (MoH, 2004).

1.2.2 Health Post

The health post in Malawi is a first community based and very basic level of service delivery. At a typical health post in Malawi there may be no infrastructure such as buildings, electricity, running water, refrigerators, drug kit and other supplies and no presence of other health workers except the HSA. The services of the HSAs at the health post are supported by the village health committees (VHCs), the village health volunteers (VHV) and the members of the community. When a health post stocks drugs it is commonly referred to as a village clinic. The services at this level are provided by the Health Surveillance Assistants. The services that are provided at health posts based on the delivery of the Essential Health Package (EHP) (see below) are mainly those that are related to first line (curative) care e.g., childhood immunizations, treatment of minor illnesses, sanitation promotion, health education and home visits.

It is also important to note that some EHP services are not provided by all HSAs. For example, a few HSAs in Nkhatabay district are involved in the treatment of minor illnesses at a health post. The determining factors for activities to be carried out at a health post are availability of skills and resources required to perform the activity. For example, after initial training HSAs skills are not adequately skilled to deliver curative care, and for them to do so they need additional training. Further to this, they may also need drugs to be available.

1.2.3 Health Centre

The health centre is staffed by one Medical Assistant, two nurses and one Assistant Environmental Health Officer (AEHO). But this is not always the case; sometimes the health centre may only have one nurse instead of two due to critical shortage of nurses. The District Health Management Team (DHMT) provides support and supervision to the health centre. In addition to secondary level health care services that are provided at health centres they also provide primary level health care services similarly to a health post. They also provide supervisory and referral support to the health post.

1.2.4 Rural Hospitals

The services provided at a rural hospital are similar to those that are provided at a health centre with admission of cases being the only difference.

1.2.5 District Hospitals/Christian Hospitals Association of Malawi (CHAM)

District hospitals are referred to as referral health facilities for the health centres. District hospitals, through their Out Patients Department (OPD), also serve as health centres for the nearby township catchment population. Services at the district hospital are provided by clinical officers, nurses, environmental health officers, health surveillance assistants and other paramedical staff, and sometimes their services may be augmented by the services of a medical doctor. The EHP Services that are delivered at the District and CHAM institutions which are over and above those delivered at the health centre level are mainly concerned with the delivery of secondary level health care services which include management of complications, administration of antiretroviral therapy and many other services. They refer complicated cases to the central hospitals and receive referrals from health centres.

1.2.6 Central Hospitals

Similarly, central hospitals act as referral health facilities for the district hospitals and they also act as district hospitals for the districts where they are located. The typical district

health system in Malawi is diagrammatically presented in Fig: 1.

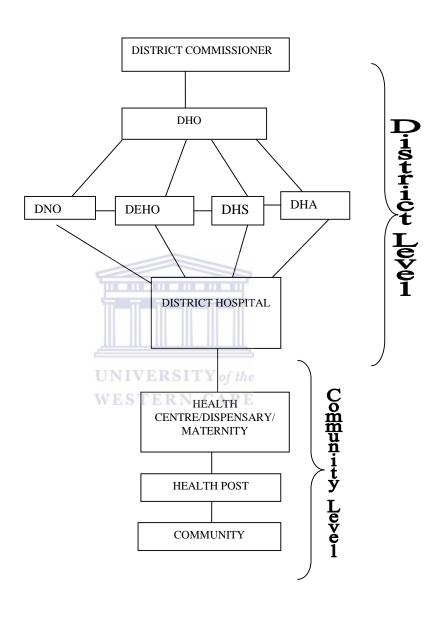


Fig: 1 Structure of District Health System

KEY

DHO= District Health Officer

DEHO=District Environmental Health Officer

DNO= District Nursing Officer

DHSA=District Hospital Services Administrator

DHA= District Hospital Accountant

1.2.7 The Delivery of the EHP

The overall objective of the Malawi government with regard to health is to:

" raise the level of health status of all Malawians by reducing the incidence of illness and occurrence of premature deaths in the population" (PSRP, 2002).

In order to achieve this objective, the Ministry of Health in Malawi introduced the Essential Health Package (EHP) in 2002. Many Malawians lack access to health care due to inadequate human resources, insufficient infrastructure and insufficient medical supplies and drugs (Kadzandira, 2002). Improved access to the Essential Health Package (EHP) and other health-related activities are considered key to the improvement of the health status of Malawians.

The EHP focuses mainly on those conditions and service gaps that disproportionately affect the health of the poor and disadvantaged populations. It is aimed at bringing access to a minimum standard of health care free of charge to everyone at the point of service delivery (Ministry of Health (MoH), 2004). The rationale for the EHP was to improve access to quality health care at all levels. Government wanted to provide free services to the people of Malawi, and at the same time strengthening the capacity of health facilities to deliver the EHP (MOH, 2004). Under the EHP drugs, equipment and medical supplies would be made readily available, some health posts would be upgraded to health centres and other health facilities would be rehabilitated to enable them deliver the EHP (MOH, 2004).

1.2.8 Malawi's Emergency Human Resources Plan

The shortage of human resources in Malawi's health sector is among the most severe in sub- Saharan Africa. It creates a lack of capacity to deliver health services, especially in rural areas where primary health care is severely compromised. In addition to this, staffing levels for the planned rollout of antiretroviral treatment (ART) and other HIV/AIDS-related services were inadequate (Palmer, 2006; WHO, 2008; Manafa et al, 2009). Furthermore, the implementation of the EHP scale-up was critically slowed down, with only 10% of the 617 facilities satisfying the human resources requirements for delivering EHP in 2003 (MoH, 2004). The human resources requirements for delivering the EHP at a health centre are one medical assistant, one assistant environmental health officer and two nurses.

In response to this acute shortage of human resources the Ministry of Health in 2004 developed the Six-Year Emergency Human Resources Plan (EHRP) in consultation with other stakeholders and after a thorough situation analysis was conducted. Human resources are one of the six components of the "Joint Programme of Work" for the health sector which is a policy that gives direction to the implementation of EHP in Malawi (WHO, 2008). The initial goal of the EHRP was to train the staff required to deliver the Essential Health Package (EHP) but later it was revised to target staffing levels similar to those of Tanzania, which fall below WHO standards but were felt to represent an attainable interim goal. The EHRP in the Joint Programme of Work for the sector wide approach (SWAp) drawn up for the period 2004-2010 falls within pillar number six which is human resources (WHO, 2008). The program focuses on retention, deployment, recruitment, training and tutor incentives for 11 priority cadres (doctors, nurses, clinical officers, medical assistants, pharmacists, laboratory technicians, radiographers, physiotherapists, dentists, environmental health officers and medical engineers). For example, one of the measures of the EHRP was a six year Emergency Training Program which would allow new entrants into the labour force. In 2001, this plan covered nursing, paramedics and lower-level staff (HSAs). In addition, the programme advocates for other innovative approaches to addressing the HR crisis in Malawi's health sector, such as the expansion of the health surveillance assistant cadre (WHO, 2008).

It is against this background of shortages of human resources that the number of HSAs was set to double and there was high expectation that they would contribute towards improved health service coverage in Malawi, without considering the challenges this would bring to the programme (Mafana et al, 2009).

1.3 Statement of the Problem

Since its inception the HSAs programme in Malawi has used health surveillance assistants in a number of health programmes at the district level. Very recently, the HSAs programme, with the funding from the Global Fund, expanded the programme to recruit more HSAs. It is strongly believed that this has created challenges for the HSAs programme in the areas of training, supervision and support. Many HSAs to date still remain either unsupervised or poorly supervised and without adequate support. To date, no in-depth study has been

conducted to explore in detail what challenges HSAs are facing after the expansion of the programme and taking into consideration the views of the HSAs themselves and their supervisors, although limited reports about HSAs have been provided by the Ministry itself and other donors interested in the work activities of the HSAs.

It is hoped that this study will inform government decisions on the type of support and supervision required by HSAs; their roles, recruitment and training needs. It will be used to improve service provision and the general motivation of the HSAs in Malawi as result of improved understanding of the challenges faced by the HSAs.

1.4 Purpose of study

The purpose of this study is to better understand the challenges of the HSA programme and to inform government policy with regard to the planning, training and support requirements for HSAs, using a case study of one rural district. Furthermore, the study will inform other managers and all concerned groups on what type of supervision, incentives and general support HSAs may require for their effective performance.

UNIVERSITY of the WESTERN CAPE

1.5 Study Setting

The study was conducted in Nkhatabay district, a rural district in Northern Malawi with a population of over 213,000.

Nkhatabay district is located along the western shore of Lake Malawi and its people are engaged in fishing which is the major source of income in the district. The district has a total land surface area of 4,071 square kilometres and a population density of 53 square kilometres (NSO, 2009). The majority of the population, nearly 90%, live in rural areas with a few living in semi-urban area surrounding Nkhatabay district headquarters. The district has 21 health facilities (health centres and the district hospital), but 94% of these fall short of the standard staff norms to provide the Essential Health Package (EHP) (Northern Zone Health Support Office (NZHSO), 2010). Before the expansion of the programme the district had a total number of 85 HSAs with nine Environmental Health Officers (EHOs) and four Enrolled Community Health Nurses (ECHN). After expansion the number of HSAs came to

181. It more than doubled the number of HSAs, without any increase in the number of EHOs and ECHNs as supervisors.

1.6 Aim and Objectives of the Study

The aim of the study was to explore in detail the impact of the rapid expansion of the HSAs programme in Nkhatabay district.

The objectives of the study were:

- 1. To describe the roles of HSAs in the community.
- 2. To understand the changes in the roles of HSAs after the expansion of the HSAs programme.
- 3. To explore HSAs needs for continuing education
- 4. To discuss infrastructure support and supervision required for the effective performance of the HSAs
- 5. To explore the challenges facing HSAs in the field after the expansion of the programme

2 Chapter 2: Literature Review

2.1 Chapter Overview

Community Health Workers (CHWs) are known by many different names internationally, e.g., HSAs, Health Assistants and health volunteers. The World Health Organization has defined CHWs as follows:

"Community health workers should be members of communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system but not necessarily part of its organization, and have shorter training than professional health workers" (WHO, 2007:1).

The Malawian HSAs meet some of these criteria, although they do not always come from the community they are working in, and communities today do not play a direct role in their selection, as they are public servants and are paid or employed by government (Kadzandira & Chilowa, 2001). They are considered community health workers because they are community based (Hermann et al., 2009) and their training period is substantially shorter than the training for professional health workers (Frankel, 1992 as cited by Bhattacharyya et al., 2001). HSAs have existed since the 1960s and 1970s when they were recruited as "small pox vaccinators" and "cholera assistants" (Hermann et al., 2009). The Ministry of Health subsequently decided to retain them and reassigned them new roles of disease surveillance and provision of basic care and referral to a health facility (Hermann et al., 2009). Over the years the HSAs' mandate has widened and now encompasses a wide range of activities that include immunizations, growth monitoring, sanitation, water source protection and many other activities. They are widely known and fully established in the Malawian health system (Hermann et al., 2009).

In this literature review some aspects of CHW programmes have been covered based on the objectives of the study as follows:

• The Roles of CHWs in Health Services Delivery

- Training of CHWs
- Infrastructure Support and Supervision
- Supervision of CHWs
- Career Structure for CHWs
- Recruitment of CHWs
- Use of Standardized Guidelines and Protocols

2.2 The Roles of CHWs in Health Services Delivery

The use of community health workers has been identified as one strategy to address the growing shortage of health workers, particularly in low-income countries. This dates back as long as 50 years ago, when the Chinese barefoot doctors started implementing community based health activities (Lehmann & Sanders, 2007). They were used for small pox vaccinations, prevention of venereal diseases and control of water borne diseases e.g., schistosomiasis and malaria. Rohde (1987) further informs us that there was a shift of emphasis in the roles of these bare foot doctors from preventive to curative work. This was appropriate, in view of the wide success of preventive programs which no longer demanded as much attention from health personnel as previously.

These early Community Health Workers (CHWs) successfully achieved their tasks without significant involvement of medical doctors. Contextually, the settings in China at that time were similar to the poor resource settings in Malawi now with regard to resource constraints and the unavailability of medical personnel, thus bearing important lessons for the Malawi programme (Rohde, 1987). Today, this unique Chinese programme is almost nonexistent mainly due to market economy policies the government in Beijing pursues. But its system of operation e.g., community selection of CHWs, community mobilization and its subsequent accountability to the people that resulted into significant health gains cannot pass without mention (Werner & Sanders, 1997).

Community based approaches to health care delivery through the use of CHWs have had very varying successes, but there is substantial evidence that they have been successful in a number of resource-limited settings. In Haiti, for example, community-based TB treatment

interventions have thrived in one of the poorest countries in the Western Hemisphere (Farmer & Kim, 1998; Farmer et al., 2001). In Peru TB infection rates were drastically reduced because of treatment adherence as a result of Directly Observed Therapy (DOTS) implementation for both TB treatment and ART in the community (Farmer & Kim, 1998; Farmer et al., 2001). In Egypt, the CHWs contributed towards the reduction of infant mortality rate (IMR) by 40% through distribution of oral rehydration salts (ORS) to homes, compared to a meager 15% reduction when it was only available through pharmacists (Parlato & Favin, 1982 as cited by Bhattacharyya et al., 2001). In Nepal, where CHWs were provided with antibiotics and training in pneumonia treatment, an evaluation found out that 80% of the cases that were treated were correctly managed by the CHWs (Dawson, et al., 2001 as cited by Bhattacharyya et al., 2001). In Ecuador, CHWs were more cost effective in providing vaccinations to children than hospital-based workers (San Sebastian, et al., 2001 as cited by Bhattacharyya et al., 2001).

Community Health Workers are expected to perform a wide range of activities, according to reports from different countries, including: home visits, environmental sanitation, provision of water supply, first aid and treatment of minor illnesses, health education, communicable diseases control, community development activities, referrals, record keeping, and collection of data on vital events (Ofosu-Amaah, 1983). There is a long and unresolved heated debate in the literature about how and what activities a single CHW can be expected to perform (Ofosu-Amaah, 1983; Bhattacharyya et al., 2001; Kironde and Bajunirwe, 2002; Abbat, 2005; Gilroy & Winch, 2006; Boulle, 2007; Lehmann and Sanders, 2007). Hermann et al., (2009) inform us that evaluations of past CHW programs indicate that CHWs have been overwhelmed by a very broad range of tasks with negative effects on the overall quality of their performance. While developmental and educational roles of CHWs are considered important, there are also growing demands from the community for CHWs to provide curative services (Lehmann & Sanders, 2007). The inclusion of curative services in the activities of CHWs increases their motivation and their acceptance within the community (Curtale, Siwakoti, Lagrossa, LaRaja & Guerra, 1995). It is further argued in literature that community ownership and participation is enhanced when CHWs provide curative services for malaria, pneumonia and other diseases that might be affecting a particular community in addition to other responsibilities they have (Kelly et al, 2001; Bhattacharyya et al, 2001;

Herrel et al, 2004; Lehmann & Sanders, 2007). Curtale et al., (1995) inform us that in Nepal when CHWs were asked on how best the programme could be improved, they unanimously suggested to be given more medical training and more drugs. They further inform us that if CHWs are involved in providing curative services the CHWs are able to divert patients from consulting traditional healers and private pharmacies; and that their more effective role did not reduce the level of utilization of hospitals and health posts (Curtale et al., 1995). Literature further informs us that once communities are disappointed with the services provided, CHW programmes flounder (Lehmann & Sanders, 2007). A typical example of this is reported from Burkina Faso where the CHWs were rendered ineffective for their frequent referrals to the next level of care for almost two thirds of the ailments that came to their health posts for assistance (Sauerborn, Nougtara & Diesfeld, 1989). This is an issue discussed in detail with the HSAs and their supervisors in this study.

2.3 Training of CHWs

Training is an important aspect of the successful functioning of CHWs at the community level (Bhattacharyya et al., 2001). It provides new skills, education and enables them to interact with higher levels of professional staff (Bhattacharyya et al., 2001). For training to be effective it has to be done regularly and continuously, with the needs of the community in mind (Bhattacharyya et al., 2001). For example, a CHW can lose standing in the community if he or she does not have the ability to provide treatment or prevention and always has to refer to the nurse (Walt et al., 1989). When this happens the community loses faith and refuses to receive advice from the CHW (Walt et al., 1989).

LeBan, (1999) proposes that the prerequisites for effective training are:

- Training methodology needs to be appropriate and should give opportunity for hands-on management of real cases in the community
- Adult participatory learning methodologies and problem solving approaches are the most ideal training methodologies for them as change agents.
- CHW functions need to be clearly defined before training commences so that they are able to relate the material learnt and the specific tasks they intend to pursue.

Koepsell & LeBan (1999, as cited by Bhattacharyya et al., 2001) further suggest that training of CHWs needs to be carried out locally.

Continuing education is vital for CHWs most especially if we look at the level of their education and the short duration of their training (Ofosu-Amaah, 1983). Frankel (1992 as cited by Bhattacharyya et al., 2001) asserts that continuous training is important for the effective performance of the CHWs and also an important factor in their retention. It allows CHWs to learn new skills, take on new challenges, and interact with peers, keeping the job interesting and promoting personal development (Bhattacharyya et al., 2001). Continuing or refresher courses are considered as important as initial training for CHWs. If regular refresher training is not available, the CHWs tend to lose the acquired knowledge and skills (World Health Organization (WHO), 2007).

2.4 Infrastructure Support & Supervision

2.4.1 Infrastructure support for CHWs

Irregular support in form of supplies lowers the morale of CHWs and also affects their standing in the community (Gilson, et al., 2006). The CHWs credibility as health workers is boosted by the presence of adequate supplies which also increases their confidence in performing their roles in the villages (Van Der Geest, 1992). Walt, 1988 as cited by Curtale et al, 1995:1119 asserts that:

"...CHW programmes will drift toward demise, drowning in exhortation, not because CHWs themselves cannot deliver, but because the support that make them effective is, in general absent".

Such infrastructure support can take many different forms. Several issues which will be taken up in the results section of this study, have been reported in a previous study in Malawi. Kadzandira (2002) reported on contention and dissatisfaction around issues of housing, basic transport and equipment. He reported that many HSAs were living in houses that were dilapidated and very small and were living in places with poor communication and shopping opportunities (Kadzandira, 2002). Furthermore, out of all HSAs that received bicycles only 10% said their bicycles were in working condition while the rest their bicycles were non functional due to lack of spare parts. The other constraints to their effective

performance were the lack of vaccine storage, vaccine carriers, protective clothing and the drug kits (Kadzandira, 2002).

2.4.2 Supervision of CHWs

The success of CHWs programmes is dependent on regular and reliable supportive supervision. It is one of the problem areas that often are the weakest link in such programmes (Lehmann and Sanders, 2007). The literature suggests that small scale CHW projects are often successful because they manage to establish effective support and supervisory mechanisms, often with community involvement, while in larger projects supervision is often an additional workload for health professionals which in most cases is eventually treated as a routine inspection (Lehmann and Sanders, 2007; WHO, 2007). Continuous supervision removes the fear of isolation that the CHWs have in the field and helps to sustain their interest and motivation to perform their roles adequately (Curtale et al., 1995). Other researchers further assert that supervision is important because it gives the CHWs opportunities to discuss problems, exchange information and take advantage of continuing education (Bhattacharyya et al., 2001). In Guatemala for instance attrition rates among the supervised CHWs declined compared to those that were unsupervised (Parlato and Favin, 1982 as cited by Bhattacharyya et al., 2001). A number of reasons have been given for failure to conduct supervision e.g., increased workload of professional health workers, inadequacy of supervisory skills, inaccessibility, poor coordination among CHW supervisors, transport, lack of per diem and lack of professional health staff to conduct the supervision (Bhattacharyya et al., 2001). Ofosu –Amaah, (1983) proposes that in the event that professional health workers are unable to supervise the CHWs, the use of trained auxiliaries or a development of a cadre of CHW as primary supervisors needs to be considered to ensure more regular and more sustained supervision. For example in Commonwealth Carribean recommendations were made to promote community health aides "with greater skills and appropriate attitudes" to be promoted to senior aides to assist in the supervision of junior aides (Ofosu -Amaah, 1983). Similarly in Malawi some HSAs were promoted to Senior HSAs to supervise their fellow HSAs due to inadequate number of EHOs to supervise HSAs. In this study the effectiveness of this approach will be explored in detail. WHO proposes that for supervision to be effective there is need for proper planning

and defining of clear strategies and procedures at the start of the programme (WHO, 2007). Gilson et al, (1989) propose that at the initial planning stage consideration needs to be given to the total costs of an effective programme, including cost for training and supervision. Lehmann and Sanders, (2007) concurs with the fact that the problem with supervision of CHWs lies with poor planning, lack of supervisory skills or the outright lack of interest by some health professionals to supervise CHWs (Lehmann & Sanders, 2007). WHO, (2007) further recommends that all parties for the supervision, that is the supervisors and the supervisee, need to be aware about the whole processes of supervision i.e., the supervisees need to know what is expected of them by their supervisor. In addition to this supervisory guidelines (checklists) need to be developed and should include a list of activities to be carried out. Further to this, the WHO also recommends, that feedback needs to be given immediately after supervision through a meeting or a written report (WHO, 2007).

2.5 Career Structure for Community Health Workers

Bhattacharyya et al., (2001) indicate that personal growth and development which is the acquisition of knowledge and skills is viewed by many CHWs as a stepping stone for future employment. Other scholars propose that personal growth and development should not be taken for granted to raise false expectations among CHWs regarding advancement to an employment situation within the government system or another organization (Battacharyya et al., 2001). For example, in Solapar district in India, 93% of the CHWs were not satisfied with their duties because they believed they would get employment in government but it never materialized (Kartikeyan and Chaturvedi 1991). Further to this, they advise that if the expectations are already among the CHWs, effort should be made to address these expectations realistically from the start. Although HSAs in Malawi are government employees, they have high expectations for advancing their career through training to become environmental health officers, nurses or clinical officers (Herman et al., 2009). In this study the HSAs expectations for future advancement will be discussed.

2.6 Recruitment of Community Health Workers

Selection of CHWs should be based on their motivation to serve the community. If this is not carefully done, it may lead to lack of trust from the community and may eventually become a contributing factor to a high turnover of CHWs, which will make sustained quality assurance unlikely (Passad & Muraleedharan, 2007; Lehmann & Sanders, 2007). While this is the ideal situation, literature seems to suggest that in most cases communities are not fully involved in the selection process of CHWs and that sometimes when they are involved it is by way of suggesting names and not deciding the criteria to use in selection (Walt et al, 1989; Bhattacharyya et al, 2001; Lehmann & Sanders 2007). Most literature agree that there is need for CHWs to be recruited from the communities they serve, and at the same time they also point out the difficulties in implementing this approach. CHWs from the same communities they serve have presumably the added advantage that they will be more accessible but also be able to gain the confidence of community members (Ruebush, Weller, & Klein, 1994). Experiences from Asian countries indicate that CHWs recruited from local communities have a greater impact on utilization; creating health awareness and health outcomes than those recruited from outside (Bang et al., 1994; Abbatt, 2005; Lewin, Dick, Pond, Zwarenstein, Aja, Wyk et al., 2005). In Malawi HSAs are recruited within or outside of the community. It is estimated that nearly one third (29.2 percent) of HSAs who are supposed to be posted in communities, are based in urban areas (Hozumi, 2003; Kadzandira and Chilowa, 2001). This issue was explored in the field in discussions with the HSAs and the supervisors the EHOs and ECHNs and will be presented in more detail in subsequent sections of this study.

2.7 Use of Standardized Guidelines and Protocols

The use of standardized protocols and guidelines is a very important tool for quality assurance among the CHWs. This means that there is a need to understand the issues related to the scope of practice and have a clear definition of the roles of CHWs (Kelly, et al., 2001; Haines, et al., 2007; Passad & Muraleedharan, 2007). Evaluations of past CHW programs indicate that CHWs have been overwhelmed by a very broad range of tasks with negative effects on the overall quality of their performance (Hermann et al., 2009). Clearly

defined roles and standardized protocols are considered essential because they ensure that CHWs practice within the limits of what they can achieve and what they have been trained for. In addition to that, the simple guidelines and standards can facilitate supervision and supply management (Hermann et al., 2009).

2.8 Conclusion

The purpose of the literature review was to try and understand who community health workers are and the nature of their work. Drawing on examples from other countries, it sought to comprehend some of the challenges and successes CHW programmes have experienced.

From the literature it is apparent that CHW programmes have been implemented for more than 50 years with many success stories to emulate. Among them, CHWs can make a valuable contribution to community development and, more specifically, can improve access and coverage to communities with basic health services.

The literature has also emphasised that CHW programmes are not cheap and that right away at the planning stage consideration should be given to some areas for their effective performance.

The literature review also reviewed CHW programmes that are similar to the Malawi programme and explored how they were emulated in Malawi. Although many examples were from different countries and settings, the essence of great value and attachment was there for determining how the different study findings and recommendations from elsewhere related to the Malawian situation and how they could be copied for implementation in Malawi.

3 Chapter 3: Research Design and Methodology

3.1 Study Design

A qualitative phenomenological study design was used in the study. The study design was appropriate because there was little pre-existing knowledge of the challenges Health Surveillance Assistants (HSAs) were facing in the field after the Global Fund expanded the programme. In addition to this the issues surrounding the HSAs are complex and demand maximum opportunity for exploration and inductive hypothesis generation (Bowling, 1997). This qualitative study design specifically explored study participants' experiences and perceptions on the expansion of the HSAs programme. Further to this, the phenomenological approach gave the opportunity to understand and describe the challenges facing the HSAs from their own point of view (Mertens, 2005).

3.2 Study Population

The study population included practicing HSAs, both new and old, supervisors for HSAs in Nkhatabay district who are the Environmental Health Officers and the Enrolled Community Health Nurse.

WESTERN CAPE

3.3 Sample Size and Sampling Procedure

The key informants for the study were the District Environmental Health Officer (DEHO), Environmental Health Officers (EHOs) and Enrolled Community Health Nurses (ECHNs) because they were in the right position to adequately explain the programme right from its inception (Rice & Ezzy, 1999) and they are actively involved in the supervision of the HSAs. In-depth interviews were conducted with all key informants. Focus Group Discussions [FGDs] were conducted with six groups of HSAs who were all HSAs attached to two purposefully selected facilities. Three groups comprised of old HSAs while the other three groups comprised of new HSAs. This was meant to generate independent information from the two groups on how the expansion programme was affecting their performance in the community. Each focus group had on average six participants and in total 42 people were the study participants.

The health facilities where the interviews and the focus group discussions (FGDs) were conducted were purposively selected. The facilities included the district hospital and Chintheche Rural Hospital. The two health facilities were selected based on the fact that Nkhatabay District Hospital is located in the urban area, close to the district headquarters while Chintheche Rural Hospital is located in the rural area thereby representing both urban and rural settings. Further to this, the EHOs who are the principal supervisors of the HSAs are only positioned at the two health facilities and that if other health facilities were selected there would be nobody to interview. Nkhatabay District Hospital has eight EHOs, two ECHNs and 28 old HSAs and 16 new HSAs while Chintheche Rural Hospital has one EHO, seven old HSAs and 16 new HSAs. Since there are many EHOs at the district hospital the three EHOS interviewed were randomly selected from the list of EHOs. In addition to this, the DEHO was purposively selected as he is the Officer responsible for the HSAs in the district. Similarly, HSAs at the district hospital and the rural hospital were randomly picked from the lists of HSAs at both health facilities. At the district hospital four FGDs were conducted, two each for old and new HSAs. At Chintheche Rural Hospital, two FGDs were held separately for both old and new HSAs. A total number of six HSAs participated in each FGD. One ECHN was interviewed at the district hospital while at Chintheche no ECHN was interviewed as there is no ECHN at the rural hospital.

3.4 Data Collection Tools

A combination of data collection methods were used to understand the experiences and challenges facing HSAs and their supervisors from different perspectives. In-depth interviews were conducted with the key informants, i.e. the DEHO, the EHOs and ECHN, while FGDs were conducted with HSAs.

The tools used for data collection included the use of a tape recorder, a video recorder, an FGD guide and an interview guide for the in-depth interview. In addition to the data collection methods an audit trail was maintained and the researcher kept a diary throughout the research process, where all field notes, developing understandings, reflections on the research process and initial exploration of emerging themes were

documented (Creswell & Miller, 2000). This journal was shared with the supervisor on a regular basis to ensure that they are together throughout the research process.

3.5 Data Analysis

Data analysis was done concurrently with data collection, data interpretation, and narrative writing. This enabled exploration of developing insights in subsequent interviews. This enabled refinement of questions asked in both focus group discussions and in-depth interview and also helped identify new issues in the implementation of HSAs programme.

The second step was to organize data and prepare it for analysis by transcribing interviews and FGDs. All the materials were type written, sorted and arranged according to different types depending on sources of information (Creswell, 2009). Thereafter the researcher read through all the data in order to obtain a general sense of the information. Notes were written in margins and general thoughts about the data were recorded. The information was segmented; and the categories and themes were identified. The third step looked at the major lessons learnt from the themes identified and represented them in the qualitative narrative. This involved a discussion of events and a detailed discussion of several themes or a discussion with interconnecting themes. In writing the narrative, some information was quoted and presented in the actual language of the participant *in vivo term* to reinforce findings of the study (Creswell, 2009).

3.6 Validity and Reliability

Validity in this study was viewed as a measure of ensuring that the data collected was an accurate account and represented participants' realities and is considered credible to them (Schwandt, 1997 as cited by Creswell and Miller, 2000). Validity was achieved in a number of different ways: triangulation of data from different sources provided different perspectives on the same topic. In the case of this study the in-depth interviews and the FGDs with different role players (HSAs, ECHNs and the EHOs) as well as the researcher's diary were used in triangulation (Mays & Pope, 2000). Member checking was also used to validate the study results. This process was achieved by summarizing the main content of interviews and FGDs with respondents to ensure that there was common understanding of the

phenomenon under study (Mays & Pope, 2000). Validity was also achieved through reflexivity. A diary where all events were recorded was kept and shared with the supervisor. The diary was constantly referred to during the analysis process (Mays & Pope, 2000). Validity was also enhanced through maintenance of an audit trail whereby the researcher provided clear documentation of research decisions and activities. This has been attached to the appendices of the research report as evidence (Creswell & Miller, 2000).

Reliability in this study was looked at as the likelihood that when a similar study was done by somebody else it would elicit similar findings (Green & Thorogood, 2004). Reliability was achieved through close attention to 'good practice' in field work. This included accurate note taking and transcriptions and discussing certain issues with colleagues and supervisor (Green & Thorogood, 2004:194).

3.7 Limitations of the Study

The limitation of the study was that the researcher is an Environmental Health Officer and might have preconceived ideas as an insider in the programme. This was addressed through reflexivity and the use of an audit trail.

Furthermore, data saturation, usually a requirement in qualitative research, was not attempted, given the size and scope of this project as a MPH mini-thesis.

3.8 Ethical Considerations

Permission to carry out the study was obtained from the Higher Degrees Committee at the University of Western Cape (UWC) and thereafter permission was sought from the National Research Council of Malawi. Written or verbal informed consents were obtained from all study units (subjects) participating in in-depth interviews and FGDs. All participants to the study were assured that the information obtained was to be used for research purpose only and that their particulars will not be disclosed.

4 Chapter 4: Results

4.1 The History of HSAs in Malawi

The first Health Surveillance Assistants (HSAs) to be employed by the Ministry of Health (MoH) in Malawi were *Public Vaccinators* or simply *Vaccinators* as far back as the 1950's (MoH, Undated:2). The Malawi Public Health Act 34.01 covers their status in Sections 42 – 47 (Public Health Act, 1948). The vaccinators used to form vaccination teams that moved from village to village, vaccinating people. Their operating base was either the district hospital or a health center (MoH, Undated). Their job was strictly vaccination only. In about 1970, when the World Health Organization Smallpox Eradication Campaign started, the vaccinators were regrouped from different districts into one national team that systematically covered the whole Malawi (MoH, Undated). Their mission was completed in 1972 when Malawi, together with other countries under World Health Organization, was declared smallpox free in 1978 (MoH, Undated).

In 1973 when the first outbreak of cholera occurred in Malawi, the vaccination teams were re-deployed to carry out vaccinations in the affected district of Nsanje in South Malawi (MoH, Undated). The vaccinators were trained for five days on giving injections and basic knowledge and skills for promoting village sanitation and water hygiene as a way of preventing and controlling cholera and their name then changed to Cholera Assistant (MoH, Undated). As Cholera Assistants, their activities widened as they became responsible for general dimensions of health maintenance, improvements and promotion (MoH, Undated). When the cholera epidemic subsided, Cholera Assistants were engaged in other health activities, resulting in the change of name to Health Surveillance Assistants (HSAs) (MoH, Undated). Their continued use reflected the increased demand for health workers to oversee environmental health problems at community level as there was critical shortage of environmental health staff (MoH, Undated).

The HSA in Malawi is regarded as a community based health worker and is supposed to be located at the health post. The HSA reports to the nearest health centre. But due to low staffing levels in the health sector a few HSAs, mainly Senior HSAs, are also found at the district hospital and health centres. They assume the roles of the AEHOs at the health centre

such as the maintenance of cold chain, immunizations, growth monitoring and many other activities, but they are also assigned health posts close to their health facilities. However, the majority of HSAs are in the community at health posts. The HSAs at the community work hand in hand with village health committee members who are elected by the community to oversee health issues in the villages.

The key issues highlighted by this study can be summed up under the following headings:

- Roles of HSAs in Health Services Delivery
- HSAs Training and Continuing Education Needs
- Supervision for HSAs
- Recruitment of CHWs
- Career Prospects for HSAs
- Infrastructure and Other Support for HSAs

4.2 Roles of Health Surveillance Assistants in Health Services Delivery

In the discussions with HSAs there was greater unanimity that HSAs are perceived as key representatives of the Ministry of Health at community level. Key informants shared the same view of the HSAs and the DEHO had this to say:

"If there is somebody representing the institution of Ministry of Health at the community then it is an HSA"

When participants were asked about the general impression that the community have of the HSAs, both the key informants and the HSAs shared the opinion that the HSA at the community was viewed as the bridge/link between the community and the health facility and is referred to as "a dokotala" meaning a doctor in the local language.

It was also noted that the HSA is taken as a trusted member of the community and an advisor on health issues. The role of the Health Surveillance Assistants differs greatly in various health facilities depending on the resources and programs available in a particular district and the needs of each facility (Hermann et al., 2009), but can include most or all of the following activities as summarized in Table 1 and 2:

Table 1: Indicating the Roles of HSAs in the Past and the Added Roles currently done by HSAs

HSAs Roles in the Past	Additional Roles currently done by HSAs	
 The HSA as a health worker serves as a linkage between fixed district health services and the community; The HSA works directly with village/ community 	1. Administers presumptive treatment for malaria, acute respiratory infection (ARI), acute diarrhoea, eye and skin infections and minor injuries;(It was there but has been properly defined)	
leaders in identifying and providing services in the community and also collaborates with Enrolled community Health Nurse, Medical Assistant and reports to Environmental Health Assistant;	2. Promotes behavioural change communication of information to individuals, families and communities on EHP targeted conditions;	
3. In community settings according to an assigned catchment area [2000-2,500 population];	3. Facilitates the creation and support activities of the Home Basic Care / Community Support Groups;	
4. Conducts community assessment within his assigned catchment area;	4. Provides support to home based care and palliative care for HIV & AIDS and terminal conditions;	
5. Works with the community in solving community problems;	5. Trains and supervises all community support groups;	
6. Conducts village inspections;	6. Orders, keeps, dispenses and maintains up-to-	
7. Observes for and reports disease outbreaks;	date records of selected medical supplies and contraceptives;	
8. Works with others in providing immunisation;	7. Promotes use of Insecticides Treated Nets (ITN);	
9. Maintains equipment utilised on the job;	8. Promotes safe delivery practices in the community.	
10. Facilitates formation and training of Village Health Committees [VHCs] and volunteers;		
11. Improves the quality of water by protecting shallow wells & chlorinating untreated water;	RN CAPE	
12. Treats minor illnesses;		
13. Conducts growth monitoring;		
14. Supervises VHCs and volunteers;		
15. Refers patients and suspects to nearest health unit;		
16. Writes monthly work plans; and,		
17. Carries out any other duties as may be assigned to him/her by his/her immediate supervisor		

Source: Kadzandira 2001 & HSA Training Curriculum

Table 2: Indicating HSAs Roles before Expansion and Roles that have been formally added after Expansion

HSAs Roles before Expansion	Formally Added Roles of HSAs after Expansion
Assisting in giving immunizations at under five	Some HSAs were reported to be dispensing drugs
clinics	through the IMCI programme mainly for common
	childhood illnesses like diarrhea, pneumonia and

Assisting in growth monitoring promotion

Sanitation promotion through village inspections and introduction of new sanitation technologies like sanplat latrine and dome slabs.

Provision of safe water through water chlorination with HTH and chloride of lime for the prevention of cholera and other diarrhoeal diseases.

Family planning-some HSAs are involved as community based distribution agents

eye diseases. They were also reported assisting in providing presumptive treatment for malaria using SP to pregnant mothers. However, they expressed concern that malaria being the number one killer in Malawi, they are not allowed to dispense LA which is the malaria drug used for treatment in Malawi.

Child health days campaigns-where VIT A supplementation is administered to children and Supplementary Immunization Activities (SIAS) measles vaccinations are given.

Provision of HIV/AIDS related services e.g., HIV testing and counseling, provision of nutritional food supplements to HIV/AIDS clients.

Mass treatment–HSAs are involved in deworming, bilharzias and filariasis treatment.

TB Programme- HSAs are also involved in collection of samples and slide fixing of sputum at the health facility level.

NB: As mentioned in the Focus Group Discussions and in-depth interviews

The additional proposed role that seemed to be unanimously agreed among HSAs in the FGD based on the needs of the community as from the discussions was for all the HSAs to stock drugs to treat minor illnesses in the community. One participant had this to say:

"... people in the community get sick all of a sudden and when the HSA does not have anything to provide it becomes a very big challenge for the HSA. What we want is an HSA to be provided with a drug kit in the same way other HSAs are providing drugs through village clinics".

The current practice is that it is only a few HSAs are stocking drugs due to a number of factors e.g., inadequate funding for the district health offices (DHOs) to provide training for the HSAs to start dispensing and procuring drugs. The current situation is that even in health centres and district hospitals drugs are insufficient. It was also revealed in focus group discussion with the HSAs that HSAs (those trained and operating village clinics) dispensing drugs through the village clinics command greater respect in the community than HSAs without drugs. Specifically, they wanted to be given permission to dispense malaria drugs such as Lumefantrine Artemether (LA). According to the job description of the HSAs at the time of interview they were only allowed to administer presumptive treatment of malaria (Fansidar) to antenatal mothers. But because malaria remains one of the leading causes of

morbidity and mortality in the hospitals and in the community, HSAs felt an urgent need to dispense malaria medication. One HSA who was running a village clinic had this to say on the importance of dispensing LA:

"... at my village clinic I keep paracetamol and cotrim. For pneumonia cotrim its ok but for malaria we are not allowed to dispense Lumefantrine Artemether (LA); and paracentamol for sure is not the cure for malaria. Paracentamol is for relieving pain and when we send them to Chintheche many of them die on the way – a death which could have been prevented if we were stocking LA. I could have saved many lives. I think somewhere it is good that these policies need to be reviewed if we really want to save lives." (HSA)

An unexpected finding of this study was that some HSAs were presently dispensing tuberculosis (TB) drugs at the health centre and the district hospital when they are not allowed to dispense TB drugs. They wondered if they could extend it to the community alongside with the antiretroviral (ART) drugs specifically to patients in their continuation phase of treatment. This would alleviate the need to travel long distances to get their medication. However, there was some reservation on the expansion of their roles from the supervisors who said:

"...HSAs are overloaded, for example village health registers are not adequately filled because they are overloaded".

"HSAs are overburdened with responsibilities and at times you find them doing certain activities that they are not properly oriented."

One participant finally said that many new programmes that are introduced in the country require the services of an HSA for their effectiveness.

"... if you look at what we are doing in the field, even the Ministry of Health knows that it cannot function without us (HSAs). That we challenge because there is no other person apart from the HSA at the community to transact business on behalf of the Ministry. Nothing can progress without the HSA at the community".

4.3 Health Surveillance Assistants Training and Needs for Continuing Education

4.3.1 Health Surveillance Assistants Training

Training of HSAs previously used to be organized at central level in three primary health care training centres at Lunzu in Blantyre for the south, Mponela for the centre and Mzimba for the north of Malawi. In 2007 the training was decentralized as a result of the programme's expansion. This was meant to give an opportunity for many HSAs to be trained in a short period of time to address the human resources crisis in Malawi and also to bring the training closer to their expected places of work either in urban or rural areas. This decision was taken at central level in line with the decentralization policy. The policy suggested that at an HSA training centre there should be four trainers of which two are environmental health officers, one clinical officer and one enrolled community health nurse. These trainers were co-opted from the existing staff at the district health office. No new staff was recruited as trainers. The centre is directly supervised by the DEHO. In the past the course used to run for six weeks. Subsequently the training period increased to eight and then ten weeks. The training period increased in line with the demands for delivering the essential health package (EHP) at the community by allocating more time for practical attachment (MoH, Undated).

The 10-week course is organized in modular form and what has been added in the new curriculum are topics like community mobilization, disease surveillance, community based health care, the female and male reproductive health systems, community based therapeutic care, harmful reproductive health practices, infertility, infection prevention and universal precaution and a topic on basic management and administration. The changes in the curriculum were necessitated by the new developments in health and the need for effective delivery of the EHP in the community.

WESTERN CAPE

In both focus group discussions and in-depth interviews participants observed that although the training period for the HSAs has been increased the period was still considered short by many. During the discussions one of the supervisors had this to say:

"These HSAs do a lot of activities. A lot of new programs have been introduced e.g. village clinics. The introduction of these new programs prompted that HSAs should be trained the

necessary skills required for the new programs and that is why the training period has been gradually increased."

One HSA in the focus group discussion acknowledged that:

"...the period was short and much learning material was left. It required all material to be fully covered".

On the period of practical attachment one HSA said:

"... the 10 week long training should continue and that it should be followed with practical training for about four or five weeks. HSAs trainers usually say this is just an eye opener. You will learn more in field or in future. But we don't believe that because it is not all catchment areas where you find there is intensive working and supervision for all of us to learn. Otherwise our colleagues working here at the district hospital when they are stuck, they can rush to the offices and ask the supervisors on what they can do when they meet a challenging situation, unlike an HSA in a rural remote area who has nobody to consult".

In other words the HSA was stressing the importance of covering all course material while in training and not banking hopes on the future that supervisors would brief them. There was general consensus that the training period for HSAs should be extended to at least one year period for them to be able to understand and cover all the course material and practical attachment in field because the curriculum and the work activities they perform are extensive. The other general concern that emanated from the discussions with the new HSAs was the availability of trainers during training at Nkhatabay District Health Office PHC training centre. Trainers were reported to have other roles besides training.

"...the facilitators were a problem. They were supposed to be four in number, but you would only find one facilitator available the whole day."

The absence of facilitators had a psychological effect and affected the quality of learning for some of the HSAs as expressed below:

"... most of the times some facilitators were away. And when one person teaches, it looks more or less like a sermon where it doesn't matter whether its audience understands whatever is being imparted. As a result grasping of material usually was a problem. But when facilitators take turns it becomes simple and students understand easily".

On the quality of effectiveness of the training some HSAs complained, for example that management of eye problems was left out. Some EHOs in key informant interviews indicated that the new HSAs performance in areas like immunization and samplat casting has been compromised.

4.3.2 Health Surveillance Assistants Needs for Continuing Education

There seemed to be consensus among HSAs and their supervisors in the discussions that after initial training, HSAs need refresher courses. They pointed out that refresher courses were minimal and erratic; and that chances for new HSAs to attend refresher courses were minimal. Old HSAs in the FGDs had this to say:

"Previously after undergoing initial HSA training, there used to be refresher courses organised for HSAs. But now this is a problem. Workshops used to be many and now there are few workshops. When there was a workshop, one knew definitely he would be attending the workshop; unlike today when we are many HSAs". (All in agreement).

One HSA further suggested:

"... equity in selection of participants for workshops because all of us are their children. There should be equal sharing of resources".

They further suggested the topics for refresher courses to include basic skills in provision of curative services, safe motherhood and supervisory skills for the SHSAs.

4.3.3 Use of Standardized Guidelines and Protocols

In both the in-depth interviews and discussions there was consensus that HSAs were performing other functions without guidelines and protocols. The ECHN had this to say:

"HSAs are overburdened with responsibilities and at times you find them doing certain activities that they are not properly oriented... they don't have guidelines to follow." (ECHN)

The only guidelines readily available in the district for HSAs were EPI guidelines on dosages and schedules.

4.4 Supervision of Health Surveillance Assistants

The main supervisors for HSAs are AEHOs and the ECHNs under the responsibility of the DEHO in the district. In the past supervision of the HSAs was done by the health assistants who are now a defunct cadre. The health assistants had a better record of performance as regards supervision of HSAs than the AEHOs because they used to stay in the health centre close to the HSAs and many of them did not have programmes to coordinate which could distract them from supervision. The health assistant cadre was abolished to pave way for the promotion of the HSAs to their current grade. The critical shortage of the AEHOs and ECHNs made government to promote some HSAs to Senior HSAs in order for them to supervise their colleagues. Some Senior HSAs underwent an orientation that was organized for them for a few days.

It was learnt during the discussions that supervision was either nonexistent or inadequately done. There was greater unanimity between the key informants and the old HSAs that in the past supervision of the HSAs used to be adequate due to the availability of the now defunct health assistants who used to stay close with the HSAs at the health centre. It was learnt that supervision is organized through division of the district into clusters and that each cluster is assigned an AEHO/EHO to supervise the HSAs in the cluster. It was further acknowledged in the discussions that the district had inadequate AEHOs and that all of them except one were based at the district health office. The HSA/EHO ratio before expansion in the district was 1:10 but now it is 1:20. When HSAs were asked on how often supervision is conducted to them by the AEHOs they had this to say:

"Awa vizizizira waka atiyendera cha!!" All of them in agreement saying there is no supervision at all from the AEHOs.

However the DEHO emphasized the need for supervision saying:

"... it boosts their morale somehow. There is a situation where an HSA may leave a health post for a period of over a month and if supervision is not regularly conducted this cannot be noticed. So there is need for closer supervision to be done".

When asked why supervision is not carried out by the AEHOs. The responses of the key informants were:

"The main problem is just negligence I have to be honest here. Some are really doing a good job".

The HSAs had this to say:

"They have been given programs and I think these programs make them busy forgetting that they also have the responsibility to supervise us"

The programmes meaning that some have been given vertical programs to coordinate e.g., malaria, TB and water and sanitation in addition to their roles as supervisors for HSAs.

"The gap between the AEHO and HSA is wide. Therefore the AEHO takes himself as a very big boss to visit the HSA".

The HSA meant that the AEHO is too senior to supervise the HSAs and that they are not suitable to supervise them because they take themselves as very big bosses.

"They operate from the district to the health facility; the distances are long...the problem is with their deployment".

The Senior Health Surveillance Assistants (HSAs) were also mentioned as supervisors for the HSAs in the discussions. The Senior HSAs were reported to be unable to supervise the HSAs due to inadequate supervisory skills. They said SHSAs got promoted to their position and started work without proper orientation of their role as supervisors. They suggested as a solution that the SHSAs should be trained in supervisory skills. Others were of the opinion that the health assistants grade that was abolished should be brought back because they were rated as good supervisors for the HSAs as they stayed right in the community and when HSAs had problems they would easily meet them for advice. They further suggested that if government is to recruit the health assistants, the HSAs should be given more priority than outsiders.

In a key informant interview with the ECHN when she was asked how often she supervises the HSAs she had this to say:

"... we take the opportunity of mobile clinics, it is when we supervise the HSAs. Every month we go out for mobile clinics and we are with the HSAs. The activities we normally supervise them are Expanded Programme on Immunization (EPI), growth monitoring, family planning and HIV testing and counseling".

Specifically she indicated that at mobile clinics they are interested in monitoring the dosages and schedules for immunizations to ensure quality. She also indicated that the right supervisors for the HSAs are the health workers who work in the community like the EHOs and the ECHNs.

The other issue that came out in the key informant interviews was that the district had no checklist for supervision:

"... wanted one whereby if an officer gets out for supervision should be able to capture all data on environmental health and it has not been finalized".

All EHOs were in agreement about finalizing the checklist but no draft was ready at the time of the interview with the informants.

Another hot issue for debate that came from the HSAs in the discussions was about the inadequate handling of their issues when presented to their supervisors.

"... the problems we present are not solved. For example, when we present our claims usually they are not honoured...Child Health Days allowances ...up to now are not yet paid... even when we go out for mobile clinics, lunch allowances are not paid. Contrary to our situation is that our colleagues in the clinical section when they go out on similar duties they are given allowances. This discourages us to work hard".

One supervisor had this to say in response:

"Many are not assisted... others may have a claim at the DEHOs office. Usually I go to meet the DEHO on the issue and whatever the DEHO says is communicated back to the HSA. But many are not adequately assisted". (EHO)

The supervisors suggested the following for effective supervision of the HSAs:

- a) Holding regular meetings for supervisors
- b) Compilation of reports by supervisors to monitor progress
- c) Finalizing the checklist

4.5 Recruitment of HSAs

The discussions revealed that the community is not involved in the selection of the HSAs. The Ministry of Health advertises and they are selected at district level with no involvement of the community members. In the past HSAs were recruited from the same communities they were serving and ideal candidates used to be volunteers that were assisting on health issues in the community. With the change of times and the growth of the programme, recruitment from the same community has been futile for a number of factors e.g., getting people with the right attributes and the increased calls for transparency and accountability when recruiting staff. The major problem that was reported in the discussions with this recruitment process is that immediately after the new HSAs started work, they demanded postings to their respective home districts. In other separate interviews the issue of HSAs working in their home areas aroused heated debate. But consensus favored HSAs to be working in their own home areas for the following reasons:

"there can be an emergency that can demand your assistance and if you are not in the health post the community members may not be appropriately assisted".

"What is required is that one should work in a community which he knows very well, where one has been brought because he knows its challenges, culture and whatever unlike one who does not know much about the area. The community may start teaching the HSA its culture and it may be difficult for an HSA to initiate new changes most especially on practices that the community has been practicing over the years".

There was only one argument against selection of HSAs from the same area which indicated that an HSA can be selected from anywhere so long as its proximity is close to the health post:

"Not really from the same area but should have the knowledge of the place its culture and values ... I would propose an HSA to serve a community that is within 2-3 km away from his home because he will know exactly what happens in the neighbouring villages."

As already indicated earlier, this has contributed to the problem of accommodation among the HSAs. Many are reported to be residing away from their catchment areas. One EHO said,

"... many leave their stations to stay at a good place away from their stations mainly at trading centres where life is a bit ok for them".

4.6 Career Prospects for HSAs

In terms of career prospects for HSAs in Malawi they can be promoted through their job ranks as Senior HSAs and they also have the opportunity to advance their career through education. HSAs with good grades are encouraged to apply to training colleges to advance their career to become medical assistants, clinical officers, environmental health officers or nurses.

One development contributing complexity to the issue of career opportunities in the course of the study was the promotion of all HSAs and SHSAs to new grades. In the past HSAs were pegged at the same grade as Hospital Servants who assist in cleaning of wards. The new promotion has seen all the HSAs promoted to Grade M and L (the latter for supervisors). However, there is no clear stipulation with regard to further career progression. By comparison, an Assistant Environmental Health Officer knows for sure that within his job ranks he or she can get promoted to Senior AEHO, EHO, Senior EHO and so on, even without undergoing further studies. HSAs do not have the same certainty. From experience one major challenge is their poor educational background which does not meet the requirements for admission in training colleges. Further to this, the ending of the Emergency Human Resources Training Plan 2004-2010 has created a very big problem for financing further education for HSAs. In previous years tuition fees in nursing and medical colleges had been heavily subsidized and HSAs could proceed for further training. Now this training plan has come to its end and HSAs and other health workers are unable to proceed further with their studies due to high tuition fees.

In all the discussions there seemed to be group consensus that the HSAs need to be promoted and also to be given more chances to study with the aim of advancing their career. One EHO in an in-depth interview suggested that:

"HSAs with good certificates of Form IV to apply to institutions like the Malawi College of Health Sciences to do training in Medical Assistant or even as Assistant Environmental Health Officers".

However some also had reservations on upgrading the HSAs because after training they do not want to work in rural areas. Others suggested that this could be solved by informing

them in advance before going to college the need for them to work in rural areas. They said many AEHOs have preference to work at the district health office because they are attracted by electricity and other social amenities which are absent in rural areas. Further to this, they said at the district health office chances for attending workshops and coordinating programmes are high for them unlike at the health centre. In an interview with the DEHO, he said even if the AEHOs were at the health centre they could equally be considered for workshops. The problem he cited for AEHOs to be at the district health office was the lack of accommodation at the health centres.

4.7 Infrastructure and Other Support for Health Surveillance Assistants

When the DEHO was asked about what type of infrastructure support the HSAs require, the following transpired:

"... accommodation and an office where they can operate; not under a tree when giving immunization... the standard of the houses in the community are really poor not conducive to an HSA."

Some HSAs were even wondering why they should not be provided with accommodation when community based workers from other sectors like agriculture and community services were provided with accommodation.

In further discussions with the HSAs and supervisors it was observed that many HSAs in the district do not stay in their health posts for various reasons. Some of the reasons given were the lack of accommodation in the health posts, lack of interest to stay in rural areas and female HSAs wanted to be closer to their families.

In the discussions there was consensus on the reason why accommodation at the health post was a problem for the HSAs. The DEHO had this to say:

"... if we recruit from the same area we know for sure that the HSA has accommodation already as he will be operating within his home area. The HSA from outside is sometimes looked at as a stranger in the area. Sometimes he may not like the water and even the accommodation".

The other issues that came out during the discussion were the issues of general support to HSAs that would enable them to work effectively. The old HSAs expressed concern that with the coming of the new HSAs in the district their conditions had deteriorated more than they were in the past because there are now many in need of the same limited resources they used to have.

It was noted that there were still many new HSAs that had no bicycles and that the old HSAs bicycles were worn out. They emphasized that the bicycle is a very important resource for an HSA as it facilitates mobility of the HSA in the catchment area. They emphasized the importance of the bicycle that it is used for collection of vaccines at the nearest health facility and for operating outreaches. They also complained about the quality of bicycles procured that they were not durable. The other heated debate on bicycles was the introduction by the Ministry of Health –the bicycle loan scheme and they had this to say:

"...its nice only that what is required is the price should be subsidized for us to afford. But still we don't understand why they should be deducting us from our salary when we will be doing government job".

This actually meant that the HSAs did not see any reason why the bicycle should be deducted from their salaries as they were doing government work.

Additional requests that that were presented included provision of locum to HSAs saying that they have many activities to perform in the community and that they are sometimes awakened from sleep at night, they also wanted motorcycles to be provided to HSAs working in areas with difficult terrain and finally they wanted allowances for child health days and subsistence allowances to be paid on time.

4.7.1 Uniform and Protective clothing for Health Surveillance Assistants

HSAs need uniform for identity at both work and in the community. According to experience in Rumphi district HSAs are meant to have at least two pairs of uniform and every year they are supposed to be procured a pair of uniform. The protective clothing required for HSAs include gumboots, overalls, raincoats, gloves and umbrellas. This responsibility is at the district health office and from experience during training they are supposed to be issued with a pair of uniform, gumboots and overalls. Due to already

overburdened resources at the district health office sometimes it may be difficult for the office to procure uniform for the HSAs.

During the discussions the issue of uniform and protective clothing came out strongly from the HSAs. The old HSAs complained that for the past two years they had not received uniform. The new HSAs acknowledged receipt of uniform during training and complained that they only had one pair of uniform and that it was difficult for them to be in uniform every time at work. The DEHO when asked why the situation was like this he responded as follows:

"...the reason is that the numbers of HSAs are high. But the major issue here is that of priorities. These days uniform is not a priority. Because of financial problems of institutions you find that the DHMT cannot afford to buy uniform for HSAs when ambulances at the same time need maintenance and fuel".

4.7.2 Construction Materials for Demonstration Toilets

In the past water and sanitation used to be under the Ministry of Health and HSAs were at the fore front promoting new sanitation technologies like sanplat pit latrines and dome slabs and VIP latrines. They used to be provided with construction materials such as cement and reinforcement bars to demonstrate these sanitation technologies at the community level. Now the responsibility of water and sanitation has shifted to the Ministry of Irrigation and Water Development and this support that used to go to the HSAs is now nonexistent in Nkhatabay district, although their job description clearly stipulates that they are to promote sanitation at the community. This came out clearly in the discussions with both the HSAs and their supervisors. They said HSAs require construction materials like cement and reinforcement bars for construction of demonstration toilets in public places such as schools and markets. They acknowledged that in the past they used to receive these construction materials and would cast good and quality sanplats.

4.7.3 Funding for Training Village Health Committees (VHCs)

In Malawi, training of VHCs is one of the responsibilities of the HSAs with support from the district health office. Similarly as earlier presented, activities like VHCs training suffer because of limitation of resources and HSAs sometimes are forced to conduct VHC trainings without financial support.

In the FGDs HSAs complained that they are most often advised to form and train VHCs yet they are not given any support from the district. They mentioned that these days VHC members are dynamic and with many additional roles on them. They can be VHC members at the same time members of other committees in the same village; and that it may happen when they are attending meetings organized by other committees from other sectors are given money incentives. The consequences of this as expressed from the discussions are usually counterproductive resulting in VHC members thinking that the HSAs are denying them their right to incentives.

4.8 Summary of results

This study has revealed that, contrary to common perceptions and to the researcher's assumptions at the beginning of the study, the challenges facing the HSAs started sometime in the past. However, the expansion of the programme has added more strain on the district health office in many ways. For example, in the planning phase of the programme there was no consideration for increasing the number of supervisors to supervise the HSAs. In addition to this, the trainers for HSAs were identified from the already existing staff at Nkhatabay DHO, thereby creating gaps at the institution.

One thing that has come out clearly is that although the HSAs are overburdened with a lot of activities, they still want to serve their communities with new additional roles that are mainly curative in nature.

5 Chapter 5: Discussion

This study explored in detail the challenges HSAs face in Nkhatabay district after the expansion of the HSA programme through funding by the Global Fund to fight Tuberculosis, AIDS and Malaria. In both focus group discussions and in-depth interviews the picture that emerged was that considerable challenges existed even before the expansion of the programme, and that the expansion just exacerbated them. Challenges particularly emerged around supervision, recruitment, training, career progression, infrastructure and other general support for HSAs e.g., bicycles, uniform, funds for training VHCs and provision of construction materials for demonstration purposes. The findings are discussed in relation to existing information and knowledge as presented earlier in the introduction, literature review and study results.

5.1 Roles of HSAs in Health Services Delivery

Health Surveillance Assistants continue to perform a number of roles contributing towards the delivery of health services in Nkhatabay district. Generally, in the Ministry of Health the HSA is viewed as the most important link between the community and the Ministry. Further to this, their location in the community strengthens the aspirations of the Ministry of Health to deliver the EHP at the community level in line with the *Poverty Reduction and Strategic Paper* (WHO, 2008). The HSAs are viewed as the main representatives of the Ministry of Health at the grassroots, translating government policies on health into practice.

Key findings of this study with regard to roles relate to the tension between expanding needs and work burden of HSA and tensions around their curative role.

One of the major findings in the study is that although the HSAs' roles in Malawi continue to expand, they are already overburdened with activities. The list of activities contained in their job description is comparable to other CHWs in the world (Hermann et al., 2009; Lehmann and Sanders, 2007). However, there is a growing need for HSAs to provide curative services at the community level. Their own perception is that HSAs providing drugs in communities through the village clinics under the IMCI programme of community case management, command greater respect in the community than those without village clinics. This finding is consistent with the findings from Tanzania, Nepal and Botswana that CHWs

can provide drugs at the community level(Gilson et al., 1989; Bhattacharyya et al., 2001; Lehmann and Sanders, 2007). However, for this to be effectively implemented there is need for proper planning at the conception of the programme and consideration needs to be given to skills development, drug availability and safety, supervision and support.

A specific issue with regard to the curative role for the HSAs was that the HSAs wanted to treat malaria cases at the community level using Lufemantrine Artimether (LA). At the time of the study the situation was that HSAs were not allowed to dispense LA but were dispensing presumptive treatment for malaria using Fansidar (SP)¹. This had negative consequences which resulted in unnecessary and time-consuming referrals to health facilities and increased mortality among the children who died before reaching health facilities. This finding is consistent with the findings of other researchers in other countries that when CHWs conduct too many referrals they tend to lose respect of and touch with the community (Walt et a al., 1989; Bhattacharyya, 2001). This has resulted in communities seeking alternative mechanisms for support by visiting traditional healers or drug sellers in the community (Curtale et al., 1995).

The issue of dispensing tuberculosis drugs and antiretroviral therapy in the community, though discussed, was not fully exhausted in this study and requires further exploration to determine its feasibility.

5.2 Health Surveillance Assistants Training and Needs for Continuing Education

5.2.1 Health Surveillance Training

From the results, the training period for HSAs was considered short by many of those interviewed. They reported that the training period has been changing over the years, from six weeks to eight weeks and now to ten weeks. The reason for the change was to make the training course more compatible with the delivery of the EHP, with more time now being allocated for practical training (MoH, Undated). This is consistent with findings from other

¹ The situation has changed somewhat in recent months: According to the latest information HSAs are now allowed to administer LA after undergoing a one week orientation in community case management. At the time of the study this was not the case. After the orientation they are also given training manuals for their reference. All old HSAs that were trained in running village clinics in the past can only start dispensing LA after undergoing this orientation.

researchers which call for more CHW training time to be spent in hands-on activities (Gilson et al., 1989; Rabinson and Larsen, 1990). The extension of initial training to ten weeks is, however, still considered short by many who point to the massiveness of the curriculum, the comprehensiveness of the job description of the HSAs and the persistent introduction of new activities for the HSAs. However there is no rule that clearly states how long a CHW training course should take. The literature does stress, however, that breadth and depth of training has to be commensurate with initial skills levels and expected performance (Bachataryya et al., 2001).

The decentralisation of HSAs training to district health offices is consistent with findings from other studies which advocate CHWs training to be conducted in areas close to where they will be working, either in urban or rural areas (Ofusu Amaah, 1983; Kaseje et al., 1987; Gilson et al., 1989; Robinson and Larsen, 1990). One major problem identified with decentralised training centres in the study results is the availability of trainers during the training period. It is reported that most of the times trainers were not available. It is emphasised in literature that trainers should always be available to provide support and guidance and that they should accompany one another when going out for practical training and assess skills in real situations (Gilson et al., 1989). This is both a matter of planning, but also of the allocation of adequate resources to both initial and ongoing training, something which is more often than not neglected in CHW programmes (Gilson et al., 1989). It is therefore recommended to have full time trainers at the PHC training centre to avoid situations where trainers are preoccupied with other activities.

5.2.2 Health Surveillance Assistants Needs for Continuing Education

From the study results there is strong indication that CHWs are very concerned with the absence of continuing education opportunities. Refresher courses used to be frequent in the past compared to the current period. The reason for this is that there are many more HSAs in the system now than in the past, while the overall availability of training opportunities has not increased. The findings are consistent with literature worldwide (Frankel, 1992; Ofosu-Amaah, 1983; Kaseje, 1987; Lysack and Frefting, 1987). The other issue from this study was the issue of selection of participants for refresher courses: study participants

complained that the HSAs targeted for continuing education were mainly those based at the health centre. This is consistent with the findings from other studies that refresher course tend to target selected CHWs, leaving others with limited chances to attend such meetings. Although resources are a limitation it is important that HSAs are given an equal opportunity to attend refresher courses for them to be updated on new developments.

5.3 Infrastructure and Other Support for HSAs

5.3.1 Infrastructure Support for HSAs

If the HSAs are to effectively deliver the EHP at the community level there is need for attention to the construction of health posts where essential health services like immunizations and dispensing of drugs could be provided. In the past the PHC programme used to construct health posts or under five clinic shelters in Malawi. This is an area that needs to be revitalised and be given a priority. Construction of health posts by the community with support from either government/NGOs is consistent with the findings in Eritrea where they contributed towards the effectiveness of the CHWs programmes (Gherezghiher, 2009).

The provision of accommodation to HSAs raised repeatedly during the discussions. The major challenge to this is that community members see HSAs as government employees and community members are not involved in their selection. They therefore do not consider it their responsibility to assist HSAs with accommodation. This is aggravated by the fact that HAS do not always work in the area they come from. If the HSAs were recruited from their home areas there would be no problem with accommodation as they would be operating from their homes. The practice of recruiting CHWs from elsewhere is inconsistent with the findings from elsewhere (WHO, 2007, Lehmann & Sanders, 2007).

If government really wants to recruit HSAs from elsewhere it needs to come up with a mechanism to address the issue of accommodation for HSAs, because this is a problem that cannot be addressed by the community alone but in partnership with government and NGOs.

5.3.2 Other Support for HSAs

Provision of support to HSAs is vital for their effective performance and emphasised by literature from all over the world (Gilson et al., 1989; Bhattacharyya et al., 2001; Lehmann and Sanders, 2007). During the discussions HSAs stressed the need for support like bicycles, uniform, financial support for training VHCs, construction materials for demonstration toilets, reliable payment of allowances for child health days and the possibility of the HSA to start getting Locum. It was noted that for VHCs to support the HSAs adequately at the health post there was need for VHCs to be trained by the HSAs and that they lacked financial support to conduct the training.

5.4 Career Prospects for HSAs

The international literature emphasizes that career opportunities for CHWs are a defining aspect for motivation and retention. Lack of career prospects often lead to frustrations, lowering of morale and high attrition (Ofosu-Amaah, 1983; Bhattacharyya, et al., 2001; Lehmann and Sanders, 2007). This study found that there are limited career opportunities for HSAs and as a result many HSAs are demotivated. Although there are two ways in which HSAs can progress i.e. through normal promotional channels and by advancement through education there are still many challenges towards their promotion. Some HSAs who have met prerequisites for nursing, environmental health and clinical officers training are un able to attend training colleges because tuition fees were hiked after the end of the emergency human resource training plan in 2010, and due to poor education backgrounds. While the summary promotion of HSAs to new levels during the time of the study did provide advancement, uncertainty about future developments beyond this promotion means that career structures remain undefined, and career uncertainty remains a limiting factor for the HAS programme.

5.5 Supervision of HSAs

Like in much of the international literature, in this study too supervision emerged as a major area of concern and weakness. The use of Senior HSAs as supervisors is proving to be problematic. From the results it was clear that SHSAs were often incapable to conduct

supervision based for a number of factors e.g., lower educational and professional qualifications, inadequate orientation, little differences in grade and salary. As result they failed to command respect as supervisors among fellow HSAs. Although supervision is considered as a vehicle for achieving quality in the delivery of health services it receives little support required for conducting and sustaining supervisory visits (Gilson et al., 1989; Lehmann and Sanders, 2007). Therefore greater care is required in the use of the available resources given for supervision. For example the AEHOs were supposed to be stationed in health centres to cut the costs of supervision. However, there is no logic for supervisors to operate from very far looking at the cost implications that are likely to be incurred e.g., running costs for the motorcycles and allowances. Again issues of emergencies requiring their support may crop up, and if they are not available at short notice great mistakes are liable to be made by the HSAs who need constant guidance and support from their supervisors. There is need for the DHMT in Nkhatabay to support the SHSA, AEHOs and ECHNs in ensuring that supervision is regularly provided to the HSAs in the district. For example, they would consider allocating a house at the health centre for an AEHO to be residing at the health centre within the catchment area, providing allowances for supervision on an equal basis among all cadres, providing running costs for the motorcycles and training of the SHSAs to enable them to supervise fellow HSAs. This infrastructure support needs to be planned and provided for effective supervision (Gilson et al., 1989; Bhattacharyya et al., 2001; Lehmann and Sanders, 2007). Generally there is a misconception among planners that CHWs Programmes are cheap, forgetting that they fail to consider the real costs of CHW programmes (Gilson et al., 1989). Although global funding provided adequate resources for employing and training additional HSAs there was need for considering the total costs for an effective programme, involving large numbers of HSAs and good supervision (Gilson et al., 1989). Further to this, consideration was supposed to be given to additional cost burden the HSAs programme would place on the health system. For example, they were supposed to proportionally increase the number of HSAs and the number of supervisors to correspond (Gilson et al., 1989), which did not happen.

The study has shown that ECHNs could play a great role in the supervision of HSAs. But reports indicate that once the ECHNs are trained they go back to work in the hospital wards and do not do their community health work due to critical shortage of staff in hospitals.

This, too, emphasizes the need to carefully think through the medium- and long-term implications of decisions and the need for careful and comprehensive planning.

5.6 Recruitment of CHWs

The study results show that communities are not involved in the selection of HSAs, again a common finding in studies internationally (Lehmann and Sanders, 2007; Gilson et al., 1989). This has lead to the DHMT selecting health surveillance assistants through interview boards, often leading to selection of unsuitable persons as HSAs. As a result, many HAS seek transfers to their home areas soon after recruitment. There is need if these HSAs are to work in the communities the communities need to be involved in their selection. That is why the HSAs are unable to get houses for rent because they are not recognised as members of the community. As a result they are forced to seek accommodation away from their health posts. Based on experience as a professional, when communities are asked their HSA, they normally would say "we do not know who our HSA is". There is need for coordination between the three parties involved e.g., the health system, the community and the training institutions to come up with a good selection criteria for the HSAs (Lehmann and Sanders, 2007). This will ensure that HSAs are staying within their health posts and have no difficulties with accommodation.

6 Chapter 6: Conclusion

This study aimed to explore the challenges facing the HSAs after the expansion of the programme with global funding to fight AIDS, tuberculosis and malaria. Somewhat unexpectedly it was found that the challenges facing the HAS programme in Nkhata Bay preceded the expansion of the programme. This study therefore explored the challenges in a broader perspective than restricting to exploration of challenges after the expansion.

In conclusion it is important to bring to the attention of the readers a lesson learnt from Gilson et al., (1989) on CHWs programmes:

"...although the costs per CHW may be low, the total costs for an effective programme, involving large numbers of CHWs and good supervision are high."

Here it means that although the cost per single HSA may look low, other pertinent issues regarding their effective performance makes the programme costly. For example, in a larger programme like this, for supervision to be effectively carried out there is need for allocating more resources on recruitment of additional supervisors and the provision of transport to facilitate the movement of the supervisors. This was generally overlooked at the planning phase of the HSAs programme.

The results of this study clearly indicate that HSAs in Nkhatabay district are unsupervised and that they lack support in terms of bicycles, uniform and even infrastructure buildings where they can be operating from in order to deliver the EHP.

Despite all these challenges the HSAs are still eager and willing to work hard in the field if they are given the necessary tools for them to operate effectively. In addition to this, although HSAs are overburdened with activities, they are anxious and ready to absorb more activities to their routine chores. Most especially those related to their curative role at the community. In this regard the Ministry and other stakeholders are called upon to take the needs of the HSAs seriously in order to ensure that their performance and motivation at work is sustainable and geared towards the effective delivery of the EHP. The EHP is vital in the achievement of the overall objective of the Ministry of Health which is to:

"... raise the level of health status of all Malawians by reducing the incidence of illness and occurrence of premature deaths in the population" (PSRP, 2002).

7 Recommendations

In light of the above conclusion, some recommendations are being made below. Some of these require urgent attention while others may require long-term planning and have therefore been listed under long term planning.

Recommendations Requiring Urgent Attention

 Supervision of the HSAs by the EHOs and the ECHNs should be taken seriously and be intensified. The DHMT should ensure that the supervisors are adequately supported in order for them to be able to carry out supervision.

- 2. HSAs need to be given support in form of drugs and supplies, uniform and protective clothing, materials for construction of demonstration toilets and other incentives like subsistence claims and allowances for child health days to be paid on time; the way it is done with other civil servants.
- 3. Malaria being one of the major causes of morbidity and mortality in Malawi all HSAs should urgently be given required skills to dispense drugs at the community level.
- 4. The Ministry of Health should ensure that career prospects for HSAs are clearly stipulated.

Long Term Planning Recommendations

- 1. Infrastructure support should be provided to the HSAs for them to be able to deliver the EHP. Infrastructure like offices, houses, refrigerators and bicycles should be provided to HSAs and ensure that there is a plan for their maintenance.
- 2. The training period for the HSAs should be extended to one year to ensure that all learning material is covered during the training. Further to this, the DHOs and central level should ensure that trainers are available throughout the training and that the district based training centres are adequately supervised to maintain high quality standards in training the HSAs.
- 3. The recruitment of HSAs should as far as possible involve community members. As the HSAs are agents of change in the community, HSAs should be acceptable to members of the community. Sometimes the HSAs could be identified from the VHC members or volunteers that already participating in various health activities in the community.

8 Appendices

Appendix One: Interview Guide with the DEHO

Introduction

We are here to talk about Health Surveillance Assistants (HSAs) here inFacility. Your facility has had HSAs for a long period of time. Two year ago the Ministry of Health with the support from the Globe Fund initiated expansion of the HSAs Programme in Malawi. Anecdotal reports indicate that HSAs are facing a lot of problems and challenges in their work since the expansion took place. We want to explore in more detail the challenges the HSAs are facing and ascertain whether HSAs are indeed facing challenges now than it was before the expansion of the programme.

Key Research Questions

1. Before the expansion of the HSAs programme, how were things working here with HSAs? Can you tell me a bit about how the HSAs programme started here? Why was the HSAs cadre introduced? When did you first start having them?

From here, the DEHO would be given an opportunity to tell the story for a while. In the event that the story does not come up by itself, the following probing questions will be asked in the course of the conversation:

- Who started the HSAs programme and why?
- Who were the HSAs? How many? How were they chosen? What were their roles? What were their general characteristics?

TERN CAPE

- Were they paid? What other incentives did they receive?
- ➤ Did they get any training? How long was the training? Where were they trained? What were the chances for career progression?
- What did they do? Specifically where were they working at the community or facility level? What activities were they engaged in at that time?
- Who was their Responsible Officer? Who decided what they should do and who was their supervisor?
- How do you monitor the work they do (specifically I am interested in knowing whether there is any form of documentation and if, so, whether I can have a look at it).
- How did the HSAs work with the facility?
- What were the normal routine chores of an HSA?
- What did you as a DEHO find particularly important about this programme. What were its challenges?
- 2. Now, tell me after the expansion of the programme of the HSAs. What is different now?

Again, if the responses required do not come up probing questions are to be asked as follows:

- ➤ What do the rules say about how many HSAs there should be? Is this the current situation in the district?
- > Assuming that there were many HSAs before, how did you manage them?
- ➤ Who is responsible for the HSAs now? Has your role changed? Who is supervising them? How often are they supervised?
- > Are they paid? What other incentives do they now get?
 - ➤ Do they get any training? How long is the training? Where are they trained? What are their chances for career progression?
- Are they supposed to do anything different from what they were doing before? Were you told or given a document indicating their new roles?
- Are they doing anything different now?
- ➤ What are the normal routine chores of an HSA?
- 3. What is the general impression that the people have over the HSAs with the way they are working now? How do the HSAs themselves feel? The health workers?
- 4. In your own opinion, if you try to assess the impact of the HSAs on common health indicators e.g., immunizations, sanitation, what is your general impression of their performance now?
- 5. In your own opinion if you try to compare the HSAs programme before expansion and now? Which programme is best suited for accomplishment of community needs?
 - ➤ How many people were served by the HSAs before, how many now?
 - ➤ Who used to be the beneficiaries of the services provided by HSAs before, who are the beneficiaries now (e.g., young mothers, HIV patients, TB patients etc)?
- 6. You as man responsible for the HSAs in the district can you explain to me the needs of the HSAs in terms of the following:
 - Infrastructure support
 - > supervision
 - Continuing education
 - Incentives
 - Career progression
- 7. Now tell me what are the challenges HSAs are facing in the field and what are you doing to address the challenges? Have you been able to do any thing here in this district to overcome the challenges? Have you been able to "make a plan" for solving these challenges?
- 8. You as one of the persons in decision making position for the HSAs, what kind of work do you feel HSAs should do? Do you think in your own opinion the HSAs would play a role in ensuring that people have clean water, good sanitation and that other services are brought closer to the community level e.g., treatment of malaria, provision of ART and TB drugs?

(This question is intended to explore understandings of HSAs as auxiliaries or change agents).

- 9. Please can you elaborate to me more on why the HSAs programme was expanded?
 - ➤ Who came up with the idea of expanding the programme?
 - ➤ Were you informed by the Ministry of Health or the National HSAs Trainer that the programme is to be expanded?
 - ➤ Where do the funds for the expansion programme come from?
 - ➤ Were you or other DEHOs ever asked about your opinion about the expansion of the programme?
- 10. If the Ministry of Health asked you make suggestions on the HSAs programme. Can you tell me what changes you would propose and what they should bear in mind in future before expanding HSAs programme- what would you tell the Ministry?



Appendix Two: Interview Guide with EHOS and ECHNs (HSAs Supervisors)

Introduction

We are here to talk about Health Surveillance Assistants (HSAs) here inFacility. Your facility has had HSAs for a long period of time. Two years ago the Ministry of Health with the support from the Globe Fund initiated expansion of the HSAs Programme in Malawi. Anecdotal reports indicate that HSAs are facing a lot of problems and challenges in their work since the expansion took place. We want to explore in more detail the challenges the HSAs are facing and ascertain whether HSAs are indeed facing challenges now than it was before the expansion of the programme.

Key Research Questions

1. Before the expansion of the HSAs programme, how were things working here with HSAs? Can you tell me a bit about how the HSAs programme started here? Why was the HSAs cadre introduced? When did you first start having them?

From here, the supervisors would be given an opportunity to tell the story for a while. In the event that the story does not come up by itself, the following probing questions will be asked in the course of the conversation:

- ➤ Who started the HSAs programme and why?
- Who were the HSAs? How many? How were they chosen? What were their roles?
- Were they paid? What other incentives did they receive?
- ➤ Did they get any training? How long was the training? Where were they trained? What were the chances for career progression?
- ➤ What did they do? Specifically where were they working at the community or facility level? What activities were they engaged in at that time?
- Who was their Responsible Officer? Who decided what they should do and who was their supervisor?
- How do you supervise HSAs (specifically I am interested in knowing whether there is any form of documentation and if, so, whether I can have a look at it).
- How did the HSAs work with the facilities?
- What were the normal routine chores of an HSA?
- ➤ What did you as supervisors find particularly useful about this programme before expansion? What were the challenges?
- 2. Now, tell me about the expansion of the HSAs programme. What is different now?

Again, if the responses required do not come up probing questions are to be asked as follows:

- ➤ What do the rules say about how many HSAs there should be? Is this the current situation in the district?
- Assuming that there were many HSAs before, how did you manage them?

- ➤ Who is involved in their selection? Is the community involved in their selection?
- Who is responsible for the HSAs now? Has your role changed? Who is supervising them? How often are they supervised?
- Are they supposed to do anything different from what they were doing before? Were you told or given a document by the DEHO or the Ministry of Health indicating their new roles?
- Are they doing anything different now?
- Are they paid? What other incentives do they now get?
 - ➤ Do they get any training? How long is the training? Where are they trained? What are their chances for career progression?
- What are the normal routine chores of an HSA?
- 3. What is the general impression that the people have over the HSAs with the way they are working now? How do the HSAs themselves feel? The health workers? You as supervisors?
- 4. In your own opinion if you try to compare the period before expansion and now? When do you think supervision has been good?
 - ➤ How many HSAs were supervised by you before, how many now?
 - > Do you have a checklist for supervision (If possible can I take a look at it)?
- 5. If you were in the decision making position for the HSAs, what kind of work would HSAs do? Do you think in your own opinion the HSAs would play a role in ensuring that people have clean water, good sanitation and that other services are brought closer to the community level e.g., treatment of malaria, provision of ART and TB drugs?

(This question is intended to explore understandings of HSAs as auxiliaries or change agents).

- 6. Please can you elaborate to me more on how the HSAs supervision is organized in Nkhatabay district?
 - How many times are HSAs supervised in a quarter?
 - In your own opinion do you feel the number of supervisors is adequate to supervise the HSAs in the district?
 - ➤ How many HSAs did you as a supervisor manage to supervise last quarter?
 - Where do you get the funding for supervising the HSAs?
 - In you opinion, what are the general problems you face as regards to supervision of HSAs?
- 7. Normally you as one of the supervisors when you go out for supervision what problems do you get from the HSAs? In your own opinion do you feel their problems are adequately addressed after the supervision is carried out? Have you been able to do any thing here in this district to overcome the problems? Have you been able to "make a plan" for solving these problems?

Do you give feedback after supervision? (This question is intended at finding if at all there is evidence on feedback which could be in a form of a report).

8. If the Ministry of Health asked you make suggestions on the HSAs programme. Can you tell me what changes you would propose and what they should bear in mind in future before introducing a new programme- what would you tell the Ministry?



Apendix Three: Focus Group Discussion Guide with Old HSAs

Introduction

We are here to talk about Health Surveillance Assistants (HSAs) here inFacility. Your facility has had HSAs for a long period of time. Two years ago the Ministry of Health with the support from the Globe Fund initiated expansion of the HSAs Programme in Malawi. Anecdotal reports indicate that HSAs are facing a lot of problems and challenges in their work since the expansion took place. We want to explore in more detail the challenges the HSAs are facing and ascertain whether HSAs are indeed facing challenges now than it was before the expansion of the programme.

Key Research Questions

1. Before the expansion of the HSAs programme, how were things working here with you as HSAs?

From here, the old HSAs would be given an opportunity to tell the story for a while. In the event that the story does not come up by itself, the following probing questions will be asked in the course of the conversation:

- Who started the previous HSAs programme and why?
- Who were the HSAs? How were they chosen? What were your roles?
- ➤ Were you paid?
- Did you get any training?
- What did they do? Specifically where were you working at the community or facility level? What activities were you engaged in at that time?
- ➤ Who was their Responsible Officer? Who decided what they should do and who was their supervisor?
- How have you been supervised in the past?
- How did the HSAs work with the facilities?
- ➤ What did you as HSAs find particularly useful about this programme. What were its challenges?
- 2. Now, tell me about this new programme of HSAs expansion. What is different now?

Again, if the responses required do not come up probing questions are to be asked as follows:

- a. What do the rules say about how many HSAs there should be? Is this the current situation in your catchment areas?
- b. Who is involved in your selection? Is the community involved in your selection?
- c. Who is responsible for the HSAs now? Has your role changed? Who is supervising you? How often are you supervised?
- d. Are you supposed to do anything different from what you were doing before? Were you told or given a document by your supervisors or the DEHO indicating your new roles?

- e. Are they doing anything different now?
- f. What are the normal routine chores of an HSA?
- 3. What is the general impression that the people have over the HSAs with the way you are working now? How do you feel? The health workers? Your supervisors? How do you feel about the new HSAs?
- 4. In your own opinion if you try to compare the previous programme of HSAs and the current one? Which programme has been good for supervision?
 - ➤ How often are you supervised?
 - > Do you have a checklist for supervision that your supervisors use (If possible can I take a look at it)?
 - In your opinion, what are the general problems you face with supervision of HSAs?
 - In your own opinion do you feel the number of supervisors is adequate to supervise the HSAs in the district?
- 5. If you were in the decision making position for the HSAs, what kind of work would HSAs do? Do you think in your own opinion the HSAs would play a role in ensuring that people have clean water, good sanitation and that other services are brought closer to the community level e.g., treatment of malaria, provision of ART and TB drugs?

(This question is intended to explore understandings of HSAs as auxiliaries or change agents).

- 6. Please can you elaborate to me more on how the HSAs supervision is organized in Nkhatabay district?
 - How many times are HSAs supervised in a quarter?
 - In your own opinion do you feel the number of supervisors is adequate to supervise the HSAs in the district?
 - How many HSAs did you as a supervisor manage to supervise last quarter?
- 7. Normally you as one of the HSAs what problems do you face from the community? In your own opinion do you feel your problems are adequately addressed after presenting them to your supervisors?

Do you get feedback after supervision has been made to you (This question is intended at finding if at all there is evidence on feedback which could be in a form of a report)

8. If the Ministry of Health asked you make suggestions on the HSAs programme. Can you tell me what changes you would propose and what they should bear in mind in future before introducing a new programme- what would you tell the Ministry?

Appendix Four: Focus Group Discussion Guide with New HSAs

Introduction

We are here to talk about Health Surveillance Assistants (HSAs) here inFacility. Your facility has had HSAs for a long period of time. Two years ago the Ministry of Health with the support from the Globe Fund initiated expansion of the HSAs Programme in Malawi. Anecdotal reports indicate that HSAs are facing a lot of problems and challenges in their work since the expansion took place. We want to explore in more detail the challenges the HSAs are facing and ascertain whether HSAs are indeed facing challenges now than it was before the expansion of the programme.

Key Research Questions

1. How are things working here with you as HSAs?

From here, the new HSAs would be given an opportunity to tell the story for a while. In the event that the story does not come up by itself, the following probing questions will be asked in the course of the conversation:

- Who are HSAs? How were you chosen? What are your roles?
- > Are you paid?
- Did you get any training?
- ➤ What do you do? Specifically where are you working at the community or facility level? What activities are you engaged in? ERSITY of the
- ➤ Who is your Responsible Officer? Who decides what you should do and who is your supervisor? How often are you supervised?
- ➤ How are you supervised?
- How do you work with the facilities?
- ➤ What do you as HSAs find particularly useful about this programme. What are its challenges?
- What are the normal routine chores of an HSA?
- 2. What is the general impression that the people have over the HSAs with the way you are working now? How do you feel? The health workers? Your supervisors? How do you feel about the old HSAs?
- 3. In your own opinion what are the general problems that you face as HSAs
 - How often are you supervised?
 - > Do you have a checklist for supervision that your supervisors use (If possible can I take a look at it)?
 - ➤ In your opinion, what are the general problems you face with supervision of HSAs?

- In your own opinion do you feel the number of supervisors is adequate to supervise the HSAs in the district?
- 4. If you were in the decision making position for the HSAs, what kind of work would you recommend HSAs to do? Do you think in your own opinion the HSAs would play a role in ensuring that people have clean water, good sanitation and that other services are brought closer to the community level e.g., treatment of malaria, provision of ART and TB drugs?

(This question is intended to explore understandings of HSAs as auxiliaries or change agents).5. Please can you elaborate to me more on how you are supervised?

- How many times are HSAs supervised in a quarter?
- In your own opinion do you feel the number of supervisors is adequate to supervise the HSAs in the district?
- 5. Normally you as one of the HSAs what problems do you face from the community? In your own opinion do you feel your problems are adequately addressed after presenting them to your supervisors?
- 6. Do you get feedback after supervision has been made to you (This question is intended at finding if at all there is evidence on feedback which could be in a form of a report)
- 7. If the Ministry of Health asked you make suggestions on the HSAs programme. Can you tell me what changes you would propose and what they should bear in mind in future before introducing a new programme- what would you tell the Ministry?

UNIVERSITY of the WESTERN CAPE

9 Reference List:

- 1) Abbatt, F. (2005). Scaling Up Health and Education Workers: Community Health Workers Literature Review. DFID Health Systems Resource Centre. London.
- 2) Bang, A. T., Bang, R. A., P. G., Sontakke & the SEARCH team. (1994). Management of Childhood Pneumonia by Traditional Birth Attendants. Bulletin of the World Health Organisation, 72(6) 897-905.
- 3) Boulle, T.M. (2007). Developing an Understanding of the factors Related to the Effective Functioning of Community Health Committees in Nelson Mandela Bay in MetropolitanMunicipality. Eastern Cape Province, South Africa. Mini-Thesis. School of Public Health, Faculty of Community and Health Sciences, University of the Western Cape.
- 4) Bowling, A. (1997). *Research Methods in Health: Investigating Health and Health Services*. Buckingham, Philadelphia: Open University Press.
- 5) Bhattacharyya, K., Winch, P., LeBan, K., & Tien, M. (2001). *Community Health Worker Incentives and Disincentives: How they affect Motivation, Retention, and Sustainability.* Basic Support for Institutionalizing Child Survival Project (BASICS II) for the United States Agency for International Development. Arlington. Virginia
- 6) Creswell, J.W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Lincoln: University of Nebraska.
- 7) Creswell, J.W. & Miller, D.L. (2000). Determining Validity in Qualitative Inquiry. *Theory Into Practice*, 39 (3): 124-130.
- 8) District Health Officer (DHO) Reports. (2009). Annual Report. Nkhatabay: DHO.
- 9) Farmer, P.E. & Kim, J.Y. (1998). Community-Based Approaches to the Control of Multidrug-Resistant Tuberculosis: Introducing 'DOTS-Plus'. *British Medical Journal*, (317): 671-674.
- 10) Farmer, P., Leander, F., Mukherjee, J., Gupta, R., Tarter, L. & Kim, J.Y. (2001).Community Based Treatment of Advanced HIV Disease: Introducing DOT HAART (Directly Observed Therapy with Highly Active Antiretroviral Therapy). *Bull World Health Organ*, (79): 1145-1151.
- 11) Frankel, S. & Doggett, M.A. (1992). *The Community Health Worker: Effective Programmes for Developing Countries.* New York: Oxford University Press.
- 12) Gherezghiher, T. (2009). Community Based Health Care Programme in Eritrea. Bridging the Gap between Communities and Health Services in Eritrea. *Medicus Mundi Schweiz Bulletin*, 111.
- 13) Gilroy KE, Winch P (2006). *Management of Sick Children by Community Health Workers. Intervention Models and Programme Examples.* Geneva, WHO/UNICEF.
- 14) Gilson, L., Walt, G, Heggenhougen, K., Owuor-Omondi, L., Perera, M., Ross, D., & Salazar, L. (1989). National Community Health Worker Programmes: How Can They Be Strengthened? *Journal of Public Health Policy*, 10(4): 518-532.
- 15) Green, J. & Thorogood, N. (2004). *Qualitative Methods for Health Research*. London: Sage Publications.
- 16) Haines, A., Sanders, D., Lehmann, U., Rowe, A., Lawn, J., Jan, S., Walker, D. & Bhutta, Z. (2007). Achieving Child Survival Goals: Potential Contribution of Community Health Workers. *Lancet*, 369 (2121-2131).

- 17) Herrel, N., Dubois, D., Mullins, J., Cantor, R., McTavish-Mungar, K., Bukenya, M., Talemwa, E., & Ssewamuwe, M. (2004). *Improving Malaria Case Management in Ugandan Communities: Lessons from the Field.* The CORE Group. Washington, DC.
- 18) Hermann, K., Damme, W.V., Paroyo, G.W., Schouten, E., Assefa, Y., Cirera, A. & Massavon, W. (2009). Community Health Workers for ART in sub-Saharan Africa: Learning from Experience-Capitalizing on New Opportunities. *Malaria Journal*, 7(1): 1478-4491.
- 19) Kadzandira, J. & Chilowa, W. (2001). *The Role of Health Surveillance Assistants (HSAs) in the Delivery of Health Services and Immunization in Malawi*. Lilongwe: Ministry of Health and Population & UNICEF.
- 20) Kaseje, D.C., Spencer, H.C., and Sempebwa, E.K. (1987). Characteristics and Functions of Community Health Workers in Saradidi, Kenya. *Annals of Tropical Medicine and Parasitology*, 81 (suppl. 1):56–66.
- 21) Kartikeyan, S. & Chaturvedi, R.M. (1991). Community Health Volunteers: A Waste of Precious Resources? *World Health Forum*, (12):341–342.
- 22) LeBan, K., (1999). Reaching Communities for Child Health: Partnering with PVOs in Integrated Management of Childhood Illness (IMCI). Child Survival Collaboration and Resources (CORE) Group Workshop Proceedings, Washington, DC.
- 23) Lewin, S.A., Dick, J., Pond, P., Zwarenstein, M., Aja, G., Van Wyk, B., Bosch-Capblanch, X., Patrick, M. (2005). Lay Health Workers in Primary and Community Health Care. *Cochrane Database Syst Rev*, (1):CD004015.
- 24) Lysack, C., & Krefting, L. (1993). Community-based Rehabilitation Cadres: Their Motivation for Volunteerism. *International Journal of Rehabilitation Research*, 16(2):133–41.
- 25) Kelly, J., Osamba, B., Garg, G., Hamel, M., Lewis, J., Rowe, S., Rowe, A. & Deming, M. (2001). Community Health Worker Performance in the Management of Multiple Childhood Illnesses: Siyaya District, Kenya. *American Journal of Public Health*, 91(10): 1617-1624.
- 26) Kironde, S., and Bajunirwe, F. (2002). Lay Workers in Directly Observed Treatment (DOT) Programmes for Tuberculosis in High Burden Settings: Should they be Paid? *Africa Health Sciences*, 2 (2): 73-78.
- 27) Lehmann, U. & Sanders, D. (2007). Community Health Workers. What Do We Know About Them? The State of the Evidence on Programmes, Activities, Costs, and Impact on Health Outcomes of Using Community Health Workers. Geneva: WHO.
- 28) Malawi Poverty Reduction Strategic Paper (MPRSP) (2002). Final Draft. Lilongwe.
- 29) Manafa, O.McAuliffe, E.Maseko, F, Bowie, C., MacLachlan, M. and Normand, C. (2009). *Retention of Health Workers in Malawi: Perspectives of Health Workers and District Management. Human Resources for Health*, 7(65) doi: 10.1186/1478-4491-7-65.
- 30) Mays, N. & Pope, C. (2000). Qualitative Research in Health Care. Assessing Quality in Qualitative Research. *British Medical Journal*, (320): 50-2
- 31) Mertens, D.M. (2005). Research and Evaluation in Education and Psychology: Integrating Diversity with Quantitative, Qualitative and Mixed Methods. Thousands Oaks, California: Sage Publications.
- 32) Ministry of Health. (Undated). HSA Training Curriculum. Lilongwe.
- 33) Ministry of Health. (2004). *Human Resources in the Health Sector: Towards a Solution. Blantyre*.

- 34) Ministry of Health. (2010). Primary Health Care (PHC). *Achievements for 2004-2009*. Lilongwe
- 35) North Zone Health Support Office (NZHSO). (2008). Joint Annual SWAP Report. Mzuzu.
- 36) National Statistics Office (NSO). (2008). Malawi Population and Housing Census. Zomba
- 37) Ofosu-Amaah, V. (1983). *National Experience in the Use of Community Health Workers*. Geneva: WHO.
- 38) Parlato M, Favin M (1982). *Primary Health Care. Progress and problems: An Analysis of 52 A.I.D. Assisted Projects*. Washington DC: American Public Health Association.
- 39) Palmer, D. (2006). Tackling Malawi's Human Resources Crisis. *Reproductive Health Matter*, 14(27): 27-39.
- 40) Prasad, B. & Muraleedharan, V. (2007). *Community Health Workers: A Review of Concepts, Practice, and Policy Concerns.* International Consortium for Research on Equitable Health Systems (CREHS) funded by UK Government Department for International Development (DFID) lead by London School of Hygiene & Tropical Medicine (LSHTM), UK. IIT Madras, Chennai, India.
- 41) *Public Health Act* (1948). Cap. 34:01. Public Health. Available: http://faolex.fao.org/docs/pdf/mlw21328.pdf.
- 42) Rice, P. & Ezzy, D. (1999). Sampling Strategies for Qualitative Research. In *Qualitative Research Methods A Health Focus*. Sydney: Oxford University Press: 40-50.
- 43) Rohde, J. (1987). Ch 1- Health for All in China: Principles and Relevance of Other Countries. In D.Morley, J.Rohde & G.Williams (eds). *Practicing Health for All.* New York: Oxford University Press: 5-16.
- 44) Robinson, S.A. & Larsen, D.E. (1990). The Relative Influence of the Community and the Health System on Work Performance: A Case Study of Community Health Workers in Colombia. *Social Science & Medicine*, 30(10):1041–8.
- 45) Ruebush, T.K., Weller, S.C. and Klein, R.E. (1994). Qualities of an Ideal Volunteer Community Malaria Worker: A Comparison of the Opinions of Community Residents and National Malaria Service Staff. *Social Science & Medicine*, 39(1):123–31.
- 46) Sauerborn, R., Nougtara, A., & Diesfeld, H. J. (1989). Low utilization of community health workers: Results from a household interview survey in Burkina Faso. *Social Science & Medicine*, 29(10): 1163-1174.
- 47) Stekelenburg J, Kyanamina, S.S., Wolffers, I. (2003). Poor performance of community health workers in Kalabo District, Zambia. *Health Policy*, 65(2):109–118.
- 48) Tesch, R. (1990). Qualitative Research: Analysis Types and Software Tools. New York.
- 49) Walt, G., Perera, M., & Heggenhougen. (1989). Are Large-scale Volunteer Community Health Worker Programmes Feasible? The Case of Sri Lanka. *Social Science & Medicine*, 29(5):599–608.
- 50) Werner, D. & Sanders, D. (1997). Ch3-Alma Ata and the Institunalisation of Primary Health Care. *Questioning the Solution: The Politics of Primary Health Care and Child Survival*, Palo Alto, California: Health Rights.
- 51) World Health Organization (WHO). (2007). Community Health Workers: What do we know about them? The State of the Evidence on Programmes, Activities, Costs, and Impact on Health Outcomes of Using Community Health Workers. Geneva: WHO.

52) World Health Organization (WHO) (2008). Country Case Study. Malawi's Emergency HumanResources Programme. Global Health Workforce Alliance (GHWA) Task Force on Scaling Up Education and Training for Health Workers. Geneva.

