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ABSTRACT

A Village Health Team (VHT) is a non-political health implementing structure; an equivalent of Health Centre I (HC I); responsible for the health of community members at household levels. A VHT comprises of 4 - 5 people selected on a popular vote in a village. Despite efforts to establish them, they have not performed to the expectations. This study investigated the factors affecting the functionality of VHTs in Lyantonde so as to recommend appropriate strategies aimed at effectively exploiting their potential. A cross-sectional study was conducted to find out the factors affecting the functionality of VHTs in Lyantonde district. We used study population of 154 VHTs in the seven sub-counties that make up Lyantonde district. In this study, the social-demographic factors affecting functionality of VHTs in Lyantonde district include age, gender and area of locality, occupation and level of education while current state of VHTs functionality is affected by distance between families, attitude of the community, attitude of the health workers, availability of medical supplies, lack of allowances, quality of training and the source of training. More so, community level factors affecting functionality of VHTs included community participation, family support, migrations while health system factors affecting functionality of VHTs included drug supply, level of training, political commitment, policy frame work and lack of allowances.

Keywords: Village Health Team, Functionality, Lyantonde district, Community health.

INTRODUCTION

In 1978, world leaders created the Declaration of Alma-Ata, which reaffirmed access to health as a fundamental human right and identified primary health care as the key to the attainment of the goal of health for all [1,2,3,4]. The 30th anniversary of Alma-Ata coincided with the halfway mark of the United Nations' Millennium Development Goals, stimulating discussion about the role of primary health care in facilitating the achievement of those goals and led to revitalized calls for use of community health workers (CHWs) as a form of community participation [5,6,7,8]. CHWs help individuals and groups in their own communities access health and social services and educate them about various health issues [9,10,11].

Initially, international health actors promoted CHWs as a means to achieve the World Health Organization's goal of health access for all by the year 2000 through

social interventions for behaviour change [12, 13, 14]. Optimism about the potential of CHWs led to the increased desirability of community-based health interventions [15,16,17,18,19,20]. As early as 2000, however, the optimism about CHW programmes began to fade, as there was little progress towards the achievement of health goals for the poor, and CHW programmes showed heterogeneous outcomes [21, 22, 23, 24, 25]. Further, CHW programmes have been characterized by high levels of attrition through resignations, terminations and relocations [26, 27, 28].

Community health worker (CHW) programs have received much attention since the 1978 Declaration of Alma-Ata, with many initiatives established in developing countries. However, CHW programs often suffer high attrition once the initial enthusiasm of volunteers wanes [29,30]. In 2002, Uganda began implementing a

national CHW programs called the village health teams (VHTs), but their performance has been poor in many communities.

It is argued that poor community involvement in the selection of the CHWs affects their functionality in communities and success. The question of how selection can be implemented creatively to sustain CHW programs has not been sufficiently explored [31,32,33].

Since the Alma-Ata declaration, successive Ugandan governments have acknowledged the relationship between health and poverty, but unfortunately, political turmoil made interventions impossible until the 1990s, when fragmented community-based interventions by development partners began to be implemented [34,35,36]. The 1999 national health policy included community empowerment and mobilization for health as key elements of the national minimum health care package. A programme designed to improve the home-based management of fevers, implemented after the Abuja Declaration of 2000, demonstrated the benefits of community-based interventions and opened up the way for a strategy based on village health teams (VHTs) [10; 11,37,38]

In Uganda community empowerment and mobilization for health has been enshrined in national health policies and strategies since 1999 [40,41]. The national village health team (VHT) strategy and guidelines in Uganda were developed in 2000 and by 2003 country-wide roll out of the VHT strategy had commenced. Between 2013 and 2015, World Vision Uganda supported 11,966 village health workers in 24 districts with capacity building in the Ministry of Health approved basic training program for VHTs, training in technical health promotion models including timed and targeted counseling, integrated community case management, community-based prevention, management of acute malnutrition and Community PMTCT [43,44,45]. World Vision Uganda also supported performance appraisal meetings, support supervision and mentoring sessions as

well as information management & reporting systems for VHTs.

The selection of VHTs followed a process of building consensus in the community. First, during face-to-face sensitization sessions, community members were educated about the programme and its need for volunteers [46,48,49,50]. The meeting's facilitator, often a technical person from the district's health team or the nearest health centre, described the kind of people best suited for selection as VHTs. After sensitization and consensus building among all stakeholders and all households in the village have occurred, a popular vote is held. According to Uganda's Ministry of Health guidelines, to be selected as a VHT member, a person must meet several criteria: he or she must be above 18 years of age, a village resident, able to read and write in the local language, a good community mobilizer and communicator, a dependable and trustworthy person, someone interested in health and development and someone willing to work for the community. Preference is given to people already serving as CHWs especially if they have served well [51, 52, 53].

Nationally, VHTs are expected to carry out general tasks in all PHC core areas which include home visiting, mobilization of communities for utilization of health services, health promotion and education, management of common illnesses, follow-up of pregnant mothers and newborns, follow-up of discharged patients and those on long-term treatment and community information management [12]. This necessitated generalist training on a range of subjects including interpersonal communication, community mobilization and empowerment, child growth and development, control of communicable diseases, sexual and reproductive health, environmental health, mental health and monitoring record keeping [13]. The target was for all villages to have trained VHTs by 2010, but only 77% of all the districts had achieved this by 2009 [12]. Due to the financial constraints at various districts, recruitment and training of VHTs has been supported by international development partners [14; 15]. In Luwero, the

implementation of the VHT strategy was supported by the African Medical Research Foundation (AMREF), under its malaria, HIV/AIDS, and TB projects. In VHT training, these three diseases received extra emphasis to reflect the interests of AMREF [16]. By June 2011, Luwero district had a functional VHT structure, and the activities of the VHTs were facilitated directly by AMREF. In 2012, however, the project under which the VHTs were supported ended, which left the local government in charge of facilitating the VHTs [17].

Theoretical background

In the early part of the twentieth century, enquiry into work motivation, and indeed retention and performance, typically rested on assumptions that behaviour was subject to a rational decision-making process occurring within the individual based on the pros and cons of a certain action or actions—i.e., ‘rational’ or ‘economic choice’ models [18].

Conceptual background

The village health worker in Uganda is equivalent to a community health worker cadre defined by WHO as a member of the community who is selected by, and accountable to the communities where they work; is supported by the health system; and receives less training than formally trained health workers [6]. The country-wide network of Government-mandated village health teams is currently responsible for health promotion, community mobilization and engagement of communities in accessing and utilizing health services. The village health teams thus constitute a virtual Health Centre Level 1 organized on the basis of a CHW: Household ratio of 1:30. The village health team members are voluntary workers with no salaries, no written contracts with the government and no formal mechanism for transfer or career progression [19]. Currently, 75% of Uganda’s 112 districts have 100% coverage with VHTs while the remaining 25% have a VHT coverage ranging from 0% (Kampala) to 99% (Kalangala) (Draft National VHT assessment report, 2014). However, little attention has been paid to the balance

between numbers and performance for Community health workers in Uganda.

The increasing investment in community health workers combined with their significant role in delivery of health services has galvanized global interest in measurement of functionality and productivity of this cadre [20]. Various studies on CHW performance and functionality have been documented [21; 22]. Approaches to measurement of CHW performance and functionality are varied with some focusing on individual level parameters such as self-esteem, motivation, attitudes, competencies, guideline adherence, job satisfaction and capacity to facilitate empowerment of communities while others focus on the health consumer level using parameters such as utilization of services, health seeking behaviour, adoption of practices promoting health, and community empowerment [23]. Other studies have consistently assessed tasks and time spent on delivery, human resource management, quality assurance, community and health system links and resources and logistics as predictors of functionality [24; 25].

Contextual background

The establishment of VHTs is seen by the Government of Uganda as its commitment to the aspirations and principles of the *1978 Alma Ata Declaration* and the *2008 Ouagadougou Declaration on Primary Health Care and Health Systems in Africa*, declarations that emphasize community involvement in health and health care delivery [26]. In Uganda, it’s the MoH that has the lead role and responsibility for the delivery of health services in the country (Government of Uganda, 2010). The *Constitution* and the *Local Government Act (1997)* prescribe that central line ministries are responsible for policy, setting of standards and guidelines, supervision and monitoring, technical support and resource mobilisation; local governments are responsible for service delivery at district and lower levels. In accordance with these legislative provisions, health service in Uganda is decentralized. Public and private health services are delivered through a progressive series of health centres

("HCs") at levels I through IV, general hospitals, regional referral hospitals and national referral hospitals. The range of health services offered is intended to increase with each level of care. The HC I has no physical structure but operates as a "virtual health centre" [4].

Statement of the Problem

Although almost 75% of Uganda's population lives within a five kilometer radius of a health facility, there is great variability in accessibility [4]; and many people in rural areas cannot access care due to poor transport networks and road conditions. Despite the fact that related studies in other parts of Uganda show improved performance through VHT services in health sector, since enrolment of VHTs in 2008 in Lyantonde district.

Different organizations both international and national have supplemented government efforts to train and facilitate the formation and working of VHTs in most parts of the country in order to bring health services nearer to the people [11].

This is again an effort to fill the gap of few health workers in Uganda as it's expected that VHTs would assist in promoting health at individual, family and community levels.

Despite the efforts above, health interventional indicators are still poor in most parts of Uganda including Lyantonde district. Despite the fact that related studies in other parts of Uganda show improved performance through VHT services in health sector, since enrolment of VHTs in 2008 in Lyantonde district there is still high mortality rate of 600/100,000, low immunization coverage of 59% below 80% national target and high prevalence of diarrheal diseases which have persisted for the last five years (Lyantonde District Annual Health Performance Report, 2011). It's expected that with the high performance of VHTs the health situation in the district would be better. This is because most of the contributors to the poor health indicators are preventable and controllable through strategies like health promotion and education, mobilization of communities for utilization of health services, community-based case management of common ill

health conditions which are all responsibilities and roles of VHTs. It's against this background that we investigated the factors affecting the performance of VHTs in Lyantonde District.

Aim of the study

This study was aimed at establishing the factors affecting functionality of VHTs in Lyantonde District, Uganda.

Objectives of the study

- i. To establish gender roles affecting functionality of VHTs in Lyantonde district.
- ii. To document the current state of VHTs' functionality in Lyantonde district.
- iii. To establish community level factors affecting functionality of VHTs in Lyantonde district.
- iv. To examine health system factors affecting functionality of VHTs in Lyantonde district.

Research Questions

- i. Which gender roles are affecting functionality of VHTs in Lyantonde district?
- ii. What is the current state of VHTs' functionality in Lyantonde district?
- iii. What are the community level factors affecting functionality of VHTs in Lyantonde district?
- iv. What are health system factors affecting functionality of VHTs in Lyantonde district?

Justification of the Study

To Policy makers

Currently, there are gaps in the information related to functionality of VHTs in Lyantonde district. While the VHT strategy and implementation guidelines are in place, most partners implementing programs in the communities do not follow the strategy as reflected in the Health Sector Strategy Investment Plan II (HSSIP II). Therefore, the study is aimed at finding out those factors affecting the functionality of VHTs in Lyantonde district to enable policy makers to design an improvement framework.

To the community

By identifying the factors affecting the functionality of VHTs in Lyantonde district would help to improve their performance

by availing to them the necessary requirements in promotion of community health care and hence reduce avoidable death especially in vulnerable groups like children under-fives and mothers. The data collected from this study will therefore help in the following ways; the study is intended to aid policy makers and planners in isolating and identifying areas concerned with community health care which require involvement of VHTs and hence allocate resources towards increasing their performance.

Study Area

Lyantonde District is bordered by Sembabule District to the north and northeast, Lwengo District to the east, Rakai District to the south, and Kiruhura District to the west. The 'chief town' of the district, Lyantonde, is located approximately 78 kilometres (48 mi), by road, west of the city of Masaka, the largest metropolitan area in the sub-region. The coordinates of the district are: 00 25S, 31 10E.

The district is composed on one county, Kabula County and 7 sub-counties, 23 parishes and 189 villages. Prior to 2007, Kabula County was part of Rakai District. In 2007, the county was split off of Rakai District and given autonomous district status. In 1991, the national population census estimated the population of the district at about 53,100. During the next census in 2002, the population of Lyantonde District was estimated at about 66,000 with an annual population growth rate of 1.9%. In 2012 the District had a total population of 66039 people according to the 2002 population census of whom 32687 and 33352 were males and females respectively.

Agriculture being the major source of livelihood for the population in Lyantonde District. A variety of crops are grown in the district, both for subsistence and economic purposes. Cattle are the main livestock kept by farmers in Lyantonde. It is estimated that there are 83,700 of cattle in the District. Other animals that are raised include goats, sheep, pigs and poultry. The district has a heavy disease

To the body of science

It is also hoped that the study will improve the public health practice through sensitizing community members and further enabling them to effectively motivate VHTs to participate in community health promotion activities. The study will also assist the administration and management of Lyantonde district in policy formulation, programs and ideas on how to improve involvement of VHTs in community health care as a strategy to improve health care services.

METHODOLOGY

burden. The most prevalent challenges include, Malaria, Respiratory infections, Diarrheal diseases, Obstetric complications, Maternal mortality and HIV/AIDS

Study Design

A descriptive cross-sectional study will be conducted to establish the factors affecting functionality of VHTs.

Study Population

The study population will include all the VHTs living in Lyantonde district that will be accessible and consent to take part in the study. Of the total VHTs, 58.2% are males while 42% are females. In the seven sub-countries, VHTs are as follows; Kasagama 58, Mpumudde 63, Kaliiro 89, Lyantonde town council 48, Lyantonde rural 130, and Lyakajjura 55. All the VHTs practice agriculture being the major source of livelihood for the population in Lyantonde district, a variety of crops are grown in the district, both for subsistence and economic purposes. Cattle are the main livestock kept by farmers in Lyantonde. It is estimated that there are 83,700 of cattle in the District, this makes 90% of VHTs to depend on only farming as the source of income which is affected by the long dry spells in the district while 10% depend on business. The district has a heavy disease burden. The most prevalent challenges include, Malaria, Respiratory infections, Diarrheal diseases, Obstetric complications, Maternal mortality and HIV/AIDS. The VHTs in Lyantonde district are affected by moving long distance between families' migrations of people, poor road network, high rates of disease

burden, and weather changes among others. In Lyantonde district 50% had finished primary level, 40 % had studied up to ordinary level and 10% had above ordinary level certificates.

Of the 500 VHTs, 70% are aged 40 years and below while 30 % are above 40 years, 60% are males while 40% are females.

Table 1 showing number of VHTs per sub-county and sample size

SUB-COUNTY	NUMBER OF VHTS	SAMPLE SIZE
Kasagama	58	25
Mpumudde	63	27
Kaliiro	89	38
Lyantonde Town Council	48	20
Lyantonde rural	130	56
Kinuuka	57	24
Lyakajjura	55	23
TOTAL	500	217

Source: District VHT focal person 2016

Sampling Procedure

Systematic random sampling was used basing on the list obtained from the sub-county as the sampling frame.

Tools for data collection

A semi-structured questionnaire was used as a data collection instrument under the quantitative method. The questionnaire was structured in nature containing both closed and open-ended questions. The tool was constituted of questions on factors affecting functionality of VHTs, gender roles, current state of VHT functionality, community level factors and health system factors affecting functionality of VHTs.

The research assistants were used to collect data at the sub-county level and they were Nurses, Teachers and senior six graduates. They were supervised by the principal researcher who would go to sub-counties, and on average they would attend to 15 VHTs per day. Besides, with the questionnaire, the respondent could freely answer sensitive questions and the respondent was always given time to ask for any clarification.

Data Analysis and Management

A VHT was classified as having good performance if he/she reported to have carried out at least 4 of the 7 tasks assigned to VHTs. Functionality was categorized as a binary variable (with 0= no performance and 1= performance).

Sample size estimation

The sample size was determined using [27], table for a finite population who came up with a table using sample size formula for finite population. The total number of VHTs are 500 then the sample size is 217.

Questionnaires were checked for completeness and accuracy. Data was finally entered into Microsoft excel version 10.0 database. Data was imported into Stata® software (v. 12, College Station, Texas, USA) for analysis. Proportions were generated to describe the functionality of VHTs with regard to their gender roles, current state of VHT functionality, community level and health system factors affecting functionality of VHTs.

To establish the factors affecting the functionality of VHTs in Lyantonde district, a univariate analysis using chi-square and logistic regression will be done, comparing each independent variable with VHT performance. A significance level of 5% will be considered. All significant factors at a p<0.05 and those with biological credibility will be taken to multivariate analysis for adjustment for potential confounding. In both analyses, crude and adjusted odds ratios with their 95% confidence intervals will be reported. Data will be presented using Tables and graphs.

Ethical considerations

Clearance was obtained from Kampala International University Research and Ethics Committee. Permission to carry out the research was also obtained from Lyantonde district local government & sub-county authorities.

Consent

Informed consent was sought and obtained from the VHTs which were involved in the study.

Confidentiality

All results were treated with utmost confidentiality by ensuring that only authorized people had access to them.

Anonymity

To ensure anonymity, codes only known to the researcher were used. Names of the VHTs were not used and information generated was presented in aggregated form.

All other principles such as integrity, honesty, respect for person, objectivity, openness, respect for intellectual

The study was conducted between September and November 2015 in Lyantonde district and a total of 271 VHTs out of the 500 were interviewed, giving a response rate of 92%.

Socio-demographic factors of VHTs

The majority of VHTs in Lyantonde were aged above 35 years (91%). This meant that most VHTs were mature people above the youthful stage.

Males were more than females by (58%) which implied that males were active in community issues than females. Most VHTs were Christians at (89%).

property, responsible publication, competence, legality, protection of human participants and many others were strictly adhered to during the discourse of research.

Limitations

- i. Inaccessibility of VHTs due to the fact that VHTs had to travel long distances in such of water and this was overcome by rescheduling the meeting.
- ii. Migration of VHTs in search for fertile lands and water for their animals and this was overcome by making special arrangements with VHTs on meeting them at the sub-counties.

RESULTS

The dominant tribe were banyankore (81%), married people were more than the un married at (80%), the dominant occupation was peasantry at (86%), most VHTs were primary graduates (86%) which enables them to know the basics as per their assignment.

The rural area (Mpumude) was dominating at (91%) implying that rural people have more concern for their community wellbeing or have more time to do other activities un like their counterparts in urban area. VHTs monthly income was <50,000 Ug.sh (79%).

Table 2: Socio-demographic factors of VHTs

Characteristics	N (%)
Age category	
>35	56 (8.6)
>= 35-49	110 (47.1)
<= 50	100 (44.3)
Gender	
Male	152 (58.2)
Female	117 (34.0)
Missing	2 (7.0)
Marital status	
Married	153 (80.4)
Single	56 (8.7)
Separated/Divorced	59 (10.9)
Level of education	
Primary	182(86.1)
Secondary	88 (13.9)
Occupation	
House wife	47 (3.6)
Peasant	163 (85.8)
Others	58 (10.6)
Tribe	
Muganda	62 (14.2)
Munyankore	157 (80.9)
Others	48 (4.9)
Sub-county	
Town council	77 (9.2)
Rural sub-counties	192 (90.8)
Religion	
Christians	190 (89.3)
Moslems	80 (10.7)
Average monthly income (UG SHS)	
50000+	95 (20.7)
<50000	173 (79.3)

Table 3: Gender roles affecting functionality of VHTs

Characteristics	No performance n (%)	Performance n (%)	Unadjusted OR [95% CI]	P
Age category				0.0551
<35	25 (33.3)	30 (66.7)	1.0	
35-49	30 (13.9)	77 (86.2)	3.1 [0.77-12.51]	
>= 50	26 (6.7)	78 (93.4)	7.0 [1.45-33.70]	
Gender				0.7886
Male	30 (11.3)	92 (88.8)	1.0	
Female	28 (15.0)	61 (85.1)	0.7 [0.25-2.1]	
Missing	22 (9.1)	31 (91.0)	1.3 [0.14-11.1]	
Marital status				0.6231
Married	36 (13.9)	114 (86.1)	1.0	
Single	23 (8.3)	31 (91.7)	1.8 [0.21-14.8]	
Separated/Divorced	22 (6.7)	35 (93.3)	2.3 [0.3-18.5]	
Level of education				0.2825
Primary	36 (14.0)	115 (86.1)	1.0	
Secondary	22 (5.6)	38 (94.4)	2.7 [0.34-22.2]	
Occupation				0.2214
House wife	23 (20.0)	25 (80.0)	1.0	
Peasant	33 (10.2)	32 (73.3)	0.7 [0.06-8.1]	
Others	24 (26.7)	127 (89.8)	2.2 [0.23-35.8]	
Tribe				0.5462
Muganda	24 (20.0)	37 (80.0)	1.0	
Munyankore	33 (10.9)	120 (89.2)	2.1 [0.6-7.1]	
Others	22 (15.0)	27 (85.7)	1.5 [0.14-12.0]	
Sub-county				0.0100
Lyantonde town council	26 (38.5)	30 (61.5)	1.0	
Mpumudde	34 (9.6)	133 (90.4)	5.9 [1.7-20.9]	
Religion				0.1088
Christians	34 (10.7)	130 (89.3)	1.0	
Moslems	24 (26.7)	32 (73.3)	0.3 [0.1-1.2]	
Average monthly income (Ugsh)				0.8044
50000+	25 (14.3)	44 (85.7)	1.0	
<50000	34 (12.5)	112 (87.5)	1.2 [0.3-3.9]	
Duration as VHT in Years				0.2140
3	25 (16.7)	46 (83.3)	1.0	
4	30 (16.7)	60 (83.3)	1.0 [0.3-3.4]	
5	24 (6.9)	75 (93.1)	2.7 [0.7-10.9]	
Who trained VHTs				0.6639
Local government	33 (11.4)	122 (88.6)	1.0	
NGOs	22 (22.2)	28 (77.8)	0.5 [0.9-2.4]	
Others	23 (14.3)	33 (85.7)	0.8 [0.2-3.8]	
Extent of involvement in VHT activities				0.0859
Actively	31 (9.7)	123 (90.3)	1.0	

Rarely	24 (26.7)	33 (73.3)	0.3 [0.08-1.09]	
Days in a month that are devoted to VHT activities				0.0582
1-2	30 (22.0)	52 (78.1)	1.0	
3-4	25 (6.2)	82 (93.9)	2.0 [0.5-7.1]	
>=5	26 (12.5)	49 (87.5)	4.2 [1.2-15.0]	
Number of trainings in VHT related activities.				0.3146
1-2	26 (11.6)	60 (88.4)	1.0	
3	32 (15.3)	80 (84.7)	1.4 [0.4-4.3]	
4-5	22 (4.4)	42 (95.7)	4.0 [0.5-32.5]	

From the analysis above, it was found out that having an age of 50 years and above was associated to better performance as people in this age bracketed were more responsible to serve their community, coming from rural area was associated to high level of performance as rural people

had more time to do VHT work unlike those in rural area, and devoting five days or more per month into VHT activities were significantly associated with good VHTs' performance because the more time one invested in the his/her job the better the job well done.

Table 4: Results of Multivariate analysis

Characteristics	Adjusted OR [95% CI]	P
Age category (years)		0.1205
35-49	3.2 [0.75-13.91]	
>= 50	5.8 [1.13-29.20]	
Sub-county or residence		0.019
Lyantonde town council	1.0	
Rural town council	4.9 [1.29-18.40]	

In multivariate analysis, coming from the rural sub-county was associated with almost 5 times higher odds of VHT performance as compared to those from Lyantonde town council. Being 50 years

and above was also significantly associated with 5.8 times higher odds of VHT performance as compared to VHTs below 35 years of age.

Table 5: The current state of VHTs' functionality

Characteristics	N (%)
Duration as VHT in Years	
3	73 (21.6)
4	92 (35.9)
5	101 (42.5)
Who trained VHTs	
Local government	158 (83.5)
NGOs	51 (6.5)
Others	56 (10.0)
Extent of involvement in VHT activities	
Actively	188 (87.8)
Rarely	80 (12.22)
Days in a month that are devoted to VHT work	
1-2	85 (30.5)
3-4	106 (46.1)
>=5	76 (23.4)
Training level as VHT in days	
1-2	86 (30.5)
3	116 (53.2)
4-5	64 (16.3)

From the table above, 42.5% had spent 5 years serving as VHTs and so they had enough experience to do the work better, 83.5% had the basic training to do their work meaning that VHTs who were well trained performed better than their counterparts who were not well trained, 87.8% were very active in VHT activities.

Community level factors affecting functionality of VHTs.

The community level factors affecting functionality of VHTs in Lyantonde district included distance between families, community attitude, community participation, family support, migrations, weather changes, poor road networks, and poor communication means.

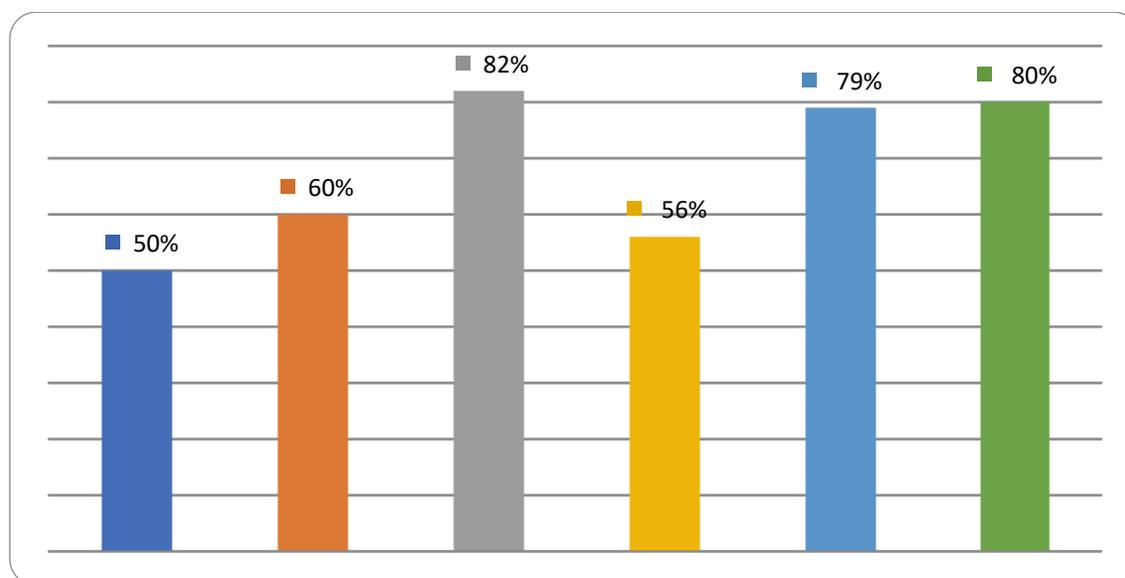


Figure 1: Graph showing community level factors affecting functionality of VHTs.

From the graph above, community level factors affecting functionality of VHTs included community participation at 50%, family support 60%, migrations 82%, community respect 56%, attitude of the community, long distances 80%.

Health system factors affecting functionality of VHTS

The health system factors included drug supply, level of training, political commitment, policy frame work, lack of allowances, and supervision.

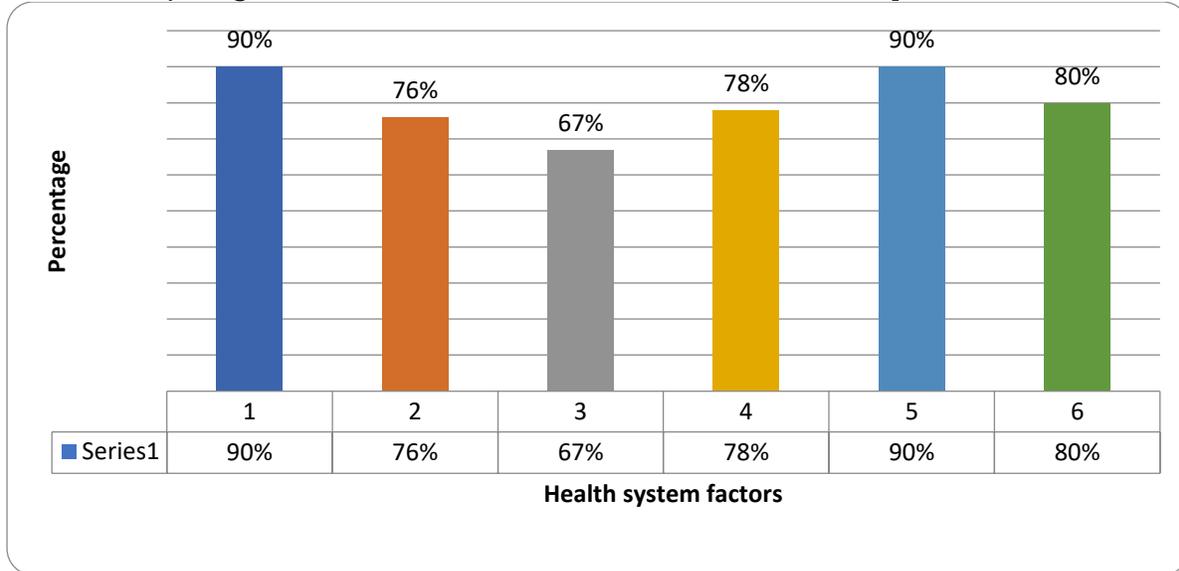


Figure 2: Showing health system factors affecting functionality of VHTS

From the graph above, 1 is drug supply 90%, 2 level of training at 76%, 3 political commitment 67%, 4 policy frame work

78%, 5 lack allowances 90%, 6 lack of supervision 80%.

DISCUSSION

The majority of VHTs in Lyantonde were in the age category of 35-49 years. This meant that most VHTs were mature persons with were more active in community affairs [28].

The dominant gender were males at 82%. Implying that the males are more concerned about the community wellbeing but also bearing in mind that in most cases they are the bread winners and so devote less time in VHT work. The majority of the VHTs married 80.4%.

This is in agreement with the study carried out in India where all the women who expressed interest to participate in the CHW program were all married [29]. 86.1% had completed Primary level and so able to read and write. 85.8% were peasants this explaining why the level of income was very low at 79.3% earning less than 50,000/= a month meaning that they earn less than a dollar per day. This could partly justify their need for allowances so as to increase their level of income hence their standards of living. Christians were

dominant at 89.3% compared to Moslems at 10.7%.

Most VHTs 42.5% had spent 5 years serving and so they had enough experience to do the work, 83.5% had been trained by Local government, Majority were actively involved in VHT activities with 87.8% and at least 46.1% perform VHT activities 3-4 days a month making an average of 1 day per week something that needs to be addressed. Of the 141 VHTs, at least 53.2% have had an average of three days of training in VHT related activities and for the last one year they have had no refresher training. This has created a gap in VHT service delivery. The age category was also significant to VHT functionality meaning that older people from 35-49 and 50 and above were more active and also the area of locality. The village was more significant compared to the town council. People in the village were more committed compared to the town VHTs.

The current state of VHTs' functionality of VHTs

42.5% had spent 5 years serving as VHTs and so they had enough experience to do the work better, 83.5% had the basic training to do their work meaning that VHTs who were well trained performed better than their counterparts who were not well trained, 87.8% were very active in VHT activities.

Distance between families contributed 60%, community attitude 75%, attitude of health workers (supervisors) 40%, availability of medical supplies 82%, supervision 73%, lack of allowances at 86%, number of trainings 75% and quality of training at 56%.

This community-based care is recognized as a critical means to achieving some Millennium development Goals (MDG) in the rural populations. Lewin *et al* [30], pointed out that progress towards MDG4 has been slow particularly among rural populations in sub-Saharan Africa. In addition, [31] mentioned that many countries implemented community health workers programs in small scale levels for a variety of health issues. According to [32], the goal of VHT program in Uganda is to reduce child mortality and morbidity by for example, increasing to at least 80% the proportion of under-fives receiving appropriate treatment within 24 hours of onset of illnesses. Therefore, VHTs must be aware of the under-fives since they are one of the main target populations.

The study further revealed that majority of VHTs were affected by lack of allowances which demotivated them leading to poor functionality of VHTs ($p=0.000$) [15].

The study revealed that lack of medical supplies 82%, greatly affected functionality of VHTs as they could fail even to administer first aid. Global health Initiative -Uganda (2011) pointed out behavior Change communication on key preventive practices for home and community health as the roles of VHTs. VHTs are particularly key to reaching remote populations and linking those in need to appropriate services and facilities [33].

The study revealed that community attitude affected VHTs functionality by

75%, whereby community members have a negative attitude towards VHTs. During the monthly meetings usually VHTs review and plan their activities; therefore, they are likely to fail even to get participants for these meetings making their work less impacting.

Community level factors affecting performance of VHTs

Community level factors affecting functionality of VHTs included low community participation at 50%, family support 60%, migrations 82%, community respect 56%, attitude of the community, long distances 80%. [34].

Low community participation was rated at 50%, which greatly affected VHTs' functionality. The other factor was low family support 60%, as most VHTs indicated that due to the nature of their volunteerism work, their spouses tend to criticise them when they come back home without pay, migrations at 82% this greatly affects VHTs' performance as follow ups are made impossible to follow some one you do not the whereabouts [34].

Community respect at 56%, under this, VHTs command less respect from their communities making community members to under look them. Long distances 80% with activities like follow ups, linking the the village and the health unit, planning activities with the health unit, support health unit activities in the village, share and plan with the village leaders, and notifying health unit staff immediately about reportable diseases all with less transport facilitation [35].

The goal of VHT program in Uganda is to reduce child mortality and morbidity by for example, increasing to at least 80% the proportion of under-fives receiving appropriate treatment within 24 hours of onset of illness. Therefore, VHTs must be aware of the under-fives since they are one of the main target populations which is hindered by the long distances between families [32].

Health system factors affecting functionality of VHTs

Equipment and supplies issues, such as the reliable provision of transport, drug supplies, and equipment, have been identified as another weak link in CHW

effectiveness in Lyantonde district at 90%. The result is not only that they cannot do their job properly, but also that their standing in communities is undermined. Failure to meet the expectations of these populations (with regard to supplies) erodes their image and credibility. If CHWs are used in programs that have drug treatment at their core, such as TB DOTS or HAART, the situation becomes more critical, but regardless most programs include the need for supply of drugs and/or equipment, including transport [36]. Ideally, supplies and equipment should be organized through district or regional dispensaries, and collected and delivered by CHWs.

In cases where villages are very far from the central health centre, village dispensaries can be established to cater to the drug needs of the populations.

Lack of allowances for CHWs has been, and remains, a contentious issue at 90% in Lyantonde district. While CHWs are ideally volunteers, in practice, many programs have not financially rewarded CHWs, even hiring them as salaried assistants. It has been argued that financial incentives reduce volunteers' willingness to work without pay and that such incentives are likely to be insufficient, leading to high attrition [36]. Other health system factors mostly included, level of training at 76 %, political commitment 67%, policy framework 78% ,and supervision 80%.

CONCLUSION

The social-demographic factors affecting functionality of VHTs in Lyantonde district include age, gender and area of locality, occupation and level of education. The current state of VHTs functionality is affected by distance between families, attitude of the community, attitude of the health workers, availability of medical supplies, lack of allowances, quality of training and the source of training.

Community level factors affecting functionality of VHTs included community participation, family support, migrations. Health system factors affecting functionality of VHTs included drug supply, level of training, political commitment, policy framework and lack of allowances.

RECOMMENDATIONS

The District should intensify and strengthen government programs like Wealth creation in order to improve the VHTs standards of living and household income so as to increase their esteem in the community since it was found out that all VHTs earn less than a dollar per a day. The Ministry of Health should hold annual refresher training courses to VHTs about their roles and community sensitization about the roles of VHTs. The ministry of health and other development partners should support Lyantonde District Local

Government to fully operationalize VHTs as lowest structure of health care in the district. The ministry of health should ensure timely delivery of first aid supplies to VHTs.

Suggestions for further research:

We suggest further studies on the following:

Assessment of the VHTs' capacity to handle roles assigned to them in the health care service delivery in Lyantonde district. Assessment of effectiveness of training given to the VHTs in Lyantonde district.

REFERENCES

1. Glenton, C., Lewin, S. and Scheel, I. B. (2011). Still too little qualitative research to shed light on results from reviews of effectiveness trials: a case study of a Cochrane review on the use of lay health workers. *Implement Sci.* 6(1):53.
2. Lawn, J. E., Rohde, J., Rifkin, S., Were, M., Paul, V. K. and Chopra, M. (2008). *Alma-Ata 30 years on: revolutionary, relevant, and time to revitalise.* *Lancet.* 372 (9642):917-27.
3. World Health Organization. (2010). *Increasing access to health workers in remote and rural areas through improved retention: global policy recommendations.* Geneva, Switzerland: World Health Organ.
4. Davidson, P. (2004). *Researching Entrepreneurship.* New York: Springer.

5. Lewin, S., Munabi-Babigumira, S., Glenton, C., Daniels, K., Bosch-Capblanch, X. and van Wyk, B. E. (2010). Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. *Cochrane Database Syst Rev.* 3: CD004015.
6. Constantine Abenawe (2022). Evaluation of the relationship between socio-economic status and the quality of education in secondary schools in Ibanda District. *IAA Journal Arts and Humanities* 9(1):83-94, 2022.
7. Constantine Abenawe (2022). Social Economic Status in Selected Secondary Schools in Ibanda District Uganda. *IAA Journal of Education* 8(1):73-89.
8. Olang, O. C., Nyamongo, I. and Aagaard-Hansen, J. (2010). Staff attrition among community health workers in home-based care programmes for people living with HIV and AIDS in western Kenya. *Health Policy* 97: 232-7
9. Takasugi, T. and Lee, A. (2012). Why do community health workers volunteer? A qualitative study in Kenya. *Public Health*; 126(10):839-45.
10. Sekimpi, K. D. (2006). Experience of the Village Health Teams (VHT) Strategy in Uganda. Rio de Janeiro: Proceedings of the World Congress on Public Health.
11. Kiggundu, C. (2006). Delivering an integrated package of community-based interventions through village health teams in Uganda: the pilot model in Mpigi district, Process documentation; Ministry of Health. Kampala.
12. Ministry of Health (MoH) (2007) *Annual Health Sector Performance Report. Ministry of Health, Kampala, Uganda.*
13. Ministry of Health (MoH) (2010) *Health Sector Strategic Plan III 2010/2011-2014/15. Kampala, Uganda. Retrieved on 10th Feb 2012 at 11:45 a.m.*
14. Thompson, J. and Tabb, Z. (2011). Village health teams (VHTs): hybrid training manual. Kampala: Ministry of Health.
15. Tom Mulegi (2022). Evaluation of the Skill Mix of Health Professionals in Government Regional Referral Hospitals in Uganda. *IDOSR Journal of Arts and Management* 7(1): 43-68.
16. Mwesigye Elisado (2022). Management styles used in the selected secondary schools in Uganda. *IAA Journal of Education* 8(1):90-96.
17. John Birihanze (2022). Effects of Indiscipline on Academic Performance in Kabwohe-Itendero Town Council, Sheema District. *IAA Journal of Education* 8(1):97-106.
18. Constantine Abenawe (2022). Quality Education in Selected Secondary Schools in Ibanda District Uganda. *IAA Journal of Social Sciences (IAA-JSS)* 8(1):197-215.
19. Birihanze Augustine Bago (2022). Effect of Single Parenthood in Students' Academic Performance; A Case of Selected Secondary Schools in Bitereko Sub County Mitooma District. *IAA Journal of Social Sciences (IAA-JSS)* 8(1):216-226.
20. Aruho Rukundo Sarah, Nuwatuhaire Benard, Manyange Micheal and Bateyo Asuman (2022). Socio-demographic Distribution of Persons with Small and Medium Enterprises in Uganda: A Case Study of Kabale Municipality South, Western Uganda. *INOSR Arts and Management* 8(1): 1-7.
21. Aruho Rukundo Sarah, Nuwatuhaire Benard, Manyange Micheal and Bateyo Asuman (2022). Evaluation of Constraints of Small and Medium Enterprises in Uganda: A Case Study of Kabale Municipality South Western Uganda. *INOSR Arts and Management* 8(1):8-20.
22. Ugwu Jovita Nnenna (2022). Impact of Violence Movie on Human Behaviour. *INOSR Arts and Management* 8(1): 21-26.
23. Aruho Rukundo Sarah, Nuwatuhaire Benard, Manyange Micheal and Bateyo Asuman (2022). Performance of Small and Medium Enterprises in Uganda: A Case Study of Kabale Municipality South Western Uganda. *INOSR Humanities and Social Sciences* 8(1): 1-10.
24. Thabugha Hannington, Bateyo Asuman, and Baineamasanyu Mary (2022). Loans

- and women involvement in business in Kasese District: A Case of Women Entrepreneurs in Hima Town Council. *INOSR Humanities and Social Sciences* 8(1): 11-18.
25. Mukabaranga Chantal, Michael Manyange and Bateyo Asuman (2022). The Relationship between Extrinsic Rewards and Employee Performance of Shyogwe Diocese. *IDOSR Journal of Current Issues in Social Sciences* 8(1):66-78.
26. David Ongabi Nyambane, Benedicto Onkoba Ongeru and Michael Nyasimi Manyange (2022). An Assessment of Collaborative Governance for Sustainable Development in Urban Planning in Kenya. *IDOSR Journal of Current Issues in Social Sciences* 8(1): 1-18.
27. Thabugha Hannington, Bateyo Asuman, and Baineamasanyu Mary (2022). Savings and women involvement in business in Kasese District: A Case of Women Entrepreneurs in Hima Town Council. *IDOSR Journal of Current Issues in Social Sciences* 8(1): 38-44.
28. Mukabaranga Chantal, Michael Manyange and Bateyo Asuman (2022). The relationship between intrinsic rewards and employee performance in Non-Profit Organisation in Rwanda; A case study of Shyogwe diocese. *IDOSR Journal of Current Issues in Social Sciences* 8(1):52-65.
29. Peter Nsiimire Mwesigye, Patrick Mbyemeire and Raphael Kombi (2022). Academic Performance of Learners by Education Level of Parents in Primary Schools in Ibanda Municipality. *INOSR Arts and Management*, 8(1): 27-34.
30. Mukabaranga Chantal, Michael Manyange and Bateyo Asuman (2022). The Relationship between Employee Recognition Programs and Employee Performance of Shyogwe Diocese. *INOSR Arts and Management* 8(1): 35-48.
31. Ministry of Health (2013). The annual health sector performance report for 2012/13 financial year. Kampala.
32. Ministry of Health, (2013). Mid-term analytical review of performance of the Health Sector Strategic and Investment Plan 2010/11-2014/15. Kampala
33. Rujumba, J. and Muhumuza, S. (2013). Malaria, HIV/AIDS and TB (MAT) integrated model Project implemented in Kiboga, Kyankwanzi and Luwero Districts. A documentation report of the project submitted to AMREF Uganda. AMREF, Uganda. Kampala (unpublished report).
34. Oonyu, C. J. (2013). Malaria, AIDS and TB (MAT) Integrated Model Project Kiboga and Luwero Districts, Uganda. Kampala, AMREF Uganda and Astra Zeneca.
35. Latham, G. P. (2007). Work motivation: History, theory, research, and practice. Thousand Oaks, CA: Sage
36. Ministry of Health, (2007). Annual Health Sector Performance Report. Ministry of Health, Kampala, Uganda.
37. Naimoli, J. F., Frymus, D. E., Wuliji, T., Franco, L. M. and Newsome, M. H. (2014). A Community Health Worker "logic model": towards a theory of enhanced performance in low- and middle-income countries. *Human Resources for Health*, 12:56.
38. USAID Healthcare Improvement Project; (2010). Community Health Worker Programs.
39. Brunie, A., Wamala-Mucheri P., Otterness C., Akol A., Chen M. and Bufumbo, L. (2014). Keeping community health workers in Uganda motivated: key challenges, facilitators, and preferred program inputs. *Glob Health Sci Pract.* 2(1):103-116.
40. Stekelenburg, J., Kyanamina, S. S. and Wolffers, I., (2003). Poor performance of community health workers in Kalabo District, Zambia. *Health Policy.* 65(2): 109-18.
41. Berman ,P., Miller Franco L., Askew I., Boezwinkle J., Brown C., Cherian D., Crigler L., Fleisher L, Franco C, Higgs E, Kraushaar D, Meadowcroft L, Middleberg M, Naimoli J, Pacca J, Palen, J., Peterson, S., Scott,V., Tharaney, M. and Williams, T. (2012). Prepared for the U.S. Government Evidence Summit on Community and Formal Health System Support for Enhanced Community Health Worker

- Performance. Evidence Synthesis Paper, Washington, DC: USAID.
42. Perry, H. and Townsend, J. (2012). Community Support Activities and Community Health Worker Performance. Global Health Evidence Summit: Community and Formal Health System Support for Enhanced Community Health Worker Performance. Washington, DC.
 43. WHO. 2005. Health and the Millennium Development Goals. Geneva: World Health Organization
 44. Krejcie, R. V. and Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*. Small-Sample Techniques (1960). *The NEA Research Bulletin*, Vol. 38.
 45. Emmanuel, A. V., Roy, A. J., Nicholls, T. J. and Kamm, M. A. (2002). Prucalopride, a systemic enterokinetic, for the treatment of constipation. *Aliment Pharmacol Ther*, 16: 1347-1356.
 46. ILO (2008). Guide to International Labour Standards. Geneva: ILO. https://www.ilo.org/global/standards/information-resources-and-publications/publications/WCMS_246944/lang-en/index.htm
 47. Lewin, S., Munabi-Babigumira, S., Glenton, C., Daniels, K., Bosch-Capblanch, X. and van Wyk, B.E., (2010). Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. *Cochrane Database Syst Rev*. 3: CD004015.
 48. WHO. 2005. Health and the Millennium Development Goals. Geneva: World Health Organization
 49. Peterson, S., Nsungwa-Sabiiti, J. and Were, W. (2004). Coping with paediatric referral—Ugandan parents' experience. *The Lancet* 363: 1955-6.
 50. Gillam, S. S. (2008). Is the Declaration of Alma Ata Still Relevant to Primary Health Care? *British Medical Journal*, 336, 536-538.
 51. Ministry of Health, (2007). Annual Health Sector Performance Report. Ministry of Health, Kampala, Uganda
 52. Village Health Team Training Manual, (20 12). A Village Health Team Collection. Retrieved on 16th Feb 2012 at 10:08 p.m
 53. Jaskiewicz, W. and Tulenko, K. (2012). Increasing community health worker productivity and effectiveness: a review of the influence of the work environment. *Human resources for health*, 10, 38.