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RESEARCH REPORT

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ACRONYMS

AIDS - Acquired Immuno-Deficiency Syndrome

CHW - Community Health Worker

DHO - District Health Office

DHT - District Health Team

FGDs - Focus Group Discussions

HC - Health Centre

HIV - Human Immune Virus

HUMC - Health Unit Management Committee

ITNs - Insecticide Treated Mosquito Nets

LC - Local Council

MoH - Ministry of Health

NGO - Non-Governmental Organisation

PHAs - Persons Living with HIV/AIDS

PHC - Primary Health Care RSITY of the

TB - TuberculosisESTERN CAPE

VHT - Village Health Team

ABSTRACT

Like many other developing countries, Uganda lately adopted the Village Health Team (VHT) Strategy to support the delivery of cost-effective Primary Health Care services in the rural areas. This strategy is intended to raise interest amongst communities to be concerned about the improvement of their own health and increase community participation in health care activities through utilisation of VHT members (Community Health Workers). Soroti, a rural district located in Eastern Uganda is one of the few districts in this country that has, since 2004, used Community Health Workers (CHWs) to support her health care delivery system (Soroti District, Undated).

But despite all the interventions made, the District Health Team and implementing stakeholders in this district are uncertain about exactly how CHWs interact with households, yet this issue is crucial if CHWs are to serve as the bridge between the health system and the community. The purpose of this study was therefore to better understand the interaction between CHWs and households in Soroti District, Uganda, by engaging with both household members and CHWs about their interactions with each other. The study was descriptive in nature and employed qualitative research approaches. It was conducted in Olio, Kyere and Kateta Sub-counties of Soroti between November 2008 and December 2009. It is hoped that the results will inform future larger evaluations of the effectiveness of CHW programmes in Soroti District.

A total of 24 CHWs participated in the study, the majority (75%) of whom were male and the rest (25%) were female. Twenty four household representatives (carers) and two Health Assistants also participated in the focus group discussions and key informant interviews respectively. It was found out that the relationship between CHWs and households in Soroti was generally good, which could increase the likelihood of success and sustainability of the CHW program. This positive relationship was primarily attributed to the recruitment approach of CHWs through a democratic community structure, good level of awareness of CHWs' roles by household members, good behaviour exhibited by CHWs, their training, skills, working approach and perceived impact of their work.

However, some factors such as stock-outs of supplies at health centres, poor relationship between some professional health workers at health facilities and CHWs, inadequate facilitation of CHWs, and their lack of remuneration, could be detrimental to this relationship

and the success and sustainability of the CHW program, if not urgently addressed. It is recommended that the Ministry of Health, Soroti District Health Office and development partners should continue supporting and promoting initiatives which strengthen the relationship between CHWs and household members and increase the possibility of success of the CHW Program; and also urgently address the identified hindering factors.



1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

Many developing countries, including Uganda, have recently established health service delivery programs utilising community health workers (CHWs¹) to improve the cost-effectiveness of health care systems by reaching large numbers of previously underserved people with high-impact basic services at low cost (Berman, Gwatkin & Burger, 1987). In Uganda, the Village Health Team (VHT) Strategy is the latest adopted approach utilising VHT members (CHWs) to facilitate the process of community mobilization, empowerment and participation in delivering, managing and improving health services at household level (Ministry of Health [MoH], 2002).

However, the mixed experience reported by many CHW programmes in sub-Saharan Africa has raised questions about whether the CHW is an optimal vehicle for extending Primary Health Care (PHC) (Berman, Gwatkin & Burger, 1987). Despite the existence of robust evidence internationally that CHWs can be enormously effective under certain conditions and wide agreement on the potential of CHW programmes to improve access to and coverage of communities with basic health services (Lehmann & Sanders, 2007; Prasad & Muraleedharan, 2007; Lewin et al, 2005; Haines et al, 2007; Zachariah et al, 2006), it is also illustrated that many CHW programmes, especially large-scale and national programmes, have not been successful because they have been beset by problems affecting their sustainability and the quality of services they provide (Berman, Gwatkin & Burger, 1987; Gilson et al, 1989 as cited in Hermann et al, 2009).

The few studies which have looked at the CHW programmes in Uganda have focussed on CHWs established by Non-Governmental Organisations (NGOs) (Hermann et al, 2009) but the gap is the focus on how CHWs, established by the national government, interact with

Two terms, Village Health Team (VHT) members and Community Health Workers (CHWs), are used for the same entity. The new term, VHT members, is used in the Village Health Team Strategy for community empowerment and mobilisation for health in Uganda (MoH, 2002). The researcher has opted to use the term CHWs in this research study because it illustrates better than the term VHT members and the use of this type of cadre has a history that may provide important lessons for today. It is also an old term that is widely used in the recent literature.

households and community perceptions about their roles and impact, particularly in remote areas. This study therefore sought to explore these fundamental issues.

This study set out to investigate the interaction between CHWs and households in Soroti District, Uganda, by engaging with both household members and CHWs about their interactions with each other. The study was descriptive in nature and employed qualitative research approaches to explore the experiences of both household members and CHWs regarding their working relations. It was conducted between November 2008 and December 2009.

In this study, the researcher adopted Lehmann and Sanders' (2007) definition of the CHWs to include a variety of community volunteers and lay people selected, trained and working in the communities from which they come. In doing this, the researcher acknowledged the original concept of CHWs, which emphasizes their role in community empowerment and took into account the provisions in the VHT Strategy (MoH, 2002) – a scheme under which the CHWs established by the Ugandan Government function. This study therefore focussed on CHWs who were established under the government programme, are formally recognized by the MoH and are already part of the formal health system's structure. The researcher viewed a household as a basic residential unit in which economic production, consumption, inheritance, child rearing, and shelter are organized and carried out. All individuals who lived in the same residence or dwelling were considered as members of such a household.

This report begins by providing an overview of how heath services are organised in Uganda; a brief history of CHWs in this country; profile of Soroti District; and the role of NGOs in the CHW Programme in this district. The document goes on to highlight the aim and objectives of the study; existing studies and literature related to the research study; study results and their discussion; and formulates conclusions and recommendations.

1.2 Background

1.2.1 Organization of Health Services in Uganda

The public health services in Uganda have been decentralised since 1994 (Hutchinson, Habte & Mulusa, 1999). This shift was intended to improve the quality of health services and pharmaceutical supplies in the hospitals and health centres, with resultant increase in the level of utilization of health facilities (Anokbonggo, Ogwal-Okeng, Obua, Aupont & Ross-

Degnan, 2004). Although health care in this country is delivered by both the public and private sectors, the poor are proportionately more likely to use the public sector than the non-poor (African Development Fund, 2006).

With decentralisation, the MoH takes responsibility for policy formulation, standard setting, regulation, technical support, supervision and inspection of the public and private sector as well as mobilising resources and donor coordination (Hutchinson, Habte & Mulusa, 1999; Pearson, 2000). The districts have the responsibility for delivering PHC and district health services (Pearson, 2000; African Development Fund, 2006; Hutchinson, Habte & Mulusa, 1999). District services are provided through a network of facilities that are categorised, in order of increasing capacity and designated, as Health Centres I to IV. This categorisation is in line with the administrative division of the country (African Development Fund, 2006).

As illustrated in *figure 1* below, at village level, a group of CHWs in that village serve as Health Centre I (HC I) facilities, which are the initial points of entry to the health system and the first link between the community and the formal health providers. Health Centre II facilities exist at the parish level and serve populations of about 5,000 people. The Health Centre III facilities are at the sub-county level and serve populations of about 20,000 people. At the apex of the district primary health facilities are the Health Centre IV facilities which are established at the county level and expected to serve a population of up to 100,000 (African Development Fund, 2006).

To promote community participation, local management and accountability, the government established a Health Unit Management Committee (HUMC) at each government health unit or centre, at all levels. These committees are responsible for oversight and supervision of the health centres, taking care of regular maintenance and construction and deciding how to allocate PHC funds to improve the quality of care. The HUMCs also provide a direct link between the community and the health centres that serves them. HUMCs typically consist of nine members; health centre in-charge, who serves as the secretary, and some community representatives, most of whom have no formal health training. The HUMCs are appointed from higher Local Council (LC) III levels, in some cases are locally elected, or sometimes become involved simply by virtue of their official positions, like being LC I official. These committees meet quarterly or when emergency need arises. The committees are accountable to the sub-county health committees (Hutchinson, Habte & Mulusa, 1999).

In most districts, the network of health facilities is complemented by a hospital (African Development Fund, 2006). General hospitals are located at district level and are supervised by the district administration (Chief Administration Officer/ District Health Officer) (Pearson, 2000). Regional and national referral hospitals are managed by the MoH and provide services at regional (serve a population up to 2,000,000) and national (the whole population) levels respectively (African Development Fund, 2006).

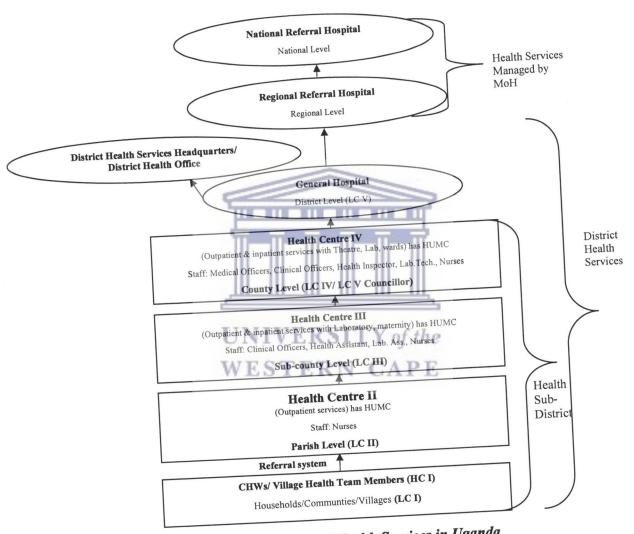


Figure 1: Organisation of Health Services in Uganda

1.2.2 Brief history of VHT members (CHWs) in Uganda

Several village volunteer groups, created by vertical programmes with each serving a separate set of interests (Komakech, 2007), have been attempted in Uganda; for example

community own resource persons, community drug distributors, traditional birth attendants, traditional healers/herbalists, community counselling aides, community change agents, condom distributors, guinea worm eradicators, etc (MoH, 2002).

But health sector reforms of the 1990s paved way for integration of all health activities and existing village volunteers (Komakech, 2007). And in 2002, due to the need to raise interest amongst communities to be concerned about the improvement of their own health and to increase community participation in health care activities, all village volunteers and other similar resource persons in the community (if the village did not have the required number of volunteers) were integrated into village health teams and renamed VHT members by the VHT Strategy (MoH, 2002).

1.2.3 Soroti District Profile

Soroti, a rural district located in Eastern Uganda (See Appendix VIII: Map of Uganda) has been using CHWs to support her health care delivery system since 2004 (Soroti District, Undated). Although the current exact number is not known, this district has over 3,200 CHWs (Soroti District Health Office, March 2006) involved in various community-based health activities, implemented throughout the district by various stakeholders including the MoH, non-governmental, faith-based and community-based organisations.

Soroti District consists of 3 rural counties (Kasilo, Serere and Soroti) and one municipality (Soroti Municipality) (See Appendix IX: Map of Soroti District). There are a total of 17 subcounties, including 3 divisions of the municipality. The total population of Soroti District is 369,789 of which 180,147 are male and 189,147 female. 88.9% of the total population reside in the rural areas. The economically active population (15-64) consists of 48.8% of the total population and 21.5% of the population are women of reproductive age (Uganda Bureau of Statistics, 2005). Most of the population in the district is engaged in subsistence farming, self-employed and makes use of unpaid family workers, particularly women and children (Soroti District, Undated).

With a contribution of 8% and 1.9% to total reported morbidity and mortality respectively, HIV/AIDS remains a key challenge to development in this district. Malaria is the greatest disease burden in Soroti District, contributing to 36% and 23.2% of reported morbidity and mortality, respectively (Soroti District, Undated). Health services are delivered through

health centres at parish, sub-county and county levels, and through the district hospital. Private drug shops and clinics also offer health services particularly in urban centres. Health human resources and infrastructure gaps exist, particularly in the more distant and remote locations. Human resources are not well distributed as most medical staff are in the hospital sector and in urban areas and productivity tends to be low (Soroti District, 2008; Pearson, 2000). Only 19.1% of the population live within 5km of a health facility, which is far lower than the national average of 49% (Uganda Bureau of Statistics, 2005).

1.2.4 Role of NGOs in the CHW Programme in Soroti District

Soroti is one of the few districts of Uganda where the VHT Strategy was piloted. But for reasons related to inadequate facilitation, very little efforts were made by the District Health Team (DHT) to follow-up or support the work of CHWs after their selection and induction in 2004, which resulted to inactivity of most of the CHWs in all the sub-counties.

Fortunately a couple of years later (about 2006), the influx of some NGOs, such as African Medical and Research Foundation (AMREF), Protection of Families Against HIV/AIDS (PREFA) and Baylor Children's Foundation with programs primarily focusing CHWs revived some CHWs in the targeted areas of these NGOs. Kyere, Kateta and Olio, the areas of focus for this research study, were among the few sub-counties which largely benefited from the interventions of such NGOs.

Most of the CHW targeted interventions of these NGOs included among others, capacity building of CHWs in PHC concepts and skills; provision of supplies such as bicycles for transport, bags, gumboots, picture cards and posters for community sensitisation; support of the DHT and lower health facilities and structures to provide support supervision to CHWs; and facilitation of networking of CHWs with health facilities, community groups and other organisations for more support.

1.3 Problem Statement

Soroti District currently has over 3,200 CHWs. Many community-based activities involving CHWs have been implemented in Soroti by the Ministry of Health and non-governmental, faith-based and community-based organisations.

But despite all the interventions made, the District Health Team and implementing stakeholders in Soroti District are uncertain about exactly how CHWs interact with households. If CHWs are to serve as the bridge between the health system and the community, their relationship with the community must receive great attention. Yet, because CHWs, as a rule, work far removed from health facilities, there is little insight into what happens when CHWs visit families.

1.4 Purpose of Study

The purpose of this study was therefore to better understand the interaction between CHWs and households in Soroti District, Uganda, by engaging with both household members and CHWs about their interactions with each other. It is hoped that the results will inform future larger evaluations of the effectiveness of CHW programmes in Soroti District.



2.0 AIM AND OBJECTIVES OF THE STUDY

2.1 Aim of study

The aim of the study was to better understand the experiences of both CHWs and household members regarding their interaction in Soroti District, Uganda.

2.2 Objectives of study

- To assess the attitudes of household members towards CHWs in the research subcounties of Soroti District.
- To explore household members' experiences with CHWs.
- To assess the experiences and attitudes of CHWs towards the households they work in.
- To identify and triangulate the factors which influence the interaction of CHWs with households in the research sub-counties of Soroti District.
- To analyse the impact of the emerging experiences and attitudes on the implementation of the CHW programme in the research sub-counties of Soroti District.

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3.0 LITERATURE REVIEW

3.1 CHWs' Profile

3.1.1 <u>Demographic profile of CHWs</u>

The concept of CHWs has been in existence for over fifty years. Internationally, CHWs have a large number of different titles by which they are known in different countries (Lehmann & Sanders, 2007). But what is clear is that there is no prescription for the ideal CHW and their personal characteristics vary widely among countries. Most non-Western cultures place greater emphasis on ascribed characteristics (those inherent in the person, such as age or gender) rather than on achieved characteristics, such as special training, because they are often critical to the ability of CHWs to work effectively (Bhattacharyya, Winch, Karen & Tien, 2001).

Most countries, including South Africa (Schneider, Hlophe & Rensburg, 2008), have largely relied on females as CHWs. Although both men and women are employed at grass-roots level, there is a collective impression (particularly amongst policy makers) that female workers are able to deliver care more effectively than male workers at community level (Prasad & Muraleedharan, 2007).

Many programs require that CHWs be literate so that they can record health information and use written materials (Bhattacharyya, Winch, Karen & Tien, 2001; Prasad & Muraleedharan, 2007). Literacy and numeracy also facilitate participation in training and follow-up activities (Prasad & Muraleedharan, 2007). Other programs have developed ways to record information for non-literate people, such as using colour-coded cards or pebbles in boxes (Bhattacharyya, Winch, Karen & Tien, 2001).

Literacy requirements often affect the age of the selected CHWs: literate people tend to be younger (Bhattacharyya, Winch, Karen & Tien, 2001). For example, in Nicaragua in 1980s, CHWs were as young as 15 years old (Prasad & Muraleedharan, 2007). In South Africa, female CHWs were predominantly between the ages of 30 and 50 years (Schneider, Hlophe & Rensburg, 2008). However, there is some evidence that older CHWs are more respected in their communities (Bhattacharyya, Winch, Karen & Tien, 2001).

There is wide agreement that CHWs should be selected on the basis of their motivation to serve the community they will be working in (Prasad & Muraleedharan, 2007; Robinson & Larsen, 1990; Bhattacharyya, Winch, Karen & Tien, 2001).

3.1.2 Recruitment and selection of CHWs

Most studies have highlighted the need for recruiting CHWs from communities they serve (Prasad & Muraleedharan, 2007; Friedman *et al*, 2007; Lehmann & Sanders, 2007; Bhattacharyya, Winch, Karen & Tien, 2001) because such CHWs are presumed to be more accessible; be able to gain the confidence of community members; have greater impact on utilization, creating health awareness and health outcomes (Friedman *et al*, 2007); and be more owned by their communities (Bhattacharyya, Winch, Karen & Tien, 2001).

But this is not always the case as there are difficulties in implementing this approach. In some cases, CHWs have been selected by village leaders who choose relatives or friends or by village committees that disregard community input (Bhattacharyya, Winch, Karen & Tien, 2001). For example, very seldom did any of the CHW projects in South Africa recruit their CHWs in a participatory way through a democratic community structure. The majority of agencies recruited their CHWs directly (Friedman *et al*, 2007), mostly through calls for volunteers, sometimes via community-based organizations and often with the involvement of local health facility staff (Schneider, Hlophe & Rensburg, 2008).

Selection that has not been carefully considered can lead to a lack of trust from the community and become a contributing factor to a high turnover of CHWs, which will make sustained quality assurance unlikely (Prasad & Muraleedharan, 2007; Lehmann & Sanders, 2007). According to Friedman *et al* (2007) undemocratic recruitment of CHWs without the participation of their communities fell short of the best practice requirements for community oversight of the work of CHWs. This practice put the CHWs at risk of not always being acceptable to the communities they served and limited the ability of communities to correct problems that they noted in the work of CHWs.

3.2 Scope of Services Provided by CHWs

Although there is no perfect formula for the combination of CHW duties, recent experience has shown that CHWs are providing at least the following types of services in different parts

of the world: preventive care, promotive services, curative care and rehabilitative services (Lehmann & Sanders, 2007).

3.2.1 Curative as opposed to Preventive services

Although the type of services provided by CHWs varies by community, CHWs offer more preventive than curative services in most countries, while in some, CHWs offer both basic preventive and curative services (Bhattacharyya, Winch, Karen & Tien, 2001; Prasad & Muraleedharan, 2007).

While it is essential to strike a balance between preventive and curative services to be provided by CHWs (Prasad & Muraleedharan, 2007), this equilibrium has been identified as an issue of concern. Whereas prevention is extremely hard to sell in all public health programs, curative care is generally more welcomed and appreciated by the residents when it is offered (Bhattacharyya, Winch, Karen & Tien, 2001).

Studies have shown that an approach in which CHWs offer more preventive than curative services had reduced the confidence of the community on the effectiveness of CHWs (Prasad & Muraleedharan, 2007) and the credibility, respect and status of CHWs in their communities. For example, the respect and status of CHWs in their communities unquestionably increases when they have medicine at their disposal, and their credibility suffers when medicine supplies are irregular. CHWs' access to and supply of medicine are closely linked to the importance of providing curative care (Bhattacharyya, Winch, Karen & Tien, 2001). In Nepal, for example, CHWs who were able to treat acute respiratory infection greatly increased their credibility among the village population (Curtale, Siwakoti, Lagrosa, LaRaja & Guerra, 1995).

Equally, inability to provide curative services to the community and lack of curative skills is a disincentive for CHWs (Bhattacharyya, Winch, Karen & Tien, 2001). For instance, in Tanzania, CHWs expressed frustration at not being able to provide the quality of services demanded by the community and therefore wanted further training in curative medicine. With disappointment on the part of the villagers and feelings of inadequacy among the CHWs, the relationship was characterized by a lack of support from the community (Heggenhougen, 1987).

3.2.2 <u>Diverse services reduce CHWs' performance</u>

Although it is necessary to integrate a range of services at community level in order to have better health outcomes, such an approach has received criticisms from various quarters who argue that it has increased the overall work-load of CHWs and thereby reducing their performance (Prasad & Muraleedharan, 2007; Hermann *et al*, 2009). CHWs with too many tasks also tended to select only a few activities that they themselves regarded as most feasible. For instance, CHWs in Malawi revealed that many of them felt overloaded with work, as more and more tasks were being added to their job description, which consequently affected the quality of their performance in key activity areas such as immunization (Hermann *et al*, 2009).

On the other hand, specific duties and functions of CHWs can dramatically influence the effectiveness and motivation of CHWs to stay on the job. CHWs with a single focus can also be trained and monitored to perform a manageable set of tasks, although frequent training and retraining in various vertical programs with no opportunity for integration may be disadvantageous (Bhattacharyya, Wineh, Karen & Tien, 2001). In the four Ugandan programmes created exclusively for HIV/AIDS-related care, the CHWs adhered to a relatively narrow range of activities (Hermann et al, 2009).

3.2.3 The diversity of CHW services

There is little scientific evidence of the optimal number and mix of CHW functions and tasks. A CHW may assist the health system in improving access to health, promoting preventive health messages, providing nutritional counselling or curative care, and helping community residents find other health care options through referrals (Bhattacharyya, Winch, Karen & Tien, 2001).

In South Africa, CHWs undertook a very broad range of activities including; child carers, peer educators, food distributors, income generating project members, administrators, traditional healers and community development workers (Friedman *et al*, 2007). In Uganda, there is evidence that CHWs have been active in mobilization of the community for mass and routine immunizations, medicine distribution, monitoring the Maternal and Neo-natal Tetanus situation in their areas (Komakech, 2007) and participating in home visits (Pathfinder International Uganda, 2009).

Pathfinder International Uganda found in their study, conducted in four districts (Amolatar, Amuria, Apac and Kaberamaido) of Uganda closely bordering Soroti, that the top most services provided by CHWs were general reproductive health counselling, provision of basic medication, provision of modern contraceptives, referral for other services, immunisation services and counselling on contraception. The services most frequently referred for by CHWs were further counselling on contraception and modern contraceptives. CHWs were also among the top three most preferred sources of information on family planning in the community.

Even though CHWs distribute medicine, the kind of medicines CHWs should be allowed to administer has been the subject of much debate. Many are concerned that treatment with antibiotics and antimalarials, in particular, might lead to overuse and misuse of these medicines and eventual increases in medicine resistance. Those who advocate for inclusion of these medicines in CHW kits argue that they are readily available from local pharmacists and medicine sellers and that trained CHWs may be able to promote proper usage (Bhattacharyya, Winch, Karen & Tien, 2001).

Evaluation studies of the Home-Based Management of Fever/Malaria (HBMF) strategy in rural Uganda have shown mixed results. While there was demonstrated improvement in the community effectiveness of malaria treatment (Nsungwa-Sabiiti, Peterson, Pariyo, Ogwal-Okeng, Petzold & Tomson, 2007), there were practices which could aggravate the problem of medicine resistance and misuse. Caretakers sometimes used what they perceived as 'weak' medicine as 'first aid' and, if the child did not get well, used more powerful medicine. Community views about medicine efficacy were divergent and it was feared that some views may divert caretakers from obtaining efficacious medicines (pre-packaged medicine) from community medicine distributors (CHWs) (Rutebemberwa, Nsabagasani, Pariyo, Tomson, Peterson & Kallander, 2009a). Using homapak (a 3-day course of pre-packaged chloroquine plus sulfadoxine/pyrimethamine tablets) instead of other allopathic antimalarials increased the likelihood of completing all steps of malaria treatment and there was marked improvement in Malaria treatment practices among homapak users. Therefore, intensifying implementation efforts to increase homapak use, especially among the poorest, would be beneficial (Nsungwa-Sabiiti et al, 2007).

Despite the various efforts by the Government of Uganda to scale up the appropriate use of facility-based healthcare services, particularly for the poor and most vulnerable population,

many factors have been perpetually reported by several studies as significant barriers to healthcare utilization. These factors include: low quality of services delivered, inadequate trained health workers, shortage of essential medicines, poor attitude of the health workers, long distances to health facilities, high cost of using services, lack of transport to health facilities and low health literacy (Pearson, 2000; Kiguli, Ekirapa-Kiracho, Okui, Mutebi, MacGregor, & Pariyo, 2009; Pariyo et al, 2009; Bakeera, Wamala, Galea, State, Peterson & Pariyo, 2009; Amuge et al, 2004). Many of these factors underscore the need for CHWs who increase availability and accessibility of health care.

3.3 Support and Supervision of CHWs

Large-scale CHW systems require substantial increases in support for training, management, supervision, and logistics (Berman, Gwatkin & Burger, 1987).

3.3.1 The relevance of training CHWs

The aspects of induction and continuing training programmes for CHWs have received considerable attention, as CHWs are often selected without any prior experience or professional training in community health (Lehmann & Sanders, 2007; Prasad & Muraleedharan, 2007). Initial training, continuous refresher training and regular mentoring are of crucial importance for sustaining the quality of performance of CHWs and they are important factors in retaining the motivation of workers (Hermann *et al*, 2009; Bhattacharyya, Winch, Karen & Tien, 2001; Lehmann and Sanders, 2007). Learning new skills is one of the main reasons CHWs volunteer (Bhattacharyya, Winch, Karen & Tien, 2001), but without refresher training, acquired skills are quickly lost (Lehmann & Sanders, 2007). Some programmes that have clearly defined career paths have provided CHWs with professional development opportunities such as sponsorship to study to become nurses, health assistants, senior CHWs etc. This has served as a motivating factor for CHWs, possibly improving retention (Hermann *et al*, 2009; Bhattacharyya, Winch, Karen & Tien, 2001).

To be effective, training has to be practically oriented and done with the needs of the community in mind (Bhattacharyya, Winch, Karen & Tien, 2001; Lehmann & Sanders, 2007; Haines *et al*, 2007). The right combination of skills can help a CHW become a more qualified worker. Having skills that the community values raises the status of a CHW in the community (Bhattacharyya, Winch, Karen & Tien, 2001). The contents and duration of training could be decided only along with decision on the range and nature of services to be

offered by them, and the level of education that they already possess (Lehmann & Sanders, 2007; Prasad & Muraleedharan, 2007). Training should be based on guidelines and standardized protocols and accompanied by broader efforts to strengthen health systems (Hermann *et al*, 2009).

Unfortunately however, regular and continuous training is among the many challenges faced by CHWs in provision of their services. For example, the CHWs in the Ugandan districts of Amolatar, Amuria, Apac and Kaberamaido did not receive refresher trainings because there was no budget for it (Pathfinder International Uganda, 2009).

3.3.2 The significance of job aids to CHWs

It is important that CHWs are provided with materials that help them perform the required tasks (Job aids). While providing a sense of affiliation and enhancing the CHW's authority, appropriate job aids also strengthen skills and are invaluable in increasing confidence. Job aids have included medicines, health education materials such as counselling cards, first aid kits, pots for demonstrating preparation of weaning foods, pens and pencils, flipcharts, notebooks, and boxes to store records. These frequently cited incentives are important to CHWs' self-esteem and ability to fulfil their role (Bhattacharyya, Winch, Karen & Tien, 2001).

The use of protocols and standard guidelines is also increasingly being recognized as an important tool for quality assurance in most health professions, including CHWs (Prasad & Muraleedharan, 2007; Haines *et al*, 2007; Kelly *et al*, 2001)

3.3.3 Supervision of CHWs in Uganda

The responsibility for the supervision of CHWs in Uganda primarily lies with the respective health facility where the CHWs are based (Hermann *et al*, 2009; Pathfinder International Uganda, 2009; Komakech, 2007). But in some areas, such as Yumbe District, the activities of CHWs have been supervised in a multi-sectoral pattern with good involvement of the subcounty authorities (Komakech, 2007).

In Yumbe District, each CHW was supervised at their own home by health workers from the reporting health units on monthly basis using a standardized checklist (Komakech, 2007). Although most CHWs in Amolatar, Amuria, Apac and Kaberamaido Districts were

supervised by health managers within the district health system who mainly originated from the District Health Officer's office, health facilities and occasionally Ministry of Health, the CHWs still felt that they were not effectively supervised because of the little funding of the health services (Pathfinder International Uganda, 2009).

Supervision and other forms of support, such as training and supplies, are widely acknowledged in the literature as crucial for the continued quality of service provision by CHWs. Large-scale CHW programmes have often been noted to neglect these areas, mainly because they had overlooked their cost in the planning stage. Only good supervision, together with adequate material support, will enable CHWs to function. This can be organized through the formal public health system or through a formal NGO network, but in both cases referrals to the formal health services need to be facilitated (Hermann *et al*, 2009).

3.4 Incentives and Disincentives for CHWs

3.4.1 Absolute CHW volunteerism amplifies their attrition

One major socioeconomic challenge that has been the subject of ongoing debate is the issue of payment versus voluntarism. The initial idea of the CHW assumed the existence of a pool of willing volunteers, but lack of payment has emerged as an important cause of attrition of CHWs in many programmes (Prasad & Muraleedharan, 2007; Bhattacharyya, Winch, Karen & Tien, 2001; Hermann et al., 2009), and, as we shall see, it impacts on the quality and character of engagements between CHWs and households. This is not to deny that much true voluntarism can be found in many communities, where people dedicate part of their time to social activities. Still, in truly voluntary programmes, CHWs are able to work a maximum of only a few hours per week and a high turnover of volunteers is the rule (Schneider, Hlophe & Van Rensburg, 2008) and the few enthusiastic and reliable volunteers that remain become overloaded with tasks from other agencies and sectors (Friedman et al, 2007).

CHWs may initially begin as pure volunteers, but as time goes on and the new information they are learning levels out and more and more is expected of them, they expect to receive a stipend to partially compensate them for their efforts, if they are not to jeopardize their own families (Friedman *et al*, 2007). CHWs also often work long hours, even full time, alongside salaried employees; a fact which inevitably leads them to demand for regular compensation for services provided (Bhattacharyya, Winch, Karen & Tien, 2001). Most of the CHWs in the Ugandan districts of Amolatar, Amuria, Apac and Kaberamaido did not work effectively and

some kept records without sending them to health centres because they were not motivated (Pathfinder International Uganda, 2009). Most successful CHW programmes have therefore ensured that their CHWs receive some form of remuneration if their programme activities prevent them from gaining their livelihood in other ways (Hermann *et al*, 2009).

3.4.2 Monetary and in-kind incentives

Incentives may be monetary or in-kind. Cash incentives may come in several forms such as salaries, small stipend, honorarium, per diem and travel allowances (Friedman *et al*, 2007; Bhattacharyya, Winch, Karen & Tien, 2001). There are many advantages to providing CHWs with cash incentives. The main programmatic advantage to cash incentives is the apparently lower attrition rate among paid CHWs. From the CHW perspective, appropriate, respectful, and regular compensation is a sign of acknowledgment and approval that allows them to earn a living or supplement other income (Bhattacharyya, Winch, Karen & Tien, 2001).

But providing CHWs with cash incentives can also have unforeseen negative consequences, depending on how it is handled. Money can be a divisive factor for CHWs and can undermine their commitment and the relationships they have with their communities. Discrepancies can also result in jealousy and enmity. CHWs who receive a salary or stipend may see themselves as employees of the government or NGO rather than as servants of the community. Financial incentives can destroy the spirit of volunteerism and work against the volunteer philosophy of a sense of community, and a community may become less willing to support the volunteers in other ways. When people distrust the government, they distrust CHWs who are perceived to be a part of the government system (Bhattacharyya, Winch, Karen & Tien, 2001).

CHWs can be paid in kind with cooking, food, housing, and help with agricultural work and child care; or through provision of material items which sometimes may not be related to the CHWs' job functions, like bags to carry supplies, agriculture tools, raincoats, backpacks, supplies for home improvement, educational materials, herbal plants, fruit trees (Bhattacharyya, Winch, Karen & Tien, 2001), uniforms, shoes and umbrellas (Friedman *et al*, 2007). Paying CHWs in-kind rather than in cash has advantages in that in-kind payments are less prone to comparison with levels of compensation of salaried employees because their exact value may be difficult to quantify (Bhattacharyya, Winch, Karen & Tien, 2001).

3.4.3 <u>Possible sources of CHW incentives</u>

The source of CHW payments can be the community (contributions from individual households), the government, an NGO, or even a for-profit company. Most successful in-kind payments are planned and implemented by the community, although CHW programs commonly provide CHWs with in-kind payments. There is some indication that decentralization increases the flexibility of the local government to respond to issues of CHW remuneration. In the Philippines, for example, an increasing number of honoraria, or travel allowances, have been provided to CHWs from both municipal governments and village development councils. The honoraria, which ranged from US\$.50 to US\$50 a month, were possible because of the devolution of health services from the provincial level to the municipality and village levels. At each level, local support for the health programs was funded out of the government's respective revenue allocation (Paison, 1999 as cited in Bhattacharyya, Winch, Karen & Tien, 2001).

3.5 Impacts of CHWs on Communities

Witnessing positive change is a strong motivator for CHWs. A sense of quick accomplishment often comes from providing curative services and nutritional interventions rather than from preventive services. CHWs can derive a sense of accomplishment at a collective level as well as from seeing changes in individual children, which is often difficult. CHWs who collect and use health information can monitor and feel proud of their own progress (Bhattacharyya, Winch, Karen & Tien, 2001).

Performance of CHWs is often measured in terms of improvement in health status of the population that they serve, increase in the utilization of services provided by them, reduction in the wastage of resources and the presence and accessibility of CHWs to the community members (Prasad & Muraleedharan, 2007).

A number of studies have shown that CHWs have impacted on the health of community members in a number of different ways. They have caused change of people's health related knowledge, attitudes or behaviours. For example, they have promoted immunisation uptake through outreach and follow up services (Lewin *et al*, 2005; Barnes, Friedman, Brickner & Honig, 1999).

In Niger, CHWs raised the health standards in the rural villages: village sanitation improved, the incidence of conjunctivitis decreased, infections healed faster, and the villagers became more knowledgeable about nutrition (Fournier & DJermakoye, 1975).

In the Bhaktapur Project in Nepal, the CHWs had visited households daily, and taught sanitation, latrine construction, water supply development, first aid, detected deficiency diseases, and referred people to clinics. Consequently, in the first 2 years of the project, 11 pit latrines and 2 gravity fed water systems had been constructed and latrines were being built all over the region (Kanno & Dixit, 1989).

Several studies have shown that CHWs have contributed to substantial reductions in child mortality, particularly through case management of ill children (Haines *et al*, 2007; Kelly *et al*, 2001) and regular personal contact with the household (Velema, Alihonou, Gandaho & Hounye, 1991; Lehmann & Sanders, 2007).

CHWs have also been used to improve and ensure timely and appropriate treatment of uncomplicated malaria. In Nigerian community, the consumers mostly preferred the CHW strategy over self-treatment in the homes and other strategies of treatment (Onwujekwe et al, 2006). Similarly in Zaire, health care behaviour changed dramatically in the intervention area where CHWs were being used for administering timely and effective treatment for presumptive malaria attacks, and by the end of the observation period, 65% of malaria episodes were treated at the community level. Malaria morbidity declined 50% in the intervention area but remained stable in the control area. Parasitological indices showed similar trends (Delacollette, Van der Stuyft & Molima, 1996).

3.6 Relations of CHWs during Work

3.6.1 Factors influencing the relationships between CHWs and Communities

The potential of the CHWs in many programs has not been realized because of a poor relationship with the community (Lehmann & Sanders, 2007). The effectiveness of the work of the CHW depends almost entirely on his or her relationship with the community. A good relationship with the community enhances community support and it is the most important nonmonetary incentive for CHWs (Bhattacharyya, Winch, Karen & Tien, 2001). Yet, detailed studies of interactions and relationships between CHWs and communities and households have rarely been done.

The few available studies show that CHWs' success is dependent on their community support (Lehmann & Sanders, 2007). In the Solomon Islands, for example, 32 percent of the village health workers surveyed left their posts because of a lack of community support (Bhattacharyya, Winch, Karen & Tien, 2001). Lariosa (1992) also reported that the CHWs did not contribute optimally to malaria control activities even in endemic areas in the Philippines because of lack of community support. Several programs have mentioned the support of the community as an incentive for CHWs (Bhattacharyya, Winch, Karen & Tien, 2001).

Communities that have directly and visibly benefited from CHW programs are the most willing to support the continued presence of CHWs. The community's interest in sustaining a CHW program is based in large part on evidence of positive changes in health status because of the CHW or on benefits such as effective referrals to health facilities (Bhattacharyya, Winch, Karen & Tien, 2001).

Communities that do not understand the role of the CHWs are less likely to give the CHWs the necessary support and may not understand their own role in improving their health. Communities understanding of their own role in changing their health status can help sustain the CHWs' activities (Frankel & Doggett, 1992; Heggenhougen, 1987). If the communities understand what the CHWs are trained to do, there is less chance that residents' expectations of a CHW will go unmet. Community understanding will also reduce inappropriate demands and frustrations (Heggenhougen, 1987).

It is also important that CHWs are acceptable to the communities they serve if they are to succeed (Baiden, Akanlu, Hodgson, Akweongo, Debpuur & Binka, 2007). Lehman and Sanders (2007) emphasized that CHWs have to respond to local societal and cultural norms and customs to ensure community acceptance and ownership. Barbosa *et al* (1998) also revealed that training gave CHWs in Rio de Janeiro, Brazil, recognition and acceptance in their communities.

Community recognition and appreciation of the work of CHWs can increase CHWs commitment to their work. Being identified as a CHW and affiliated with the health system is usually, though not always, a status symbol that generates power and respect within the community. Identification badges, uniforms, and relationships with "outsiders", can increase the status of a CHW in a community. Praise and respect from community residents and peers

can motivate CHWs positively and increase their length of service (Bhattacharyya, Winch, Karen & Tien, 2001).

In addition to community recognition, the formation of community organizations or village development committees has been cited as useful in supporting and sustaining the role of CHWs. In Gongola State, Nigeria, the support and encouragement of the village health committee emerged as an important factor in CHW job satisfaction. When support from community groups is missing, CHWs face an uphill battle in gaining the respect of the community (Bhattacharyya, Winch, Karen & Tien, 2001). CHWs from Cochabamba, Bolivia, felt that the community was unsupportive and unaware of their activities. They saw themselves as divorced from important decision-making organizations. They also felt that institutional support from highly visible community leaders would increase their motivation and their credibility with the villagers (Gonzalez, 1987 as cited in Bhattacharyya, Winch, Karen & Tien, 2001).

Several programs have also favourably mentioned community trust, prestige, mobility, and social interaction as incentives for CHWs (Bhattacharyya, Winch, Karen & Tien, 2001). The degree of trust and confidence of the community members that CHWs have gained over a period of time is important in sustaining the motivation of CHWs to function with commitment and effectiveness (Prasad & Muraleedharan, 2007).

3.6.2 The significance of healthy relationships between CHWs and Health Workers

Good working relationships between health workers at health facilities and CHWs or communities has been highlighted in several studies as very important (Prasad & Muraleedharan, 2007; Rutebemberwa, Ekirapa-Kiracho, Okui, Walker, Mutebi & Pariyo, 2009b; Bakeera et al, 2009; Friedman et al, 2007). A positive view of hospital and clinic staff can be a critical factor in strengthening their credibility and improving the referral system (Friedman et al, 2007). Referrals and records-keeping are often highlighted for establishing a good monitoring system (Prasad & Muraleedharan, 2007).

However, many instances have been reported in which the poor professional health care workers attitudes and practices had resulted in unhealthy relationships with CHWs or community members (Haines et al, 2007; Prasad & Muraleedharan, 2007; Rutebemberwa et al, 2009b; Bakeera et al, 2009). This kind of detrimental relationship often became strenuous, negatively affecting the satisfaction and performance of CHWs (Haines et al, 2007), health

services acceptability (Bakeera et al, 2009), feedback and referral systems (Prasad & Muraleedharan, 2007) and deprived the community members of the rights to participate in the improvement of the health services they got (Rutebemberwa et al, 2009b).

There have been many suggestions on how to tackle this health system barrier which reduces the quality and utilisation of health services, especially by the poorest (Bakeera *et al*, 2009). For example, various avenues such as regular community surveys, community meetings or user organizations could be instituted to give feedback to the health facilities and to address community needs (Rutebemberwa *et al*, 2009). The management of CHW programmes must also pay attention to the concerns and attitudes of health professionals (Schneider, Hlophe & Van Rensburg, 2008). Identification items such as badges and uniforms could be provided to CHWs for purposes of their identification. These items could increase the status of the CHWs in their community (Bhattacharyya, Winch, Karen & Tien, 2001).

3.6.3 <u>Importance of peer support to CHWs</u>

Interaction with other CHWs can be a critical motivator for people who often work with little supervision or tangible evidence of their effectiveness. Peer support comes in several forms. Several NGO programs have successfully paired CHWs so that they can work together and support each other. Working in teams allows CHWs to divide their work and reduces the sense of isolation and complete responsibility for a geographic area. Group meetings can provide motivation for CHWs through peer support (Bhattacharyya, Winch, Karen & Tien, 2001).

4.0 METHODOLOGY

4.1 Study Area

The study was carried out in Soroti District located in Eastern Uganda. One (Serere County) out of the four health sub-districts (counties) in Soroti District was included in the study and three (Olio, Kyere and Kateta) out of four sub-counties of Serere County were considered. Serere County and its three sub-counties were selected based on the existence of active community-based activities or interventions involving CHWs.

4.2 Study Design

The study was an exploratory, descriptive study. It utilised qualitative research methodology to enable the researcher to understand and interpret how communities and CHWs construct and understand their relationship with each other. This research methodology also enabled the researcher to understand the 'how' and 'why' questions surrounding interaction between CHWs and households (Ulin, Robinson & Tolley, 2005). By utilising a qualitative approach, the research was able to produce information-rich data which enabled him to develop an indepth insight into the interaction between CHWs and household members (Liamputtong & Ezzy, 2005). By considering the perspectives of the communities and CHWs, the researcher was able to give communities and CHWs a voice in representing their own reality (Ulin, Robinson & Tolley, 2005). In-depth interviews, focus group discussions and observation methods were features of this qualitative research. The study was conducted between November 2008 and December 2009.

4.3 Study Population

The study population was all the community members resident in the three sub-counties of Soroti District who had engaged with CHWs prior to the time of the study and active CHWs in these sub-counties of the district.

4.4 Sample Size

Focus group discussions were conducted with altogether twenty four (24) household representatives (carers) and twenty four (24) CHWs. Two groups of CHWs (one group had 5

CHWs and the other had 7 CHWs) were observed carrying out home visits. Two (2) Health Assistants were interviewed as Key Informants.

4.5 Sampling Procedure

Serere County and its three sub-counties of Olio, Kyere and Kateta were selected for the study based on the existence of active community-based activities or interventions involving CHWs.

A combination of purposive and random sampling was used to select the respondents for the study. 24 CHWs and 24 community members (household representatives who are always at home and interact with CHWs) were selected to participate in focus group discussions (FGDs) of eight participants each. One focus group discussion (FGD) with community members and one FGD with CHWs was conducted in each of the three selected sub-counties.

In each sub-county, eight community members and eight CHWs were randomly selected using a Simple Random Sampling method. This enabled all households and CHWs in the three selected research sub-counties to have an equal opportunity to be selected to participate in the study. CHWs and community members who had not had interaction with each other were excluded from the sample. Given their past experience in interacting with each other, it was anticipated that these CHWs and community members were a rich source of information and would provide valuable insights into their interactions.

All names of CHWs and households in each selected sub-county were obtained from respective sub-county headquarters. In each selected sub-county, the names of all the CHWs were written on small pieces of paper, which were folded and placed into a hat from which eight names were drawn. All the names of households were also written in small pieces of paper, which were folded and placed into a hat from which eight names were drawn. From each selected household, the person who actually deals with the CHWs was talked to.

All FGDs comprised of homogeneous samples of well informed people with a common identity and similar characteristics so that they would be able to discuss their shared experiences for in-depth understanding of the situation when stimulated (Ulin, Robinson & Tolley, 2005). These FGDs involved an intensive exploration of CHW-household interaction issues. This added interesting, insightful and reality-based perspectives and information to the

study. The CHW coordinators in the respective sub-counties assisted the researcher during the FGDs.

For further in-depth understanding of the interaction between CHWs and households, two groups of CHWs (one group had 5 CHWs and the other had 7 CHWs) were observed carrying out routine home visiting in their communities. These CHWs were randomly selected and all CHWs within the research sub-counties had an equal chance to participate in the study.

For the individual in-depth interview process, two (2) Health Assistants from the three sub-counties (1 from Olio Sub-county and the other representing both Kyere and Kateta Sub-counties) were identified and interviewed as key informants. This was because of their experience and role as persons responsible for community health activities, including supervision of CHWs activities, in the sub-counties.

4.6 Data Collection

The researcher collected and analysed the data himself. The researcher directly contacted the participants for FGDs to brief them about the study and obtained their consent to participate. To create a comfortable and secure environment for FGDs, arrangements were made for all FGDs to take place at the respective sub-county headquarters at different times.

FGDs were tape recorded and transcribed. Translation was done by the researcher. The researcher conducted the FGDs and recruited a person to act as a note-taker during the discussions. Respondents were reimbursed for their transport to and from the FGD venue and refreshments were provided during the FGDs. The proposed interview guide with questions and prompts that were used for FGDs are contained in Appendices II and III.

CHWs were also observed carrying out routine home visiting in their communities. After introductions, explaining the purpose of the study and obtaining consent, the researcher sat together with the CHWs and closely observed them conducting a home visit. The researcher quietly made detailed notes during the visit.

In relation to the individual interviews, the researcher contacted the key informants, informed them about the study and provided them with necessary details. Their consent to participate in the study was sought. These interviews were face-to-face and based on the proposed

interview guide contained in Appendix IV. They were conducted by the researcher and were also tape recorded and transcribed.

4.7 Data Management and Analysis

The researcher conducted data analysis. Data analysis was done alongside data collection and inductively. This continuous or interim analysis allowed the researcher to go back and refine questions, develop hypotheses, and pursue emerging avenues of inquiry in further depth (Pope, Ziebland & Mays, 2000).

The researcher familiarised himself with the data collected from FGDs, observations and key informant interviews by listening to tapes, reading transcripts and studying notes in order to list key ideas and recurrent themes which were coded. All the data relevant to each category were coherently and systematically coded and examined using a process called constant comparison, in which each item was checked or compared with the rest of the data to establish analytical categories. Corroborating and dis-confirming evidence collected through interviews, observations and FGDs were done to locate major and minor themes. The data was cross indexed and categories refined and reduced in number by grouping them together. Key themes or categories were then selected for further investigation. Matrices were used to develop an intimate knowledge of the data (Pope, Ziebland & Mays, 2000).

UNIVERSITY of the 4.8 Validity

The researcher summarised key points at the end of each FGD and interview to verify with the participants that his understanding and interpretation of their experiences and opinions was accurate. Triangulation of data sources through meeting with CHWs, communities and health assistants was done so as to ensure convergence among the different sources of information to form themes or categories in the study. Triangulation of methods by utilising FGDs, interviews and observations increased validity.

The researcher maintained a diary of personal thoughts and beliefs about the interaction between CHWs and households, and field notes with his observations throughout the research process for personal monitoring. Researcher reflexivity, with the researcher clearly stating his observations, personal beliefs and thoughts about the interaction between CHWs and households, have been included in the final write up of the study.

The researcher shared his experience of the study by including a thick, rich and detailed description of the setting, participants and themes of the study in the final write-up. The researcher clearly documented an account of the research process including decisions made and activities conducted for personal monitoring. The researcher's supervisor, who is familiar with the research subject, reviewed the research process, data and results and provided guidance and support to the researcher (Creswell & Miller, 2000).

4.9 Dissemination of Results

The results of the research study have been presented to the Faculty of Community and Health Sciences of the University of the Western Cape as a partial fulfilment of the requirements for the award of a degree of Masters in Public Health. They have also been presented to administrative authorities of Soroti District Local Government for purposes of planning, policy and implementation.

5.0 STUDY LIMITATIONS

The following study limitations were noted:

Sample size was a limitation as the researcher did not pursue the research until saturation was reached as is the norm for qualitative research. Because this is a mini-thesis, the researcher was guided by the recommendations for such research.

Households that had no prior engagements with CHWs were not included in the study population because it was beyond the scope of the study.

6.0 ETHICAL CONSIDERATIONS

The protocol of this research study was reviewed and approved by the Faculty of Community and Health Sciences and the Higher Degrees Committee of the University of the Western Cape; Uganda National Council for Science and Technology on May 22, 2009; and the administrative authorities of Soroti District Local Government.

Participation in the study was voluntary for all community members, CHWs and key informants. They were each provided with a letter explaining the purpose of the research study, how they were chosen to participate and data collection procedures. The letter also

requested their participation, assured them of confidentiality and provided contacts of the responsible persons in case of any questions or concerns.

Before each interview or FGD, the researcher ensured that full information about the details of the study, including its purpose and uses of participants' contributions was clearly explained to the respondents and their questions answered. The researcher was also honest and kept participants informed about the expectations of the study and not pressurise them to speak. At the outset, the researcher also clarified that each participant's contributions would be shared with the others in the group as well as with him. Participants were encouraged to keep confidential what they heard during the meeting and they signed in the consent form that they would not share information from the FGD outside of the FGD. The researcher had the responsibility to ensure that the data from the group was anonymous. The researcher also assured the participants of his availability in the event that they wanted to discuss issues that they did not want to raise in the FGD with him, although no participant followed up or raised any issue after the FGDs.

Given the nature of the research, it was most unlikely that the participants would perceive the research as threatening or invasive. However, an assurance was given to the participants that the study would cause no harm to them and they had the right to withdraw at any time they chose to. The participants were also made aware of absence of direct benefits attached to their participation (Participant Information Sheet in Appendices V and VI). Their consent was sought and consent forms were available for them to sign should they be willing to participate in the study (Participant Consent Form in Appendix VIII)). The researcher documented the participants' verbal consent in the event that some people were willing to participate but did not want to sign on the consent form.

The researcher was mindful about bias that would possibly arise owing to his involvement in the CHW Programme in the research areas. Although the researcher was involved in the implementation of the CHW Programme in Soroti District, he did not have any direct or close contact with the interviewees. The researcher basically gave technical guidance to the people who are directly involved with the interviewees. The researcher was sure that he was a stranger to most of the interviewees and did not expect them to link him up with the CHW programme implementers, or funders, or authority of any sort. During data collection the researcher introduced himself as a student and not as a staff of the CHW Programme. He did

not use the programme resources such as vehicles, staff members, or programme stakeholders during the exercise.



7.0 RESULTS

7.1 Introduction

This section presents the findings of this study. Particularly, it highlights the profile of CHWs, scope of their activities, their work approaches and coverage, how they are supported and managed, their incentives, impacts of their activities and how they relate with their community members. The personal views, opinions and experiences of the key informants and the researcher have also been incorporated in the presentation of the findings.

7.2 CHW Profile

7.2.1 <u>Demographic profile</u>

A total of 24 CHWs participated in the study, the majority (75%) of whom were male and the rest (25%) were female. The researcher did not collect the data related to age of the respondents but from his observation, the CHWs appeared to be between 18 and 65 years of age. This observation coincided with that of the household members who revealed that the CHWs were composed of both young and old men and women in the community.

7.2.2 <u>Selection of CHWs</u>

According to Ministry of Health (MoH, 2000; MoH, 2002), CHWs are meant to be selected by the communities they serve. All the key informants, CHWs and household members confirmed that this was indeed the practice in Soroti district. One household member from Kateta Sub-county said, "...these CHWs were selected from our own villages by us..."

It was evident from the responses of the household members that they liked the system of selection of CHWs from their households because it had positively shaped their relations with each other. One of the household members from Kateta mentioned:

"...they [CHWs] are very careful about what they say and do because they do not want to offend any person...they really struggle to do the right things and not offend people so that they can relate well with community members. Because they know that if they offended anyone or did wrong things, they would not be liked in their community and they would have nowhere to run to."

The key informants explained that about ten CHWs were selected per village by popular vote after sensitization of and consensus building with village members from all households. They added that the criterion used to guide the voting process was in line with the Ministry of Health stipulations. The prerequisites for being a CHW include maturity (above 18 years of age), a resident of the village, ability to read and write at least in the local language, a good community mobiliser and communicator, a dependable and trustworthy person, interested in health and development, willingness to work for the community good and should be a resource person in the community (MoH, 2000; MoH, 2002).

7.3 CHWs' Work Approaches and Coverage

Although CHWs occasionally visited households unaccompanied, they preferred moving in small groups, comprising of all CHWs within a village, when carrying out their activities in the households. This was the observation of all key informants, household members and CHWs interviewed.

The CHWs explained that they usually visited households on their own when carrying out activities which did not necessarily require the help of other CHWs such as medicine distribution, condom distribution, data collection, assisting or referring of the sick to health facilities, community mobilisation and domestic conflict resolution, or one-on-one consultations by the household members.

The CHWs explained that the team work approach strengthened team spirit and helped them to support each other during work since they had different levels of understanding of issues as dictated by their different educational backgrounds, skills and previous experiences. Some CHWs also mentioned that group work enabled them pass messages to even stubborn household members who may not have listened to any one of them alone.

7.3.1 Coverage and frequency of CHWs' work

The CHWs mentioned that although each of them was supposed to have been responsible for twenty households in their villages, they did not follow this rule. This statement by the CHWs was confirmed by the key informants. According to the CHWs, the rule of one CHW per twenty households was not possible to follow because of their small numbers in most

villages, different levels of interest and commitment to work, different levels of knowledge and skills, and different levels of trust and preference by the community members.

CHWs said that they often moved in small groups of about 5-10 CHWs in average, and visited all (approximately 200 households in average) in their respective villages at least once in every three months on their own chosen days. CHWs from one sub-county (Olio) revealed that they had scheduled their group home visits for a particular day in a week, Thursday, which all community members were aware of. They added that they announced the days of implementation of their activities to the community members through various channels including: one-on-one dialogue; during social gatherings such as church prayers and funerals; pinning up of notices; and through community leaders. The key informants and household members verified what the CHWs mentioned. The key informant from Olio Sub-county mentioned that the "...CHWs schedule their activities and conduct home visits at least once in a week and not on a daily basis and since CHWs were volunteers, there was no specific time in which they had to work". One of the household members from Olio Sub-county also pointed out that;

"...the sub-county leadership (LC III Council) informs people about their [CHWs] visits as they go around enforcing by laws..."

Much as the key informants and CHWs informed the researcher that CHWs usually drew up a program for home visiting and informed the community about it, some household members still felt that the CHWs made abrupt visits to their homes and they were not comfortable with it.

"We have a problem especially when they visit abruptly and when your household is not clean." – A household member from Kyere Sub-county.

The abrupt visits by CHWs made some of the household members afraid and embarrassed especially when they had not done what they were told in the previous visit.

"We sometimes have fear and shame when they visit us again and find that we did not do what we were told in the previous visit. Because of shame and fear, I sometimes feel very reluctant to talk to the CHWs because I am scared." – A household member from Kyere Sub-county.

According to CHWs, the activity and household visitation days depended on certain critical factors such as availability of food or some money to buy food during the activities. A CHW from Olio Sub-county explained that;

"Most times we are forced to dip into our pockets in order to buy something to eat in the day yet we also have to provide for our families. This has inconvenienced our work because we cannot visit many households when hungry and we cannot conduct home visits frequently because we also have to give ourselves some time to look for money to spend during the next visits. We start the home visits in the morning and end in the evening without eating something at times."

The activity and visitation days also depended on availability of transport facilities (bicycles for this matter) for moving around as most households were distant from each other. A CHW from Olio Sub-county mentioned that; "...some of us don't have bicycles yet the homesteads are far apart."

Climatic conditions also dictated on the activity implementation days of CHWs. For example, during rainy days, some roads were impassable and most community members would be busy cultivating. Very hot days would also not favour long distance movements.

The household members also complained that the CHWs did not reach them on time especially on hot and wet days because most of them had transport problems as the households are located far away from each other.

However, CHWs had tried to overcome the above challenges by: sometimes carrying each other on the few available bicycles provided by the NGOs supporting the CHW programme, or using their own bicycles at home, or borrowing from neighbourhood, or hiring, or walking on foot. For hunger during the exercise, some CHWs had contributed some little money to buy themselves food from vendors. Sometimes their devoted Health Assistants would buy them something using their (health assistants') own money.

The CHWs also reported that although they visited all households in their respective areas, they carried out their activities only in households in which they found a "household head or at least an adult person." According to CHWs, "an adult person" was one who was able to

understand household issues as per their (CHWs) assessment. The CHWs did not specify the age range of such a person. One of the CHWs from Kyere Sub-county said;

"Sometimes when I visit a household and do not get the parents at home, I ask the children around the whereabouts of their parents and ask them to call them if they (parents) are nearby. Or I ask for any other adult around and if they are also not around, I go away."

7.3.2 Networking

All CHWs interviewed mentioned that they were working with other groups in the community. The key informants and household members also alluded to the existence of this working relationship.

CHWs from Olio Sub-county revealed that they requested at least one community leader, like LC I or LC II or Health Assistant or any other person influential and respected in the community to accompany them at no cost during implementation of their activities. This was because the community leaders assisted the CHWs in emphasising the importance of their work and messages to the community. This approach also increased political and technical support and recognition of CHWs' work by the community leaders. The researcher confirmed this approach based on the supporting statements which one of the household members from Olio Sub-county gave when he mentioned that;

"...these CHWs usually move with health workers or health assistant from the sub-county... they were moving with a team from the sub-county..."

Some CHWs also revealed that they would sometimes invite CHWs from neighbouring villages to join them during their work at no cost. This was because some household members listened to strangers more than their very own CHWs. This idea also encouraged lesson sharing amongst CHWs and communities.

The CHWs mentioned that they worked with the local political leaders (LCs), Parish Development Committees (PDCs), health assistants, parish chiefs, sanitation groups in communities and schools, funeral groups, religious leaders and HIV/AIDS focal persons in sub-counties during mobilisation of communities, community data collection, sensitisation and home visiting activities. According to CHWs, these community groups also encouraged

community members to cooperate with them. They added that these community groups occasionally invited them to talk to the community about health issues whenever there were social gatherings. The CHWs would in-turn invite some of these groups to also talk to the community members on some pertinent issues, not necessarily health related, during community sensitisation days organised by them.

PDCs and Assistant Community Development Officers based at the sub-county would also invite some CHWs to participate in community planning meetings.

In some places, the CHWs were invited by Health Assistants, health workers at health centres, and Health Unit Management Committees (HUMCs) to take part in community outreach programs like immunisations and primary health care whenever they organised them.

Other national organisations having programs at community levels, like National Agriculture Advisory Authority (NAADS) and National Association of Women Living with HIV/AIDS (NACWOLA) and community-based organisations such as Serere Women Living with HIV/AIDS (SEWOLA) also invited CHWs to take part in their activities whenever it was necessary.

7.4 Scope of Activities of CHWs NIVERSITY of the

According to the key informants, CHWs offered more preventive than curative services. This sub-section explores the activities carried out by CHWs in their communities, the value the communities attach to some of these activities, challenges experienced by both CHWs and communities during implementation of these activities and how they tried overcome them.

7.4.1 Home Visiting: community entry, response and dialogue

When asked who the CHWs were, most household members interviewed responded that CHWs were their own people whom they selected to be trained by the CHW programme to be able to help them out of poverty and sensitise them on health related issues such as prevention of HIV/AIDS and Malaria and advise them on issues of hygiene, water and sanitation like ensuring safe water chain, food and nutrition, construction of latrines, bathing shelters, utensil racks and good housing. Others perceived CHWs as health advisors and

educators, government and community volunteers acting as mobile health centre one, who were put in place because the health workers were not enough at the health facilities.

All the household members interviewed reported that they had been briefed about the roles of CHWs by the following people: the community leaders like LCs and parish chiefs as they moved around during the selection of CHWs; CHWs when they visited; health workers at the health centres when household members visited the health facilities; officials from NGOs that supported the CHW programme during community meetings; DHT during community sensitisation meetings; and radio talk shows and messages.

The CHWs exposed that in the past household members had not cooperated with them and treated them badly because they did not understand their roles, but this had changed. One CHW from Kyere mentioned;

"Way back it was difficult and people feared us because they did not understand our roles as CHWs but now most of them receive us well (warmly and gladly)."

All the CHWs interviewed reported that they were aware of their roles and had them written in their note books, although the researcher did not have the opportunity to verify this by looking at the books. They mentioned that they were briefed about their roles during induction and trainings facilitated by the DHT, Health Assistants and officials from NGOs, like AMREF, which supported the CHW programme.

The key informants had documents with roles of CHWs with them. The key informants claimed that the District Health Educator gave them CHW training manuals which clearly spell out the roles and responsibilities of CHWs. The researcher had the opportunity to see the CHW training manuals and verified that the manuals were developed by the Ministry of Health and they actually contained the roles of CHWs clearly spelt out.

If an adult person or household head was found in a household, all CHWs interviewed said that they started their interactions by first introducing themselves by name and as CHWs to that person.

After introductions, two approaches were used by CHWs to carry on with their interactions with household members. The majority of CHWs explained that "...if given attention, we then proceed to inform them about the purpose of our visit and to discuss the topic for the visit..."

Others said that after introductions, they would enquire about the well-being of the family members in that household first before proceeding with their discussions. The quotes below are what they said and the various reasons they gave for using this approach.

"When I am visiting a household, I do not usually tell the household members the reason for my visit but I first enquire about the well-being of the family members and we discuss other issues not related to my visit before I later inform them about the purpose of my visit. This is because people are different. There are people who if you told them about your visit, they just become rude and tell you off." – CHW from Kyere Sub-county

"For me I first find out about the condition of the household members before going ahead to discuss the purpose of my visit. Because one time I found out about the condition of the household members and was told that the condition of one of the children in the household was bad. So I had to help them get the child to the health facility first and suspended my visit but promised to come back another time when the child got better. That household head later came to my home and requested me to share with his family because his child had gotten better." – CHW from Kateta Sub-county

"I enquire about the well-being of the household members to get a better picture of the situation and to build good relations. Analysing the situation enables me better understand the problems at hand which will guide my approach to the situation." – CHW from Olio Sub-county

The researcher did not probe the household members to find out which of the two approaches above used by CHWs to carry on interactions with them after introductions, they were comfortable with. But deducing from the above explanations of CHWs, it is apparent that the latter approach of enquiring about the situation in households, created a conducive and better environment for building mutual understanding between the two parties.

7.4.2 Community sensitisation on health issues

The sensitisation of communities on health related issues was one of the core activities mentioned by CHWs. All CHWs said that they mainly educate household members about

health related issues, a perception which was shared by household members. One of them from Kateta Sub-county said "...the first thing they [CHWs] give us is knowledge on health issues and how to maintain our households healthy and they demonstrate to us what to do." The researcher also observed this during the home visiting activities he witnessed.

The CHWs mentioned that they educate household members about personal hygiene, safe water chain, malaria, HIV/AIDS prevention and control, and reproductive and family health using the picture cards given to them by the CHW programme. To this list of issues mentioned by CHWs, the household members added that the CHWs also educate them about environmental hygiene, sanitation, waste disposal, importance of parents not sharing sleeping rooms with their children, dangers of congestion, good food and nutrition practice, prevention of diseases and living positively with HIV/AIDS.

Sensitisation was one of the activities most valued by the household members because of its perceived impact and this was confirmed by the key informants. The household members revealed that, of all the information given to them during sensitisation sessions, they valued information on water, hygiene and sanitation most because they had observed great improvements such as reduction in number of cases of diarrhoeal diseases. One of the household members from Olio Sub-county mentioned;

"The most valuable information is on sanitation, maintaining safe water chain, hygiene and sanitation because way back households were unhygienic and food hygiene was very poor and diarrhoeal diseases were common. But currently, things have changed because there are a few incidences of diarrhoeal diseases and households are more hygienic than before."

Nearly all female household members reported that they valued information about family planning and reproductive health most. One of the female household members from Kyere Sub-county said "...as women, we value the information on family planning most because it has helped us space our children and plan better for our families."

Challenges of implementation

The major challenge experienced by CHWs during sensitisation was the little trust and confidence that a few household members, who had experienced domestic chaos as a result of

misunderstanding some of their health messages, had in them. CHWs' messages on family planning were the most often misunderstood by the household members. For example,

"...the wife may be interested in practicing family planning but her husband may not. Even though she discusses the issue with her husband, it sometimes leads to domestic violence which is beyond our level. So we are sometimes seen as trouble causers in such families." – A CHW from Olio Sub-county.

On the other hand, some household members revealed that they had a challenge in understanding some of the CHWs' messages. "Some CHWs do not teach us well and do not exhaust all the information...They fail to drive the points home and to make you understand what the realities are", lamented one household member from Kateta Sub-county. Immediately after, his colleague from the same discussion group sustained:

"I agree with my colleague because it's true that we sometimes fail to understand everything CHWs tell us during their visits to our households..."

One of the household members from Kateta Sub-county cited that they sometimes failed to understand CHWs well, "...because these CHWs are most times tired by the time they reach our homes as they walk long distances and since they are few in number, they have to visit many households, which wears them up. So by the time they arrive your household, they would be already tired and may fail to explain well and exhaust all the information."

To overcome the challenge, some household members had tried to consult CHWs at their free time after the sensitisation exercise. A household member from Kateta Sub-county said,

"...I follow up the CHW at a later time after his/her visit. I go to his/her home and ask him to explain and clarify to me what I did not understand during his visit to my household. I often find this very helpful because the CHW would have also rested and relaxed. So he will be able to freely explain to me and even give me more information."

7.4.3 Inspection of households

After educating, the CHWs narrated that they usually moved around the households in the company of a household member to inspect and check for the presence and hygienic

conditions of various aspects of the households. The key informants and most household members also reported the same. The researcher also confirmed this finding during the home visiting activities he witnessed. A household member from Olio Sub-county explained:

"When these CHWs come to my home, they are always interested in finding out if my household is well maintained and later advise on what to do about the wrong things they have noticed. They request for the person at home to show them around the household as they inspect and check for the presence and conditions of latrines, bath shelters, drying racks, sleeping rooms, kitchens, refuse disposal and hand washing facilities."

Challenges of implementation

According to some household members, when the CHWs had finished inspecting their households and had discovered some errors, they (CHWs) most often expected them to put things right, even though some of the recommended interventions may be difficult for household members to implement. Some household members lamented for example:

"Sometimes these CHWs ask us to replace some of our kitchen utensils, which cost money. Me being a poor man already, I am faced with the challenge of looking for money to replace such things. This makes me feel that they are a burden at times." — A household member from Kyere Sub-county.

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"Much as the CHWs encourage us to construct pit latrines, our topography (underlying basement rock) hinders us from digging deep into the earth for pits. The difficulty of getting construction materials like grass for thatching huts has made it worse for us as we cannot easily get these materials. Eradication of mosquitoes is also a major problem between us and CHWs because we live close to the lake and so have many mosquitoes which bite us even if we are seated outside in the evenings." — A household member from Kateta Sub-county.

Although the household members reported that they had tried to overcome the difficulties of latrines by excavating anthills within the area, because they were easier to dig deep for latrines, and following instructions of CHWs in order to minimise fear and embarrassment, some of them had as well made demands which CHWs felt were unrealistic. For example,

"...they show us the pit holes and say that they have done what we told them. They then demand for slabs from us because as people who usually distribute medicines and other health incentives, they expect us to also provide latrine slabs. We do not have the capacity to make slabs and so what we do is to tell them that we shall forward the issue to the above authorities. The household members also demand for insecticides used for treating mosquito nets from us. We have taught them the importance of sleeping under a treated bed net and they value it...but people are demanding for their houses to be sprayed with residual mosquito repelling insecticides like the neighbouring district (Katakwi)" — CHW from Kyere Sub-county.

CHWs also reported that some household members had given them a hard time by adamantly refusing to follow their instructions. The key informants also revealed that some of the household members did not cooperate and claimed they did not have the time to attend to CHWs. Worse still, they sometimes even demanded payment from the CHWs for occupying them when they were supposed to be doing other things. The researcher himself also observed one of the household members from Kateta Sub-county asking for money from CHWs in compensation of his time during a home visit.

For the moment, the CHWs had tried to deal with uncooperative people by counselling them. On the issue of unrealistic community demands (slabs, ITNs and treatment insecticides) CHWs had tried to tell the household members the truth that they were not able to meet their demands, but would forward them to higher authorities and lobby for provision of such items when they got an opportunity to do it. On the issue of mosquitoes, CHWs had encouraged those who did not have Insecticide Treated Bed Nets (ITNs) to continue smoking their houses to repel the mosquitoes.

7.4.4 Medicine distribution

CHWs also reported that they distributed medicine for malaria (homapak), to the sick people in households whenever available. The CHWs explained that they got the medicine from the nearest government aided health centre II or III or IV and distributed it to the household members they had diagnosed to be suffering from malaria. The CHWs added that they were trained by the CHW programme to detect malaria based on its signs and symptoms.

"...when they [CHWs] come to my household, they often find out about any sick children and probe to understand the cause of the illness." - Household member from Kyere Sub-county.

The key informants and household members confirmed this activity and they added that medicine distribution was among the activities valued most by household members because they received the medicine at a free cost. Some household members were cited saying:

"I value the medicine they [CHWs] distribute to us, especially the anti-malarials (homapak) because even if you don't have money, you get the medicine free of charge without paying anything... They also give you information on how to maintain your family healthy and how to administer medicine to the children." — Household member from Kateta Sub-county.

"These CHWs just treat us free of charge without any cost..." – Household member from Kyere Sub-county.

Challenges of implementation

The key informants reported that stock-outs of anti-malarial medicines at the health facilities had negatively affected the credibility of CHWs because distribution of medicine was irregular. This was considered a key issue which was undermining the CHW programme. The key informant of Olio Sub-county made clear that,

"Because the community members value medicine most, there has been an overwhelming demand for them. Currently there is a shortage in supply of the antimalarials and the community members are asking why the CHWs are not distributing medicine anymore. So the community members are thinking that the CHWs have failed to perform, yet the government has not actually supplied the medicine."

However the CHWs had tried to address this issue by continuously encouraging household members to take the sick to the health centres where they could get proper treatment and medicine, especially during the time of medicine stock-outs. They also advocated for the MoH to increase and regularise supply of medicine to health facilities. One of the CHWs from Olio Sub-county mentioned;

"Ministry of Health through the DHOs office should ensure constant and regular supply of medicines that we distribute to community members. This will bring the community members closer to us and it will also encourage them to visit us at our homes as they come for the medicines instead of us going to them. As a result, this will minimise our house-to-house movements and in the process of them receiving the medicines we shall also be in position to give them some pieces of advice."

7.4.5 Referrals of the sick to health facilities

The CHWs also refer sick household members to health facilities. A CHW from Olio Subcounty said:

"We encourage them [household members] to take sick children to the health facilities for treatment and we refer those who are sick to the health facilities for proper medical attention."

The CHWs had gone an extra mile beyond just referring the sick to health facilities to even assisting them reach the health facilities. As a household member from Kyere Sub-county commented:

"The CHWs have helped the sick by lending their bicycles, which were given to them by the CHW programme, for transporting the sick to the health facility."

Household members emphasized that they also valued this assistance by the CHWs.

Challenges of implementation

However, CHWs also spoke about the difficulties they faced in the process of helping the sick to health facilities and when interacting with the health workers at the health facilities. They explained that;

"We are sometimes called upon to help sick people at night, yet we do not have torches or fuel for our lamps. We do not have gumboots and the roads may be bushy and we risk a lot." - A CHW from Kyere Sub-county.

"We have difficulty in working with some health workers. Some of these people do not recognise us when we visit the health facilities and in the process we become

demoralised. This happens even when we have referred a patient to them."- A CHW from Kateta Sub-county.

7.4.6 Data collection

The CHWs also said that they collected health related data using record books which were given to them by the District Health Office through their respective sub-county Health Assistants. They added that they submitted the data to their respective sub-county health centres III for entry into the data bases. The researcher had the opportunity to verify this by looking at the record books but was not able to see any of the databases, as the Health Information Assistants who were responsible for the databases were not available at health centres III in the study sub-counties and their offices were locked. The records books observed were purposely designed by the Ministry of Health for use by CHWs and had provisions for births, deaths, diseases, populations and immunisation data among others. This was verified when one of the household members from Kateta Sub-county mentioned that, "...they [CHWs] also register deaths and births (health facility and home births), pregnant women and children under five in the villages."

7.4.7 Condom distribution

CHWs "...have encouraged people with HIV/AIDS to live positively and have given them condoms", said a household member from Kyere Sub-county. The CHWs explained that they usually get the government recommended condoms from the nearest government aided health facilities in their sub-counties and freely distribute them to the interested household members and people with HIV/AIDS during their sensitisation sessions. The researcher did not probe into the challenges experienced by CHWs and households during condom distribution exercise.

7.4.8 Community mobilisation for immunisations

Another activity that the CHWs reported to be doing was mobilising household members to take their children for immunisation during immunisation days. The key informants confirmed this activity. However, the researcher did not probe into the challenges experienced by CHWs and households during community mobilisation.

7.4.9 <u>Domestic conflict resolution</u>

Although it is not one of their endorsed roles, CHWs reported that they occasionally helped household members re-solve their family related issues like domestic violence, child abuse and management of children.

"We help in resolving family conflicts like domestic violence and child abuse. If the issues are sensitive, we speak to the household members separately in their categories of adults, children and youth" - CHW from Olio Sub-county.

This was confirmed when a household member from the same sub-county (Olio) mentioned that "...CHWs sometimes help me to advise even those children who do not listen to my instructions and advice well. The CHWs also correct me whenever I have done something wrong, since no human being is perfect."

7.4.10 Cleaning of health facilities

Household members from Olio Sub-county gave evidence that CHWs helped clean up their health centre IV.

"...I have also witnessed them [CHWs] cleaning up the health centre by sweeping, slashing, scrubbing and mobbing it"- Household member from Olio sub-county. WESTERN CAPE

7.5 Support and Management of CHWs

Training and competency of CHWs 7.5.1

All the CHWs interviewed revealed that they were initially trained to perform their roles by the Ministry of Health through the District Health Office and later refreshed by the NGOs supporting the CHW Programme. In verification, the household members said that they had witnessed the occurrence of such trainings. According to CHWs, their initial training was conducted for five days in 2004 after their selection. It took place at their respective subcounty headquarters and covered the PHC concepts and roles of CHWs. The CHWs cited that since then, they did not have any other training again organised by the District Health Office, until 2006 when NGOs such as AMREF provided them with refresher trainings in the same areas. The CHWs had undergone two refresher training sessions by the time of this study. The refresher trainings were conducted in close collaboration with the District Health Team at the same venues as the initial training but lasted three days.

Majority of the household members interviewed felt that the CHWs visiting their homes were skilled in performing their work. One of the household members from Olio sub-county said:

"For some of us, with our low level of education, we feel these CHWs are skilled in their work and we believe them because we do not have the information and skills they have."

These respondents reasoned that they thought this way because the CHWs: had been trained on their roles; had caused a positive change in their areas; did not receive any rewards; were not corrupt in that they really delivered their medicine to affected household members without any problem; explained and demonstrated very well about construction of latrines, drying racks, administration of medicine and keep records of the medicine just like health workers; referred some cases to the heath facilities and qualified health workers and they also encouraged people to report any cases of certain diseases.

According to some household members, although the CHWs were skilled in performing their roles, they felt that the CHWs still needed frequent refresher trainings and further training especially in medicine administration so as to keep up-to-date and more competent. Some of these respondents were quoted as shown below.

"These CHWs understand their work and are skilled but because of continuous changes in medicine they need to be taken back for training so as to update their skills. For example we now hear that the Ministry of Health has changed the treatment of malaria. So I am sure that these CHWs do not understand how to administer the new anti-malarials, so their skills will need to be updated on the use of these new anti-malarials. So we cannot conclude that they are fully skilled, they need to be frequently refreshed, especially if there are any new developments." — Household member from Kateta Sub-county.

"These CHWs understand their work and are skilled in especially medicine administration. But they are not skilled in administering injections. For example there may be diseases which require treatment through injections but because these

CHWs do not know how to inject, they fail to treat such diseases. So the CHWs should be taught how to administer injections as well because there are many poor people who cannot afford the treatment costs at clinics or health facilities (payable) yet if the CHWs were taught how to inject, they would be of help to such people." - Household member from Kateta Sub-county.

On the other hand, as indicated below, some respondents felt that not all CHWs were skilled.

"... for some people who attained a higher level of education, they feel these CHWs are not skilled enough and they are liars." – Household member from Olio sub-county.

"It is just like students, some students are bright while others are not, so are these CHWs. Some of them understand and know what they are doing while others don't. However majority of them are reluctant and not interested in their work. But when it comes to medicine distribution, they really do it well." - Household member from Kateta Sub-county.

To corroborate the above view, one of the CHWs actually revealed that some household members, especially the retired civil servants, were very knowledgably that they challenged most CHWs when they visited their households.

7.5.2 Supervision of CHWs IVERSITY of the

The Health Assistants at Health Centres III and in-charges of the nearest health centres from where the CHWs got the medicine, were responsible for monitoring the performance and quality of work of CHWs at sub-county level. The District Health Team, led by the District Health Officer, is the overall programme coordinator. The CHWs informed the researcher that Health Assistants moved together with them at least twice a month during the implementation of their work and provided them with all the necessary technical support. The researcher confirmed this practice based on the supporting statements which one of the household members from Olio Sub-county gave when he mentioned that;

"...these CHWs usually move with health workers or health assistants..."

The health centre in-charges, most of whom are Clinical Officers by training, usually monitored the medicine distribution and immunisation activities of CHWs. There were no

documented tools used by the Health Assistants of health unit -in-charges for monitoring the work of CHWs.

Both the key informants and CHWs revealed that the Parish Coordinators of CHWs submitted progress reports to Health Assistants every month. These reports were analysed and compiled in a file stored at the Health Centre III or Sub-county Headquarters and the information used for planning and action purposes.

CHWs in Soroti also had other supervisors whose responsibility was to provide support and to ensure that CHWs actually performed their duties within their communities. All the household members, CHWs and key informants interviewed mentioned these supervisors to include the following: the LC Is and leaders of CHWs at village level were responsible for overseeing the activities of CHWs in each village; Parish Chiefs and CHW parish coordinators coordinated the CHWs in each parish; Assistant Community Development Officers, CHW Program implementers and CHW coordinators at sub-counties.

7.6 Incentives

7.6.1 Volunteerism by CHWs

The key informants told the researcher that CHWs were purely volunteers. All the CHWs interviewed also mentioned that they were volunteers and did not receive any rewarding things during and after the home visits. One of the CHWs from Kyere Sub-county actually said, "We do not get any rewards..." In concurrence with CHWs, all the household members interviewed said that they did not give any rewards during or after the CHWs had visited their homes because the CHWs were committed volunteers who didn't ask for anything in reward for their services.

Some household members however mentioned that if by any chance the CHWs came around during meal time, they were welcomed to join household members for the meal. In conformity with this statement, one of the CHWs from Kyere Sub-county mentioned that, "...sometimes people request us to share some tea or food with them..."

Conversely, one of the CHWs from Kyere Sub-county revealed that much as he did not request for anything, some household members offered him some things, which he accepted. He said:

"We do not ask for anything. But in case the household member wants to give me something, I usually tell him/her to send it with a child to my home later after my visit. This is to avoid being seen by LCs as one who is extorting from the household members."

From the responses of both CHWs and household members, it was unclear to the researcher if CHWs received some rewards from households or not as some household members and CHWs did not reveal it. Perhaps, there may be some informal arrangements which were hidden.

Meanwhile, the researcher learnt that much as the CHWs were taken as entirely volunteers, most of them (CHWs) felt that they should have received at least something small as a reward from the government in compensation and appreciation of their efforts and time. "Ministry of Health through the district health office should give us some motivation for this work so that we can also benefit from it, like some money..." said one CHW from Kyere Sub-county. "...because we do this work at the expense of our families and we go back home hungry and tired and with nothing for family members to eat", added his colleague from the same discussion group.

Household members had similar thoughts about rewarding CHWs. "The CHWs should also be given some motivational allowance so that they are encouraged and their work does not deteriorate because although they are volunteers, they also need to eat, dress, and wash which costs money", said one of the household members from Kateta Sub-county. One household member from Olio Sub-county thought that "...CHWs should be provided with bicycles and given some monthly income, such as Uganda Shillings 10,000 as appreciation token..."

7.6.2 <u>Attrition of CHWs</u>

The key informant from Olio Sub-county was not sure about the total number of CHWs who were active at any one time. "I am not sure but we realise the number of active CHWs at any one time when we ask them to participate voluntarily in some group activities like cleaning of health centres. We then monitor their turn-up", he said. He made an estimate to the researcher that about 5 out of 200 CHWs, on average, became inactive in a sub-county per year. He revealed that the village and sub-county leaders of CHWs were responsible for

monitoring the levels of activeness of CHWs in their areas and report to them (health assistants), but unfortunately, this system was not very effective as some leaders were also not very committed.

However, when need arose for replacement of CHWs, this key informant informed the researcher that they (health assistants) facilitated the replacement process following the MoH recommended CHW selection criterion. "...every year we facilitate the community to replace the ones who would have left or become inactive following the same selection criterion", he said.

7.7 The Impacts of CHW Activities

This subsection describes the suggested impacts of the activities of CHWs.

7.7.1 Reduced disease burden

The most important impact reported by both the household members and the CHWs was a reduction in disease burden among household members. According to CHWs, the number of cases of diseases like malaria and diarrhoea had reduced, and few children fell sick or died. The household members also reported the same.

"Diarrhoea episodes amongst children have reduced because children no longer indiscriminately dispose their excreta as before" – Household member from Kyere Sub-county.

"...Malaria episodes have also greatly reduced...," added another household member from the same sub-county.

Recent statistics have shown that Malaria contributed to 61.1% of all diagnoses in the district and had a Case Fatality Rate of 1.1% (Soroti District, 2008), compared to 36% and 23.2% of total reported morbidity and mortality, respectively ten years ago (1998) (Soroti District, Undated), indicating a dramatic decrease of mortality. Diarhoeal diseases contributed to 5.3% of all diagnoses among children less than five years of age and 2.1% among persons of 5 years or older (Soroti District, 2008), compared to with 6% of all total reported morbidity in 1998 (Soroti District, Undated). The researcher could not find suitable statistics for comparison of the changes in health status of the households in the recent times and before.

Although the diseases discussed above are good indicators of appropriate and timely community-based interventions, it is impossible to directly attribute reduced morbidity and mortality to the activities of CHWs.

7.7.2 <u>Increased health related knowledge among household members</u>

Increase in health related knowledge among household members was also reported by all key informants, CHWs and household members. The CHWs noted that more pregnant women were aware about antenatal services available at the health facilities. Most household members noted the increased knowledge about living positively among people living with HIV/AIDS, hygiene and sanitation among household members. "We are happy because health related knowledge among community members, including the old has increased", said a household member from Olio Sub-county.

7.7.3 <u>Improved sanitation and hygiene conditions</u>

According to most household members interviewed, sanitation and hygiene conditions had greatly improved ever since the CHWs were appointed. The respondents explained that latrine coverage had increased; personal and household hygiene conditions like waste disposal, cleaning of clothes and houses had improved; safe water chain had improved, especially protection of water sources, hygiene of water collection vessels and use of separate cups for scooping and drinking water; and there were fewer cases of lice and bedbug infestations. They said;

"More latrines have been constructed and you can no longer find human excreta deposited all over the compound as it was the case before."- Household member from Kyere Sub-county.

"As women there is a very big change. Women now wash up after coming back from the gardens and their hygiene has improved greatly. The women also try to maintain their water collection containers and water sources clean unlike before. Children have also learnt to maintain good hygiene in their households, like proper use of latrines, because they get this information from school and transfer it to their homes"- Household member from Olio Sub-county.

Recent statistics have shown that the latrine coverage had increased in counties in which CHWs were more active. For example, the latrine coverage of Serere County, which had very active CHWs and the area of this research study, was 75.3% compared to 55.1% in Soroti County, which had averagely less active CHWs (Soroti District, 2008).

7.7.4 Health services brought nearer

The household members stressed that the CHWs, through their work, had brought health services nearer and reduced their distances to the health facilities. They said that:

"...Although I do not have a bicycle, I don't have to worry when any family member falls sick in my household because it is just a matter of sending a child to run to the nearest CHW for assistance and I am rescued..." – Household member from Kyere Sub-county.

"...Even if one fell sick in the middle of the night, s/he would not have to worry but only swallow the medicine given to him/her." – Household member from Kateta Sub-county.

"There is a quick response to assisting the sick people because the CHWs are readily available and are willing to help." – Household member from Kateta Subcounty.

7.7.5 <u>Increased utilisation and uptake of health services</u>

The household members also talked about increased utilisation and uptake of health services, like maternal and child health, and family planning among themselves. "More pregnant women now give birth at health centres..." said a household member from Kyere Sub-county.

"I am most grateful to the CHWs for sensitising the community about family planning and child spacing. Before these CHWs started sensitising us, there was high fertility rate in our community but after they intervened, there is now better child spacing." - Household member from Kateta Sub-county.

Some household members also mentioned that more household members were taking their sick children and relatives to the health facilities for treatment as compared to before. There was also an increased number of people accessing HIV services. In Olio Sub-county, due to trust that people living with HIV/AIDS had in some CHWs, they had disclosed their sero-status to them and asked for their support.

7.7.6 <u>Improved behaviour and lifestyles of household members</u>

As a result of increase in knowledge, the CHWs and household members noted an immense change in the behaviour and lifestyles of some household members. "More people sleep under mosquito nets than before", said a household member from Kateta Sub-county. "More people have now constructed sound houses and separate shelters for cooking and animals", was how another household member from Kyere Sub-county described the impact of the CHWs.

7.7.7 Reduced household spending on treatment

Some household members reported that their levels of spending on treatment of their sick family members had reduced because of reduced disease burden in their households. For instance one household member from Kyere Sub-county mentioned;

"I have realised a change in my home... because I have saved the money which I would have used for treating sick family members as episodes of sickness have now reduced. I can also afford to buy a goat for myself or pay people to help me harvest my cassava."

7.8 Relationships between CHWs and Communities

7.8.1 The different feelings of CHWs when entering households

All CHWs interviewed felt that it was a good idea to go to a household in the capacity of a CHW. They felt this way because home visiting helped them "learn many things and compare different households."

When asked how they usually felt when visiting a household, all the CHWs expressed that they were usually happy, proud and confident when visiting a household. The key informants also mentioned that most CHWs usually felt proud when visiting households. CHWs gave various reasons why they felt that way, as shown in the table below.

Table 1: How CHWs usually felt when visiting a household and reasons

"my people also feel happy to receive me as their CHW	"I feel confident because" "we were already trained to perform our work and we understand what to do (we	"I feel proud because" "I am a trained health educator." "I am the one showing
and a health educator" "I love my work as a CHW" "the community values me	know how to approach them and what to do next after being received) and we have been equipped with all the necessary information"	these people how to improve their health."
as their health educator" "most of the community members are aware about out roles and appreciate our work."	"the community members have confidence in us."	

7.8.2 Reactions of communities when CHWs visit their households

All the household members interviewed felt that it was a good idea to have CHWs visiting their households because of their perceived importance and impacts of their work.

The household members responded differently to seeing CHWs in their households. When asked about how they felt when a CHW visited their households, most of the household members expressed that they felt "very good, happy and excited" because of the following reasons cited in the box below:

Box 1: Reasons why household members felt "very good, happy and excited" when CHWs visited their households

"...I feel I have seen health workers who care about my life"

"...better health has come into the household."

"...I know they have brought me good news or they have brought me

something new."

"...these CHWs help us cover the gaps which exist in our households."

These reasons are mirrored by the CHWs in Box 2 below:

Box 2: Reasons why most household members were pleased to see CHWs in their households – CHWs perception

"...they value our work and have put into practice what we had previously told them."

"...they are anxious to receive the new information we have brought for them."

"...they think we have brought them good news and support from other organisations like medicine ITNs or we are collecting data."

"...they love to learn new things."

"...they have seen the difference between the past times and the present times. Our work has made differences in their households..."

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Furthermore, all the household members expressed that they felt the CHWs who had visited their households had treated them well and in calm, humble and friendly manner and they were "comfortable with them". They said "they are friendly and good" "these CHWs are very calm and humble" "they are patient with us".

The household members gave various reasons why they felt that way, as shown in the table below.

Table 2: How household members felt CHWs had treated them and reasons

"They are friendly and good "These CHWs are very calm" "They are patient with us

because..."

"...they do not force us to do things. They only educate us about the importance of health and encourage us to do those things to remain healthy"

"...they have treated us like brothers and sisters without forcing us to do anything"

and humble because..."

"...they talk to us very well"

"...they do not give orders to us like other structures such as LCs. Even if you have a problem, they will not spread it to other people."

"...even if you don't have a latrine and you try to hide on seeing them, they will always try to persuade you back, calm you down and help you out of your problem"

"...they are committed people and are interested in identifying your problem and

giving you advice to help you
out of it"

"...they do not harass us like government officials who earn salaries. The CHWs know that they are only volunteers and so they have to persuade people."

because..."

"...they do not harass us."

"...they are not like people who earn salary, who do things carelessly and think that after all their salary will be paid whether they have done the right things or not. If you have not understood something, these CHWs will not get tired to repeating it over and over again until you understand because know that they are helping solve community the problems which are deterring them from developing."

"...they treat us very well.

They take time to educate us about health issues"

Most household members attributed the above behaviour of CHWs to their training. "I think it is the way they were taught during their training", said one household member from Kyere Sub-county.

While other household members gave various reasons as to why they thought CHWs treated them that way, as shown in the box below.

Box 2: Reasons why household members thought CHWs treated them the way they did

"...they are conscious that if they forced us do things like the political and government leaders do, we would not abide"

"...they put on our shoes and help us understand our problems and how to solve them regardless of our differences in age, education and sex"

"...these CHWs were selected from our own villages and know who is who in the area, who behaves which way, who has which problem. So they are very careful about what they say and do because they do not want to offend any person... so that they relate well with community members...they know that if they offend anyone or did wrong things, they would not be liked in their community and they would have nowhere to run to."

"...these CHWs know that we have what they want. And so to get it, they really have to humble themselves and persuade us to give it to them."

"...most of our leaders force us to do things without really giving clear explanations and persuading us. So the CHWs have discovered that if they also used this approach, they would not succeed in the villages"

"...they want to link us to the health workers at the health centres"

However, CHWs also noted that the extent of pleasure of the household members varied and mostly depended on the value they attached to the work of CHWs and how much they had benefitted from CHWs activities. A CHW from Kateta Sub-county cited that;

"Families with children under five often receive us well as compared to those with older children or no children at all because their children have benefited a lot from our services. It is worst with households with only old people, because they don't benefit from incentives like ITNs since they are not usually targeted by the health programs giving out such incentives."

"...household members who have done what they were told will always treat us warmly and well. Households with people who have had some level of education will most likely obey our instructions than those with low or no education because they understand what we tell them..." said another CHW from Olio Sub-county.

CHWs who had been treated well by household members said that they felt "respected and encouraged".

Some household members felt "happy" when a CHW visited their households, "but..."
"...at the same time afraid because I feel I may have missed out something."

"...I sometimes feel embarrassed when they are discussing with me issues that affect me and I have not done the right things."

"...embarrassed because my latrine is about to fill up."

A few household members revealed to the researcher that they felt uncomfortable when a CHW visited their households. "When those CHWs visit my household, they make me uncomfortable..." said a household member from Kyere sub-county. This household member reasoned that "...because they get me unprepared; sometimes even the household is not clean and beddings are not neat. So when they enter my house, I feel embarrassed". Another household member from the same sub-county who also felt the same way sustained that:

"It is true! Some of these CHWs are like snakes in some households because whenever they visit, they make you do work which you were not prepared for: like scrubbing sauce pans, cleaning water storage containers and pots, digging and constructing latrines within that short period of time. So some people often run away from home when they see CHWs. But those who value life and health often remain to do whatever is to be done because health does not come easily, it has to be bought."

In relation to what the household members revealed above, the CHWs also noted that some household members, especially those who did not listen to them and had untidy compounds, were usually terrified and panicked upon seeing them in their households. One of the CHWs from Kateta Sub-county gave details that;

"Some people who did not put into practice what we had told them previously and have untidy compounds become terrified and panicky on seeing us. Most of these people will quickly try to put things right as we are approaching their homes. They may also begin asking the children about the condition of the latrines and some parts of the household, like sleeping rooms and rush children to quickly clean them up. Some of them will even hide."

According to CHWs, the household members who responded this way were usually those who had; low level of education, bad morals and manners, negative perception about CHWs, low level of understanding of the roles of CHWs, less value attachment to health related issues, or were drunkards. In their own words, the CHWs explained that:

"Our reception depends on the degree of soberness of the household members or head. Households whose household members or head is a drunkard or is drunk at the time of our visit hardly receive us well. These are the most difficult households to visit because these kind of people usually ask us difficult and useless questions and are not cooperative. It's worse when you visit a household whose head is a drunkard or is drunk and this individual has low education level. This person will always tell you off saying that hygiene and health is for those of us who are educated and not for them." — CHW from Kateta Sub-county.

"People with bad manners and morals, low levels of education and those who perceive us as people who want to benefit from their ideas receive us very poorly. But those people with some level of education usually receive us warmly, listen to us and do what we tell them." – CHW from Kyere Sub-county.

According to both CHWs and household members, their experiences and attitudes towards each other do have a positive impact on the implementation of the CHW programme in their sub-counties. They said that their relationship and experiences with each other brings about development and leads to the success of the programme because household members had seen that the CHWs were really delivering and doing their work and they were happy. They reasoned that if an impact occurred out of the work of CHWs it would boost the programme because the donors would be pleased and could increase their funding to the programme.

They added that their relationship may inform the programme in such a way that the programme would reposition itself and adjust its strategy to focus on another aspect other than health after discovering that the health aspect had succeeded. They said:

"If this relationship continues, the health of the people in our village will improve and this will contribute to the success of the program. The programme can be strengthened and donors will be impressed." – Household member from Olio Subcounty.

"Because of that good relationship between the household members and the CHWs we have realised that our sub-counties are implementing more preventive measures. For instance the latrine coverage here is above 75% on average. This is because of the good working relationship between the government, sub-county and the CHWs and, CHWs with the community. This good working relationship will improve the interventions of the program especially in those areas where the CHWs are active."

- Key Informant from of Olio Sub-county.

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8.0 DISCUSSION

8.1 Introduction

This section presents an analysis and interpretation of the results of the study in relation to existing literature and similar studies done in other places. It highlights the key emerging issues which relate to the objectives of the study and how various factors influenced the relationship between CHWs and household members, focusing on recruitment, training and supervision, teamwork and networking, and the crucial role of communication.

8.2 The importance of recruiting CHWs from their own communities

The study established that the communities of Soroti fully participated in the selection of their own CHWs based on the strategy provided by the Ministry of Health, which is different from the practice in other places (Bhattacharyya, Winch, Karen and Tien, 2001; Friedman *et al*, 2007; Schneider, Hlophe and Rensburg, 2008). This recruitment of CHWs through a democratic community structure was considered to be a good practice by all the household members because it provided a firm foundation for positively shaping their relationships with CHWs.

Due to this CHW recruitment approach, all the household members were able to identify CHWs as CHWs and associate them with the health system, which generated power and respect of CHWs within their peers and the community. The respect gained motivated CHWs, which could potentially increase their length of service (Bhattacharyya, Winch, Karen and Tien, 2001).

This CHW recruitment approach also made CHWs easily accessible by household members. This fact, coupled with CHWs' willingness to help, gave the household members an impression that CHWs had brought health services closer to them and had reduced their distances to health facilities. The CHWs usually helped the sick household members with medicines whenever they were available, health facility referrals and transport facilities (bicycles) to the health facilities. These endeavours of CHWs, especially health facility referrals, were perceived by both the household members and CHWs to have improved health seeking behaviour among community members and increased utilisation and uptake of facility-based health services like maternal and child health and reproductive health in the area. These actions of CHWs may be augmenting those of the Government of Uganda in

scaling up the appropriate use of facility-based healthcare services, particularly for the poor and most vulnerable population.

Living within the communities they served enabled CHWs to understand their community needs, problems and existing local societal and cultural norms and customs. The good comprehension of these fundamental issues empowered CHWs to respond appropriately to their communities. This conduct by CHWs evidently increased their acceptance, ownership, trust and confidence in the community (Baiden *et al*, 2007).

CHWs' understanding of their communities also greatly improved their relationship with household members. This positive relationship significantly motivated CHWs and enhanced effectiveness of their work and community support. It also contributed to a low turnover of CHWs, which would make sustained quality assurance more likely (Prasad & Muraleedharan, 2007; Lehmann & Sanders, 2007).

8.3 The role of training and supervision in the improvement of CHWs' status in the community

Training significantly enabled CHWs to gain recognition, appreciation, praise, trust and confidence of household members. While household members pointed out that CHWs had different levels of skill and knowledge, and some seemed more satisfied than others, most of them praised CHWs and had trust and confidence in them because CHWs had the knowledge and skills that the community valued. CHWs were imparted with PHC concepts and skills during the initial and re-training sessions conducted by officials from the District Health Office and other development stakeholders.

The study also found out that, although CHWs were trained and perceived as skilled by most household members, the household members felt that there was a need to frequently and continuously train CHWs so as to keep them up-to-date with new developments. There is vast evidence that initial training, continuous refresher training, regular mentoring, supplies and support supervision are of crucial importance for sustaining the quality of performance of CHWs, and they are important factors in retaining the motivation of workers (Hermann *et al*, 2009; Bhattacharyya, Winch, Karen and Tien, 2001; Lehmann and Sanders, 2007). However, large-scale CHW programmes have often been noted to neglect these areas, mainly because they had overlooked their cost in the planning stage (Hermann *et al*, 2009). This was the case

of Soroti District and her neighbouring districts (Pathfinder International Uganda, 2009). Before the entry of CHWs supportive NGOs, Soroti was faced with the challenge of limited financial resources for training, supplies and support supervision of CHWs, which resulted in inactivity of most of the CHWs in this district after their selection and induction. The reactivation of Soroti CHWs by NGOs showed that the success of the CHW programme in this district hinges on the active support by such NGOs. This experience raises questions about the sustainability of the Soroti District CHW programme when NGOs cease their support for this programme.

Supervision played an equally important role in ensuring that CHWs were able to perform their roles and were seen to be supported. Although the responsibility for the supervision of CHWs in Soroti primarily lay with the respective health facility where the CHWs are based, they were supervised in a multi-sectoral pattern, with good involvement of the sub-county authorities and development stakeholders. The relatively good level of support supervision of CHWs in Soroti in all likelihood increased the quality of service provision by CHWs (Hermann *et al*, 2009). It would be important to note that the improved support supervision of CHWs in this district was mainly contributed to by NGOs, a fact which again raises concerns about the long-term sustainability of the program.

8.4 The importance of teamwork and networking to CHWs

During implementation of their activities, CHWs often worked in small teams and networked, which enabled them gain more support and respect from their communities. Despite the CHWs' awareness of the MoH requirement that each of them was supposed to oversee the health status and health activities in 20-25 households in a village (MoH, 2000; MoH, 2002), CHWs in Soroti found this arrangement not feasible because of their small numbers in most villages and their different levels of commitment to work, knowledge, skills, trust and preference by some community members. Instead, the CHWs worked in small groups, each of which comprised of all CHWs within a village (about 5-10 CHWs in average), when executing their routine duties in the community. Like in several NGO programmes elsewhere in the world, as reported by Bhattacharyya, Winch, Karen and Tien (2001), working in teams not only boosted community support and respect, but also motivated CHWs, strengthened their spirit to work together and support each other, allowed them to divide their work and reduced the sense of isolation and complete responsibility for their apportioned geographic area.

The CHWs often networked with other CHWs from neighbouring villages, community leaders, technical persons and several community groups and structures, community-based organisations, health facilities and national government programs that existed within their localities. This practice increased respect, credibility and support of CHWs within their communities and awareness of household members about the activities of CHWs. It also significantly motivated CHWs and enabled them influence decisions made by other local community groups and organisations.

With regard to teamwork with health facilities, CHWs experienced some challenges during the process of referrals. In addition to inadequate facilitation, the major challenge faced by CHWs during health facility referrals was poor attitudes and practices of some professional health workers at health facilities towards them. These attitudes and practices of some professional health workers had demoralised some CHWs and damaged the working relationship between them. This dilemma has also been reported in various other studies (Haines *et al*, 2007; Prasad and Muraleedharan, 2007; Rutebemberwa *et al*, 2009b; Bakeera *et al*, 2009).

This kind of detrimental relationship is a health system barrier which, if not urgently addressed, could reduce the quality and utilisation of health services by the household members (Bakeera et al, 2009). It strained CHWs and health workers, negatively affected the satisfaction and performance of CHWs and deprived the community members of the rights to participate in the improvement of the health services they get. This relationship also negatively affected health services acceptability, the credibility of health workers and weakened the feedback and referral systems.

8.5 The importance of good results from CHWs' work

There is no conclusive evidence that allows the attribution of reductions in disease burden to the VHT programme. However, there were strong perceptions among household members and CHWs that CHWs' activities had benefited many households, brought about positive changes, and had contributed to a reduction in disease burden among household members in the area. The perceived impacts of the CHWs in Soroti were similar to those of CHWs reported in other studies (Fournier and DJermakoye, 1975; Kanno and Dixit, 1989; Haines et al, 2007; Kelly et al, 2001; Velema, Alihonou, Gandaho and Hounye, 1991; Menon, 1991; Onwujekwe et al, 2006; Delacollette, Van der Stuyft and Molima, 1996). Households that

had directly and visibly benefited from CHWs' work appreciated CHWs most and they were the most willing to support the continued presence of CHWs. Witnessing positive changes raised the community's interest in sustaining a CHW program. This experience strongly motivated CHWs and gave them a sense of accomplishment at a collective level and they felt proud of their own progress.

However, there were also severe set-backs in the community's confidence in the effectiveness of CHWs, their respect, status and credibility, most crucially in their limited curative role: the irregular distribution of anti-malarial medicines by CHWs in Soroti, due to stock-outs of supplies at health centres, severely undermined their role, mirroring similar experiences internationally (Bhattacharyya, Winch, Karen & Tien, 2001; Prasad & Muraleedharan, 2007).

International experience shows that, while malpractice has to be guarded against (Nsungwa-Sabiiti et al, 2007, Rutebemberwa et al, 2009a), community medicine distribution brings health services nearer to the households, thus reducing distances to health facilities. It also improves community effectiveness of malaria treatment (Nsungwa-Sabiiti et al, 2007), reduces household expenditure on treatment since medicine is provided at no cost, and increases the credibility, respect and status of CHWs in their communities (Bhattacharyya, Winch, Karen and Tien, 2001).

8.6 Communication – a key to good relationships

Communication was found to be central to successful interaction between CHWs and communities.

Firstly, household members provided CHWs with the necessary support and affiliated them with the health system because they understood their roles. Prior to the selection of CHWs, all household members were sensitised about the roles of CHWs by the DHT, health workers and various community leaders through various channels and media, which raised their awareness. The community support gained was an incentive to the CHWs and increased their success (Lehmann & Sanders, 2007). The good level of awareness of CHWs' roles by the household members reduced inappropriate demands and frustrations and enabled household members to understand their own role in improving their health, which could help sustain the CHWs' activities (Frankel & Doggett, 1992; Heggenhougen, 1987).

However, where such communication had not been successful or had been absent, tension between CHWs and households became more frequent. Some households, for example, had experienced domestic chaos as a result of misunderstanding CHWs' messages and had little trust and confidence in CHWs. The ineffective communication of some messages by exhausted CHWs had resulted in misconceptions and confusion in households, and in some cases, domestic chaos. Lack of transport facilities and their small numbers compelled CHWs to walk long distances to reach households, thus becoming exhausted. The exhaustion of CHWs had consequently affected the quality of their performance in communication, which is a key area of health promotion.

Furthermore, inappropriate demands by both CHWs and a few household members on each other had led to frustration of both parties and loss of confidence of household members in CHWs, as these household members perceived CHWs as a 'burden'. Household members demanded latrine slabs, anti-malarial medicines, insecticides, mosquito nets and payment in compensation of their time, which CHWs felt were improper since they also relied on supplies from existing programs or health facilities. Some of the CHWs' demands which household members felt were unacceptable included replacement of some kitchen utensils and construction of deep pit latrines. The household members gave reasons that they were too poor to afford new utensils and they could not excavate deep into the earth because of the existence of an underlying ground rock.

The negative perception of CHWs resulted in uncooperative tendencies by these household members and they rendered little or no support at all to CHWs. The responses of these household members scared away some CHWs. According to the CHWs, the household members who behaved this way typically had low levels of education and comprehension of CHWs' roles, negative perception of CHWs' work, not visibly benefitted from CHWs' work, and attached less value to CHWs' work and health related issues. Although these kind of household members were few, they may become a barrier to the success of CHWs, because their influence in the community could divert the perceptions of other community members about CHWs.

Lastly, a lack of understanding between the CHWs and household members on the schedule of home visits negatively affected the relationship between some of them. Although CHWs announced the days of implementation of their activities through various community communication channels, some household members still felt that the CHWs made abrupt

visits to their homes, which they were not comfortable with. The abrupt visits by CHWs made some of the household members uncomfortable, afraid and embarrassed especially when they had not done what they were told in the previous visit. And as such, these household members rendered little or no support at all to CHWs and developed uncooperative tendencies and some of them hid or ran away when CHWs visited their households.

8.7 The impact of volunteerism

The VHT programme in Uganda is based on volunteerism. As with many such programmes in the world, this was found to be controversial and ultimately probably not sustainable.

CHWs may initially begin as pure volunteers, but as time goes on and the new information they are learning levels out and more and more is expected of them, they will expect to receive a stipend to partially compensate them for their efforts, if they are not to jeopardize their own families (Friedman *et al*, 2007). There is enormous evidence that without adequate remuneration, CHWs cannot be retained for a long term (Hermann *et al*, 2009). There is high turnover of volunteers in programmes where CHWs are absolutely volunteers (Schneider, Hlophe and Van Rensburg, 2008; Prasad and Muraleedharan, 2007; Bhattacharyya, Winch, Karen and Tien, 2001; Hermann *et al*, 2009) and the few enthusiastic and reliable volunteers that remain become overloaded with more tasks (Friedman *et al*, 2007).

In Soroti district, some household members occasionally voluntarily provided CHWs with in-kind payments in form of food to demonstrate their support to them. These in-kind payments from households greatly motivated those beneficiary CHWs. Although CHWs in Soroti were working on absolutely voluntary basis as per MoH stipulations (MoH, 2000; MoH, 2002), there was a felt imperative need among the key informants, household members and CHWs to reward CHWs because they worked hard at the expense of their families and other livelihoods.

Internationally, most successful CHW programmes have ensured that their CHWs receive adequate remuneration if their programme activities prevent them from gaining their livelihood in other ways (Hermann *et al*, 2009), although the most successful in-kind payments are planned and implemented by the community (Bhattacharyya, Winch, Karen and Tien, 2001; Prasad and Muraleedharan, 2007). Given the existence of some evidence that

decentralization increases the flexibility of the local government to respond to issues of CHW remuneration (Paison, 1999 as cited in Bhattacharyya, Winch, Karen and Tien, 2001), the local governments in Uganda could also explore various options of rewarding their CHWs if they want to retain them effectively performing for a long period of time.



9.0 CONCLUSIONS

9.1 Introduction

This section presents the conclusions of the study. It highlights the key factors that shape the relationship between households and CHWs in Soroti and their implications to the CHW programme. For ease of comprehension, the presentation of this section has been divided into two sub-sections: the first highlights the factors which enabled the good relations between CHWs and households; while the second highlights those factors which hindered such relations.

9.2 Factors which enabled good relations between CHWs and households

Generally, the status of Soroti CHWs in their communities was high. The household members recognised, accepted, owned, respected, supported, praised, appreciated, trusted and had confidence in CHWs although a few of them were dissatisfied. These positive attitudes of household members towards CHWs were predominantly attributed to the recruitment approach of CHWs through a democratic community structure, good level of awareness of CHWs' roles by household members, good behaviour exhibited by CHWs, their training, skills, working approach and perceived impact of their work. This positive mind-set of household members empowered them to oversee the work of CHWs and to correct problems that they noted in their work. It also increased the motivation of CHWs to function with commitment and effectiveness and gave them authority within their peers and the community. If sustained, this mind-set could increase the household members' understanding of their own role in improving their health, likelihood of success of CHWs, their length of service and sustainability of their activities.

The good behaviour of the CHWs was attributable to the fact that they understood their community needs, problems and existing local societal and cultural norms and customs. CHWs were found to be caring, dependable, easily accessible and enthusiastic to help. This conduct of CHWs significantly improved their relationship with the household members. The positive relationship between these two parties enhanced community support for CHWs, effectiveness of their work and contributed to their motivation and low turnover. If this good relationship is maintained, it could increase the realisation of the potential of CHWs in the CHW programme and likelihood of sustained quality assurance.

Although CHWs were trained and perceived by most household members as knowledgeable and skilled, there was an evident necessity to provide them with continuous refresher training and regular mentoring. However, Soroti District Local Government alone lacked the financial resource capacity to provide such trainings. The limited training could negatively affect the sustainability of the quality of performance of CHWs, their motivation and retention.

It was evident that NGOs had played an influential role in facilitating the comparatively good level of support supervision of CHWs in Soroti, which could increase the quality of service provision by CHWs. Based on this and other evidence, it would be important to note that the incapacity of Soroti District Local Government to support her own CHWs without the backing of NGOs (development stakeholders) puts the sustainability of this CHW Programme at stake, especially when such stakeholders cease their support.

CHWs often worked in small teams and networked when carrying out their routine duties. Working in teams motivated CHWs, strengthened their spirit to work together and support each other, allowed them to divide their work and reduced the sense of isolation and complete responsibility for their apportioned geographic area. Networking increased respect, credibility and support of CHWs within their communities and awareness of household members about their activities. It also significantly motivated CHWs and enabled them influence the decisions made by other local community groups and organisations. This team work and networking approach could enhance the success of the CHW Program.

There were pervasive perceptions that the activities of CHWs had positively impacted the health status of household members, which raised the interest of household members in sustaining a CHW program. These perceptions also strongly motivated CHWs and gave them a sense of accomplishment at a collective level and they felt proud of their own progress. The most cited impacts were reduced distance to health facilities, improved health seeking behaviour among community members and increased utilisation and uptake of facility-based health services like maternal and child health and reproductive health in the area. If these changes in the health status of households were verified and attributed to CHWs' activities, then it would be imperative to conclude that the efforts of CHWs in Soroti are augmenting those of the Government of Uganda in scaling up the appropriate use of facility-based healthcare services, particularly for the poor and most vulnerable population.

9.3 Factors which hindered relations between CHWs and households

Although medicine distribution was among the most valued activities of CHWs, its irregular implementation, due to stock-outs of supplies at health centres, negatively affected the confidence of the community on the effectiveness of CHWs, their respect, status and credibility in their communities.

The detrimental relationship between some professional health workers at health facilities and CHWs negatively affected the health services acceptability, credibility of CHWs and health workers and weakened the feedback and referral systems. This poor relationship also strained CHWs and health workers, negatively affected the satisfaction and performance of CHWs and deprived the community members of the rights to participate in the improvement of the health services they get. This detrimental relationship was a health system barrier which, if not urgently addressed, would reduce the quality and utilisation of health services by the household members.

Despite the fact that household members valued community sensitisation by CHWs, the misunderstanding of some messages delivered in these sessions due to ineffective communication had resulted into domestic confusion and chaos, which reduced community trust and confidence in CHWs. The ineffective communication of some messages was due to exhaustion of CHWs. Lack of transport facilities and their small numbers compelled CHWs to walk long distances to reach households, thus becoming exhausted. The exhaustion of CHWs had consequently affected the quality of their performance in communication, which is a key area of health promotion.

Some CHWs and household members made demands to each other which a few of them perceived as inappropriate. The negative perception of these demands frustrated both household members and CHWs involved and reduced the level of cooperation of household members, their support and confidence in CHWs. Although these were exceptional occurrences, they may become barriers to the success of CHWs, because the influence of the few household members who had such bad perceptions could derail other community members.

Lack of common understanding between the CHWs and household members on the schedule of home visits negatively affected the relationship between some of them. The abrupt visits by CHWs made some of the household members uncomfortable, afraid and embarrassed and

reduced their support for CHWs. The scheduling of routine CHWs' activities depended on availability of transport facilities for movement; food or money for buying food during work; and climatic conditions, which affected road conditions and level of community response when mobilised.

Although the CHW (VHT) programme in Uganda is based on volunteerism, as with many such programmes in the world, this was found to be controversial and ultimately probably not sustainable. There was a felt imperative need among all the respondents to reward CHWs because they worked hard at the expense of their families and other livelihoods. Some household members had occasionally voluntarily provided CHWs with in-kind payments in form of food, if by chance they came around during meal time. These in-kind payments from households greatly motivated beneficiary CHWs. Based on the available enormous evidence, it is important to note that lack of rewards or compensation for CHWs in Soroti could reduce their motivation, effectiveness and make their long-term retention less likely.



10.0 RECOMMENDATIONS

- 1. The MoH, Soroti DHO and development partners should continue supporting and promoting initiatives which strengthen the relationship between CHWs and household members and increase the possibility of success of the CHW Program. Some of such initiatives include: recruitment approach of CHWs through a democratic community structure, raising awareness of household members about their own and CHWs' roles, training and support supervision of CHWs, team work and networking by CHWs with other community groups.
 - 2. The MoH, Soroti District Health Office (DHO) and development partners should incorporate refresher training, regular mentoring, supplies and support supervision of CHWs into their plans and allocate resources accordingly so as to improve the quality of service provision by CHWs. They should design protocols, standard guidelines, job aids, training materials which CHWs could follow when carrying out their activities and conduct more refresher trainings which are practically oriented and based on guidelines, standardized protocols and needs of the community. They should also provide CHWs with more supplies such as bicycles, gumboots, umbrellas.
 - 3. The MoH and Soroti DHO should design strategies and intensify interventions that promote community medicine distribution and proper use, especially among the rural poor, so as to extend basic health services closer to the households, reduce the distances of the health facilities and household expenditure on treatment and increase the credibility, respect and status of CHWs in their communities. Strategies and interventions should address community perceptions, equip CHWs with capacity to do diagnostic investigations and provide a constant supply of efficacious drugs.
 - 4. In order to improve on the relationship between CHWs and professional health workers, the MoH, Soroti DHO and development partners should institute strong monitoring and feedback mechanisms which should address the concerns and needs of the health professionals, CHWs and community.
 - 5. There is need for the MoH and Soroti District Local Government to explore options of rewarding CHWs and consider them during planning and allocation of resources in order to retain them effectively performing for a long period of time. The community should be consulted when dealing with this issue.

6. The MoH, Soroti DHO and development partners should establish a system which provides CHWs with opportunities for professional development. Such arrangements could include promotions or sponsorship of CHWs for further studies to become nurses, midwives, health assistants, laboratory assistants, etc. The researcher contends that this approach could help reduce the existing gap of poor distribution of health human resources since the new cadre of professional health workers, who were previously CHWs, would most likely serve their own communities for a longer term. This approach could also contribute to alignment of the CHW programme to the broader health system strengthening since CHWs would complement the existing workforce.



REFERENCES

African Development Fund. (2006). Appraisal Report Support to Health Sector Strategic Plan Project II (SHSSPP II) Uganda. Tunis Belvedere.

Amuge, B., Wabwire-Mangen, F., Puta, C., Pariyo, G.W., Bakyaita, N., Staedke, S., Kamya, M. & Okui, O. (2004). Health-seeking behavior for malaria among child and adult headed households in Rakai district, Uganda. *African Health Sciences*, 4(2):119-124.

Anokbonggo, W.W., Ogwal-Okeng, J.W., Obua, C., Aupont, O. & Ross-Degnan, D. (2004). Impact of decentralization on health services in Uganda: a look at facility utilization, prescribing and availability of essential drugs. *East African Medical Journal*, S2-7.

Baiden, F., Akanlu, G., Hodgson, A., Akweongo, P., Debpuur, C. & Binka, F. (2007). Using lay counsellors to promote community-based voluntary counselling and HIV testing in rural northern Ghana: a baseline survey on community acceptance and stigma. *Journal of Biosocial Science*, 39(5):721-33.

Bakeera, K.S., Wamala, P.S., Galea, S., State, A., Peterson, S. & Pariyo, G.W. (2009). Community perceptions and factors influencing utilization of health services in Uganda. *International Journal for Equity in Health*, 8:25.

Barbosa, R.H., Cavalcanti, C., Cabral, C.D., Rodrigues, F., Baptista, L., Jannotti, C.B. & Romero, M. (1998). Urban women educate their community on HIV / STDs, family planning and reproductive health. *Sexual Health Exchange*, (3):9-13.

Barnes, K., Friedman, S.M., Brickner Namerow, P. & Honig, J. (1999). Impact of community volunteers on immunization rates of children younger than two years. *Archives of Pediatrics & Adolescent Medicine*, 153(5):518-524.

Berman, P.A., Gwatkin, D.R. & Burger, S.E. (1987). Community-based health workers: head start or false start towards health for all? *Social Science & Medicine*, 25(5):443-59.

Bhattacharyya, K., Winch, P., Karen, L. & Tien, M. (2001). Community Health Worker incentives and disincentives: How they affect motivation, retention, and sustainability. Arlington, Virginia, BASICS/USAID.

Creswell, W. John & Miller, L. Dana. (2000). Determining validity in qualitative inquiry. Theory into practice, 39 (3):124-130.

Curtale, F., Siwakoti, B., Lagrosa, C., LaRaja, M. & Guerra, R. (1995). Improving Skills and Utilization of Community Health Volunteers in Nepal. *Social Science & Medicine* 40, 8:1117–25.

Delacollette, C., Van der Stuyft, P. & Molima, K. (1996). Using community health workers for malaria control: experience in Zaire. *Bulletin of the World Health Organization*, 74(4):423-30.

Fournier, G. & DJermakoye, I.A. (1975). Village health teams in Niger (Maradi Department). In Newell, K. (ed). *Health by the people*. Geneva, Switzerland: World Health Organization: 128-206.

Frankel, S. & Doggett, M.A. (1992). The Community Health Worker: Effective programmes for Developing Countries. New York: Oxford University Press.

Friedman, I., Ramalepe, M., Matjuis, F., Lungile Bhengu, L., Lloyd, B., Mafuleka, A., Ndaba, L. & Boloyi, B. (2007). Moving towards best practice: Documenting and learning from existing Community Health/Care Worker Programmes. Durban: Health Systems Trust.

Gilson, L., Walt, G., Heggenhougen, K., Owuor-Omondi, L., Perera. M., Ross, D. & Salazar, L. (1989). In Hermann, K., Van Damme, W., Pariyo, 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. *Human Resources for Health*, 7:31.

Gonzalez, D.R. (1987). In Bhattacharyya, K., Winch, P., Karen, L. & Tien, M. (2001). Community Health Worker incentives and disincentives: How they affect motivation, retention, and sustainability. Arlington, Virginia, BASICS/USAID.

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):2121-2131.

Heggenhougan, K. (1987). Community Health Workers: The Tanzanian experience. New York: Oxford University Press.

Hermann, K., Van Damme, W., Pariyo, 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. *Human Resources for Health*, 7:31.

Hutchinson, P., Habte, D. & Mulusa, M. (1999). Health care in Uganda: selected issues. World Bank Discussion Paper No. 404: Washington, DC: World Bank.

Kanno, N.B. & Dixit, K.A. (1989). Hygiene, health education and collaborative health practices in Nepal. *Hygie*, 8(1):30-2.

Kelly, J.M., Osamba, B., Garg, R.M., Hamel, M.J., Lewis, J.J., Rowe, S.Y., Rowe, A.K. & Deming, M.S. (2001). Community health worker performance in the management of multiple childhood illnesses: Siaya District, Kenya, 1997-2001. *American Journal of Public Health*, 91(10):1617-24.

Kiguli, J., Ekirapa-Kiracho, E., Okui, O., Mutebi, A. MacGregor, H. & Pariyo, G.W. (2009). Increasing access to quality health care for the poor: Community perceptions on quality care in Uganda. *Patient Preference and Adherence*, 3: 77–85.

Komakech, I. (2007). The village health team strategy is a 'most innovative community practice' award winner: the experience of a village volunteer programme in Yumbe District, Uganda. *Health Policy and Development Journal*, 5(1): 21-27.

Lariosa, T.R. (1992). The role of community health workers in malaria control in the Philippines. Southeast Asian Journal of Tropical Medicine & Public Health, 1:30-5.

Lehmann, U. & Sanders, D. (2007). Community health workers: What do we know about them? Geneva: World Health Organisation.

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 of Systematic Reviews*, 1: CD004015.

Liamputtong, P.R. & Ezzy, D. (2005). Ch 2 – Rigour, ethics and sampling. *In Qualitative Research Methods*. Sydney: Oxford University Press: 44-52.

MoH (Ministry of Health). (2000). Health Sector Strategic Plan 2000/01-2004/05. Uganda: Ministry of Health.

MoH (Ministry of Health). (2002). Community empowerment and mobilisation for health through village health teams strategy. Uganda: Ministry of Health.

Nsungwa-Sabiiti, J., Peterson, S., Pariyo, G., Ogwal-Okeng, J., Petzold, M.G. & Tomson, G. (2007). Home-based management of fever and malaria treatment practices in Uganda. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 101(12):1199-1207.

Onwujekwe, O., Dike, N., Ojukwu, J., Uzochukwu, B., Ezumah, N., Shu, E. & Okonkwo, P. (2006). Consumers stated and revealed preferences for community health workers and other strategies for the provision of timely and appropriate treatment of malaria in southeast Nigeria. *Malaria Journal*, 1; 5:117.

Paison, N.G. (1999). In Bhattacharyya Karabi, Winch Peter, Karen LeBan & Tien Marie. (2001). Community Health Worker incentives and disincentives: How they affect motivation, retention, and sustainability. Arlington, Virginia, BASICS/USAID.

Pariyo, G.W., Ekirapa-Kiracho, E., Okui, O., Rahman, M.H., Peterson, S., Bishai, M.D., Lucas, H. & Peters, H.D. (2009). Changes in utilization of health services among poor and rural residents in Uganda: are reforms benefitting the poor? *International Journal for Equity in Health*, 8:39.

Pathfinder International Uganda. (2009). Northern Uganda Family Planning Empowerment Project Baseline Survey. Uganda: Kampala.

Pearson, Mark (2000). *Uganda Country Health Briefing Paper*. A paper produced for the Department for International Development by IHSD Limited, London.

Pope Catherine, Ziebland Sue & Mays Nicholas. (2000). Qualitative research in health care: Analysing qualitative data. *British Medical Journal*, 320:114-116.

Prasad, B.M. & Muraleedharan, V.R. (2007). Community Health Workers: a review of concepts, practice and policy concerns. India: CREHS, DFID, LSHTM.

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.

Rutebemberwa, E., Ekirapa-Kiracho, E., Okui, O., Walker, D., Mutebi, A. & Pariyo, G. (2009b). Lack of effective communication between communities and hospitals in Uganda: a qualitative exploration of missing links. *BMC Health Services Research*, 9:146.

Rutebemberwa, E., Nsabagasani, X., Pariyo, G., Tomson, G., Peterson, S. & Kallander, K. (2009a). Use of drugs, perceived drug efficacy and preferred providers for febrile children: implications for home management of fever. *Malaria Journal*, 8:131.

Schneider, H., Hlophe, H. & Van Rensburg, D. (2008). Community health workers and the response to HIV/AIDS in South Africa: tensions and prospects. *Health Policy and Planning*, 23:179–187.

Soroti District (Undated). Soroti District Health Sector 5 year Strategic Plan 2005/2010. Uganda: Soroti.

Soroti District Health Office. (March 2006). VHT data.

Soroti District. (2008). Soroti District Profile FY 2007/08. Soroti, Uganda.

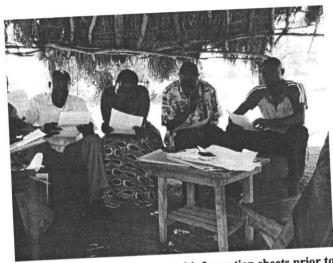
Uganda Bureau of Statistics. (2005). 2002 Uganda population and housing census. Soroti District Report. Uganda: Entebbe.

Ulin, R. Priscilla, Robinson, T. Elizabeth & Tolley, E. Elizabeth. (2005). *Qualitative methods in Public Health: A field guide for applied research*. San Francisco: Jossey-Bass.

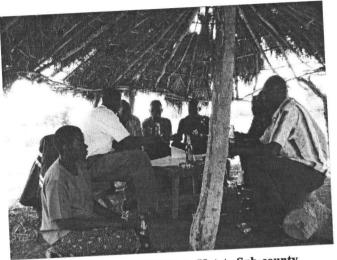
Velema. J.P., Alihonou, E.M., Gandaho, T. & Hounye, F.H. (1991). Childhood mortality among users and non-users of primary health care in a rural West African community. *International Journal of Epidemiology*, 20(2):474-9.

Zachariah, R., Teck, R., Buhendwa, L., Labana, S., Chinji, C., Humblet, P. & Harries, A. (2006). How can the community contribute in the fight against HIV/AIDS and tuberculosis? An example from a rural district in Malawi. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 100:167-175.

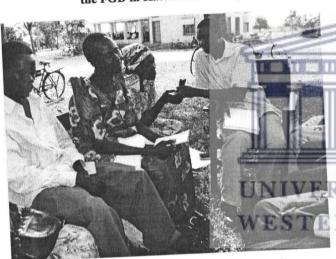
APPENDIX I: PHOTO GALLERY



CHWs reading the participants' information sheets prior to the FGD in Kateta Sub-county



FGD session with CHWs in Kateta Sub-county



FGD session with CHWs in Olio Sub-county



FGD session with household members in Kyere Sub-county



CHWs carrying out a home visit in Olio Sub-county



A CHW (right) giving a health education talk to a household member in Olio Sub-county

- 9. Have you been briefed about the roles of CHWs? If yes, who briefed you? Do you have your roles written down somewhere?
- 10. Do you feel that the CHWs coming here are skilled in what they are doing?
- 11. Who makes sure that they do the right things? Who supervises them?
- 12. Are CHWs working with any other groups in your community?
- 13. What do you think should be done to improve your relationships with the household members CHWs? Who should do this?
- 14. How do you think your experiences with CHWs will impact on the implementation of the CHW programme in this sub-county?

END

Thank you for your cooperation! UNIVERSITY of the WESTERN CAPE

APPENDIX III: FOCUS GROUP DISCUSSION GUIDE FOR CHWs

INTERACTION OF CHWS AND HOUSEHOLDS IN SOROTI DISTRICT, UGANDA

FOCUS GROUP DISCUSSION GUIDE FOR CHWs

Welcome to this study. (The interviewer introduces himself; explains to the respondents the purpose of the study and how confidentially the information provided will be handled). If the respondents accept to participate in the study, they will be availed consent forms for signing.

Introduction

I am here to talk about interaction of community health workers with communities here inSub-county.

I am aware that you have been in existence in this sub-county for quite some time now and you are involved in different activities with the community. Tell me:

- 1. How is it like to go to a household as a CHW? How do you usually feel when visiting a household?
- 2. How do people usually respond when they see you in their households? How do they receive you?
- 3. What happens next after you have been received?
- 4. What do you usually do when you enter a household?
- 5. How do you feel about the way the households you visited treated you? Why do you feel this way?
- 6. What are your experiences with the households you have worked in?
- 7. What do you think are the factors making the household members behave in that manner towards you?
- 8. Do you receive any rewarding things during and after the home visits? If yes, why? How do you get them?
- 9. What are your greatest difficulties when carrying out home visits? How have you tried to overcome them?
- 10. Were you trained to perform your functions? If yes, who trained you? If no, why haven't you received training to perform these functions? How did you learn what you are practicing? Whom did you learn from?

- 11. Have you been briefed about your roles? If yes, who briefed you? Do you have your roles written down somewhere? Who supervises you?
- 12. What do you think should be done to improve your relationships with the household members? Who should do this?
- 13. Are you linked to community groups, including health committees?
- 14. How do you think your experiences with your communities will impact on the implementation of the CHW programme in this sub-county?

END

Thank you for your cooperation!



APPENDIX IV: KEY INFORMANT INTERVIEW GUIDE

INTERACTION OF CHWS AND HOUSEHOLDS IN SOROTI DISTRICT, UGANDA

INTERVIEW GUIDE FOR KEY INFORMANT INTERVIEWS

Introduction

I am here to talk about interaction of community health workers with communities here inSub-county.

1. I am aware that CHWs have been in existence in this sub-county for quite some time now and they are involved in different activities with the community. Tell me what you know about CHWs?

From here, let the health assistant tell his/her story for quite a while. If it does not come up by itself, probe for the following in the course of the conversation:

- What is the total number of CHWs active at any one time?
- How many CHWs leave the program or become inactive each year?
- How many CHWs do you recruit each year?
- How were CHWs selected? What criteria were established? Who established them?
 What role did the community play?
- Could you describe some of the characteristics of the CHWs (e.g., sex, literacy level, previous experience)?
- Who is responsible for these CHWs? Who is supervising them?
- Were you told or given a document which says what the CHWs are supposed to do?
- What are the specific duties of the CHWs? What is the relative balance between curative and preventive activities? How many households does each CHW cover? How much time is a CHW expected to spend on his/her duties?
- What does a normal day of a CHW look like?

2. How are the CHWs working with their communities?

Again, let the interview run and probe for the following, if necessary:

- What is the status of CHWs in the community? Are they perceived as government health workers or volunteers?
- What do people here feel about the way the CHWs work? What do the CHWs feel?

 The CHWs? The community?
- How are the CHWs working with the households? What are the experiences of CHWs with the households they work in?
- What CHW functions does the community value most? What are the experiences of household members with CHWs?
- What are the factors influencing the interaction of CHWs with households? How are these factors influencing the interaction of CHWs with households?
- How are CHWs linked to community groups, including health committees?
- How are the attitudes and experiences of communities with CHWs impacting the implementation of the CHW programme in this sub-county?
- How are the attitudes and experiences of CHWs with communities impacting the implementation of the CHW programme in this sub-county?

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Thank you for your cooperation!

APPENDIX V: PARTICIPANT INFORMATION SHEET

[To be placed on SOPH, UWC LETTERHEAD once approved]

PARTICIPANT INFORMATION SHEET

October 2008

Dear participant,

Thank you for your interest in this research study. I am conducting this study for a minithesis, which is a partial fulfilment of the requirements for the award of a degree of Masters in Public Health of the University of the Western Cape, South Africa. More information about this study is detailed below but if there is anything you don't understand or unclear about, please ask me. My contact details and those of my supervisor are included at the end of this memo.

Title of study

The Interaction of Community Health Workers with Households in Soroti District, Uganda.

Purpose of the study

The purpose of this study is to better understand the interaction between CHWs and households in Soroti District, Uganda, by engaging with both household members and CHWs about their interactions with each other. This study will explore the experiences of both household members and CHWs regarding their working relations. It is hoped that the results of this study will inform future larger evaluations of the effectiveness of CHW programmes in Soroti District.

Description of the study and your involvement

The study will involve focus group discussions with household members and CHWs, observation of CHWs carrying out home visiting, and individual interviews with Health Assistants. An interview schedule has been developed to guide the discussion or interview that I will have with you.

Confidentiality

If you accept to participate in this study, your name, contact details (name of village, parish and sub-county) and information you give will be kept confidential at all times. All your contributions will only be shared with the others in this group as well as me. If you accept to participate in this study and agree to keep confidential what you hear during this meeting, please sign on the consent form provided. Your signed consent form will be kept under lock and key and will be destroyed after the study is completed. I will be available in case you want to discuss with me some issues that you do not want to raise in the FGD.

Voluntary participation, consequence of participation and withdrawal

Your participation in this study is entirely voluntary and this study will cause no harm to you. You are free to withdraw from the study at any stage and your refusal to participate or withdrawal from the research will not adversely affect you in any way.

Benefits and costs

You may not directly benefit from this study. However, the information you give may help in guiding the functioning of the Community Health Workers and the relevant health authority and Soroti District during planning and implementation of community-based health programs. There are no costs involved in this study other than the precious time you will spend in the discussion or interview. STERN CAPE

Informed consent

Your signed consent to participate in this study is required before I proceed to interview you. I have included the consent form with this information sheet so that you will be able to review it and then decide whether you would like to participate in this study or not.

(The study and the consent form will be explained to participants in their mother tongue. Participants will be invited to give consent either in writing or verbally. If verbally, the researcher will document that verbal consent has been sought and given).

Questions

Should you have any question, please contact me using the address below.

Sama Denis Joel

Student Number: 2652351 Cell phone: 0712 968346

Email: samadnys@yahoo.com

I am accountable to Prof. Uta Lehmann at the University of the Western Cape, School of Public Health whose contact details are:

Cell phone: 082 202 3189

Email: ulehmann@uwc.ac.za



APPENDIX VI: PARTICIPANT INFORMATION SHEET - TRANSLATED IN **ATESO**

[To be placed on SOPH, UWC LETTERHEAD once approved]

EBALUWA LO IKAMUNIT AISISIAN NA

Okitoba 2008

Yoga,

Eyalama acamun aipup nuikamunitos aisisian na. Auta eong asisian na kanu ailelebikin akiro nu ekotoi kanu aijaikino emasitas diguri lo angaleu kana itunga ko oyunivasiti loka Western Cape, South Africa. Nu ipu acie nu ikamunitos asisian na kesi epesikitai kwap nee. Konye acamakit eong ijo aingit arai ejasi nu ikoto ijo aitacaikino ber. Ejai eka esimu kede lo esupavaisa kada kwap obaluwa lopolo.

Etaitol ke aisisian kana

Eipone lo isomaatar immurok lu ocalo keda itunga kec ko osoroti district, oyuganda.

Apeleikinet ka aisisian kana

Apeleikinet ka aisisian kana erai amisiikin eipone lo isomaatar imurok lu ocalo keda itunga kec ko osoroti district, oyuganda. Elosikinit aisisian na aimor kede imurok lu ocalo keda itunga nu edolokitos kesi nuikamunitos eisomaye kec. Ewomitai ebe ebuni aisisian na aingarakin aitigogong ipurograms nu iswamaite kede imurok lu ocalo ko soroti district.

Eipone lo itmonikitere aisisian na kede ekon epelu.

Imoriarit aisisian na aurienata nu eponatar itunga kede imurok lu ocalo aimor nuikamunitos aiswamae kec. Ebunio da airiamun kede imurok lu aila kanu kesi aiticaun epone lo ewamanatar imurok lu ocalo kede ikesi itunga. Kitemonikitai aingiseta nuebeit aingitngit ijo arai icamu ijo.

Eipone lo ebeitor aibwa akiro lu aurianet teter iman nuce itunga ejenunete.

Arai icamunit ijo aigisingisio, ebunio aibwa ikon ikirora, ecalo keda etem kon. Ebunio da

bobo aingadaar akiro kere nu ilimuni ijo kaurianet kana, ido itisalio akiro nu etatamio aurianet kana nee, kejenete nu ajasi aurienet na bon. Isaining obalua lo kijaikitai ijo arai icamunit ijo angisingisio. Ebunio aigoikin akiro kere nuikamunitosi ijo baaba kede eikupulu toni ito ne edaunor aisian na nesi konye icwekinere aikiro ngun kere. Arai ejasi nuikotojo alimokin eong awai na aurianet, abuni eong ajaun.

Aacamunio kon kede aiger aigisingisio

Imam ibuikitai ijo acamun ajaun aisisiao naa. Ecamakitai ijo acamun araibo nat ainger ajaun asisiao na ido imam kitepesio ijo. Imam aisisian na ebuni ayaun nueroko ni ijai ijo.

Aimedauneta

Imam ijo ibuni aimedaun idiobore yeni iyingari ijo ore aisisiao kana. Konye, epote aomisio kon aingarakin aitigogong eipone lo ingarakinere aikeun angaleu kec itunga lu ocalo kane osoroti. Imam ijo ibuni aitac idio bore kere kanu ajaun aisisio na ilema ekon esawa bon lo ibunia ijo ajaun auriannet na.

Acamunet

Arai icamunit ijo ajaun asisiao na, ocamu aisaining ber obalua lo ijaikitai ijo. Idumakini ijo akiro acee nuikamunitosi aisisio na obalua ngon.

WESTERN CAPE

Aingiseta

Arai ejasi adio aingiseta, ipedori ijo adolokin eong araibonat eka supavaisa ko osimun lu'okwap kane.

Sama Denis Joel

Enaba: 2652351

Esimu: 0712 968346

Email: samadnys@yahoo.com

Abongonokin eong purofesa Uta Lehmann lo oyunivasite lo ka Western Cape, osomero lo angaleu. Eke simu da lo ejai kwap ne.

Esimu: 082 202 3189

Email: ulehmann@uwc.ac.za

APPENDIX VII: INFORMED CONSENT

ulehmann@uwc.ac.za.

[To be placed on SOPH, UWC LETTERHEAD once approved]

CONDUCT AN INTERVIEW	
RECORD OF INFORMED CONSENT TO CONDUCT AN INTERVIEW	
Date:	
Interviewer:	
UWC Student no: 2652351	
Tel: 0712 968346	
E-mail: samadnys@yahoo.cm	
Institution: University of the Western Cape	
Interviewee's pseudonym:	
Place at which the interview was conducted:	
UNIVERSITY of the	
Thank you for agreeing to allow me to interview you. What follows is an explanation of the purpose and process of this interview. You are asked to give your consent to me on tape when	
we meet to conduct the interview.	
1. Information about the interviewer	
I am Sama Denis Joel, a student at the SOPH, University of the Western Cape. As part of my Masters in Public Health, I am required to conduct a research study. I will be focusing on the interaction of Community Health Workers with Households in Soroti District, Uganda. I am accountable to Prof. Uta Lehmann who is contactable at 082 202 3189 or by e-mail at	

Here is some information to explain the purpose and usage of my interview.

2. Purpose and contents of interview

The purpose of this study is to better understand the interaction between CHWs and households in Soroti District, Uganda, by engaging with both household members and CHWs about their interactions with each other. This study will explore the experiences of both household members and CHWs regarding their working relations. It is hoped that the results of this study will inform future larger evaluations of the effectiveness of CHW programmes in Soroti District.

3. The interview process

The study will involve focus group discussions with household members and CHWs, observation of CHWs carrying out home visiting, and individual interviews with Health Assistants. An interview schedule has been developed to guide the discussion or interview that I will have with you.

4. Anonymity of contributors

At all times, I will keep the source of the information confidential and refer to you or your words by a pseudonym or invented name which I would like you to choose. See name above. I shall keep any other records of your participation locked away at all times, and destroy them after the data has been collected.

5. Things that may affect your willingness to participate

The interview may touch on issues which may be sensitive to you and the community. If there is anything that you would prefer not to discuss, please feel free to say so. I will not be offended and there will be no negative consequences if you would prefer not to answer a question. I would appreciate your guidance should I ask anything which you see as intrusive.

6. Agreement

6.1 Interviewee's agreement

If you agree to participate in this and to keep the information discussed during the FGD confidential, please give your consent below.

6.2 Interviewer's agreement

I shall keep the contents of the above research interview confidential in the sense that the pseudonym noted above will be used in all documents which refer to the interview. The contents will be used for the purposes referred to above, but may be used for published or unpublished research at a later stage without further consent. Any change from this agreement will be renegotiated with you.

Signed by interviewer:

Signed by participant:

Date:

Place:



APPENDIX IX: MAP OF SOROTI DISTRICT

