EXPLORING INTRINSIC FACTORS MOTIVATING COMMUNITY HEALTH VOLUNTEERS TO PROMOTE CERVICAL CANCER SCREENING, ISIOLO SUB-COUNTY

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A THESIS SUBMITTED TO THE SCHOOL OF PUBLIC AND GLOBAL HEALTH IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF PUBLIC AND GLOBAL HEALTH OF THE UNIVERSITY OF NAIROBI

2022

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ACKNOWLEDGEMENTS

My gratitude goes to my supervisors Dr. Richard Ayah, Dr. Pamela Godia and Dr. Frank Onyambu for their dedication, commitment and guidance during the entire writing period.

Special thanks to the Department of Health, in the county government of Isiolo, especially Isiolo Sub-County for their cooperation and support during my data collection, and all the community health volunteers who participated in this study.

Lastly, my sincere recognition goes to my family and friends for their unconditional and generous support and prayers during my study period.

DEDICATION

To my late Mum, Mrs. Rachael Bosek, whose love for me knew no bounds and taught me the value of hard work. I will never forget you and to my lovely daughter baby Tamara, your calmness during the writing period gave me a peace of mind.

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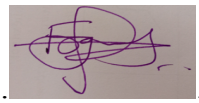
Signature……  ……Date…7th November 2022……..…

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ABSTRACT

Introduction: Community Health Volunteers (CHVs) provide healthcare services such as basic curative, promoting and preventive healthcare services at the community level. While CHVs role is outlined at policy level, their engagement at the county level is still sub-optimal influencing their motivation. Other than remuneration, CHVs can be motivated by other intrinsic factors such as recognition. Unlike other cancers, cervical cancer is treatable when identified early by screening and early diagnosis. However, the uptake of screening services in Kenya is still low among eligible women. Therefore, to encourage uptake of screening by eligible women, CHVs need to be utilized to create awareness at the community level.

Objective: Study aimed at exploring the intrinsic motivation factors that influence CHVs in promoting cervical cancer screening.

Methodology: This was a qualitative study conducted in Isiolo Sub-County. Sixteen CHV leads were purposively selected to participate in individual interviews conducted between January and February 2021. The interviews were audio-taped, transcribed and analyzed using thematic content analysis.

Results: Fourteen out of 16 participants were competent having demonstrated knowledge on cervical cancer and screening. However, 13 out of 16 did not know the type of screening services offered. All the participants had a good relationship with their supervisors. The average time spent each day doing CHV work was 3.6 hours. Participants rated their job satisfaction in relation to promoting cervical cancer screening very lowly at 2.8 on a scale of 10 due to lack of capacity building and facilitation to work diligently at the community level. All the CHVs (N=16) attributed their motivation to service to community and to God. Eleven out of 16 attributed their satisfaction to gaining and utilizing new knowledge.

Conclusion: The CHVs were not satisfied with their role in creating awareness to promote cervical cancer screening. Factors such as average level of knowledge on cervical cancer and inconsistent support supervision were the main factors that contributed to dissatisfaction of CHVs and influenced their performance on creating awareness for cervical cancer screening

Recommendation: Subject specific training is needed to improve CHVs knowledge on cervical cancer screening and consistent close supervision provided to ensure optimal performance by CHVs.

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LIST OF ABBREVIATION/ACRONYMS

CHC – Community Health Committee

CHEW – Community Health Extension Worker

CHS – Community Health Strategy

CHV – Community Health Volunteer

CU – Community Unit

HPV – Human Papilloma Virus

KDHS – Kenya Demographic Health Survey

KEPH – Kenya Essential Package for Health

KNH/UON-ERC: Kenyatta National Hospital and University of Nairobi - Ethics and Research Committee

LMIC – Low and Middle Income Countries

MOH – Ministry of Health

NCD – Non Communicable disease

SSA – Sub Saharan Africa

UHC – Universal Health Coverage

WHO – World Health Organization

DEFINITION OF OPERATIONAL TERMS

Community Health Volunteer – A health worker who acts as intermediary between the community and healthcare providers. They do not have formal medical training background but are trained to provide health services in their local community such as health education.

Community Health Volunteer Lead - A CHV who is in-charge of other CHVs working within the same community unit. The CHV leader act as a point of contact person in a given community unit.

Community Unit – a collection of households with approximately 1,000 to 5,000 people living within the same geographical area, sharing the same resources and challenges. Each community unit has at least 20 CHVs and one CHV lead.

Promote – to educate women to utilize cervical cancer screening services.

Awareness – Knowledge of cervical cancer and cervical cancer screening.

Create Awareness – any effort designed to mobilize prospective clients (women) to understand they need cervical cancer screening and utilize it.

Cervical Cancer – is a disease that result from untreated growth of abnormal cells in the cervix.

Screening: a health intervention used on a population at risk (women) to identify individuals with a high probability of having or developing cervical cancer e.g. the use of visual inspection test or pap smears to detect presence of pre-cancer lesions on the cervix

Intrinsic Motivation - is the inherent willingness of a CHV to provide health education to the community in order to achieve self-fulfillment.

Competence – the ability to understand individual's need for cervical cancer screening based on the knowledge and skills acquired as a CHV

Relatedness – is a sense of belonging and having close relationship with others e.g. supervisors, colleagues and community members.

Autonomy - the degree to which CHVs feel they have the liberty on how to conduct their task i.e. planning their household visits

CHAPTER 1: INTRODUCTION

This chapter provides the background and the significance of the study.

1.1 Background

Community Health Volunteers (CHVs) play a vital role in primary healthcare (Ministry of Health 2014). A CHV is an individual chosen by the community and trained to provide health education and address health-related issues of community members within their localities often referred as community units working in close collaboration with their linked health facilities (Ministry of Health 2014). Several countries especially in the low and middle income regions rely on task shifting of CHVs to address the shortage of healthcare workers and to increase equitable access and awareness for utilization of health care services in order to sustain the progress towards the achievement of Universal Health Coverage (UHC), one of the targets of sustainable development goals (Kuule et al. 2017). However, sub-optimal performance due to high attrition rates and lack of motivation such as training has been reported (Gaelle Vareilles et al. 2015; Kuule et al. 2017; Megan Huchko, Saduma Ibrahim, Craig Cohen, and Smith, Robert Hiatt 2018).

Universal Health Coverage means that everyone regardless of their financial capability have access to the preventive, promotional and curative health services they need, of sufficient quality in order to be effective and productive (Verrecchia, Thompson, and Yates 2019). There is growing global attention to the potential of CHVs contributing towards UHC as evidenced by CHVs effectiveness in delivering primary healthcare including; preventive, promotional and curative services related to reproductive health, infectious, communicable and non-communicable diseases (Cometto et al. 2018). The World Health Organization (WHO) Global workforce strategy adopted in 2016, urges countries to utilize CHV initiatives in primary care system aligned to broader national and county health workforce which require long term dedicated financing (WHO 2016). The use of CHVs is a cost-effective approach both in high income countries and low and middle income countries (Cometto et al. 2018; WHO 2016).

CHVs represent a bridge between the community and healthcare workers and act as change agents to encourage and educate community members to take care of their own health by adopting healthier lifestyles and utilizing health services such as cervical cancer screening. Their peer-to-peer approach helps to gain the trust of families who can benefit from CHVs services (Ministry of Health 2014). The comprehensive cervical cancer guide by WHO, recommends the utilization of CHVs in raising awareness in the community, and creating demand for community members to utilize cervical cancer screening services (World Health Organization 2014). CHVs contribute to realization of reduced health inequality by expanding access of healthcare services to the underserved or excluded vulnerable population such as marginalized populations including nomads and pastoralist communities living in regions like Isiolo sub-county (WHO 2018). Such communities often lack equitable access to primary health care rendering them to illnesses that could otherwise be averted such as cervical cancer (WHO 2018).

Globally, cervical cancer is the fourth leading cause of death among women (Bray et al. 2018). In Kenya, it is the second leading cause of mortality among women contributing to 10% (3,266) deaths after breast cancer (GLOBOCAN 2018). The cervical cancer burden in Kenya can be significantly reduced through screening and early detection and management of precancerous lesions (Ministry of Health 2017). However, there is low uptake of screening services in Kenya despite high levels of awareness (Ng'ang'a et al. 2018). Studies conducted in Kenya revealed numerous factors contributing to low screening uptake including, poor access to health facilities, prohibitive cost of screening, low perception of risk, fear of the results and lack of satisfactory knowledge on the diseases progression (Ng'ang'a et al. 2018; Orang'O et al. 2016). Majority of these factors are also exhibited in other low and middle income countries in Sub-Saharan Africa (Viviano et al. 2017; Chidyaonga-Maseko, Chirwa, and Muula 2015). Community Health Volunteers (CHVs) have been used widely to link community members to healthcare services and this approach has proven fruitful across African regions by diagnosing and treating illness such as malaria and providing health education (Onono et al. 2018; Kuule et al. 2017; Chung, Hazmi, and Cheah 2017; Gaëlle Vareilles et al. 2017). Despite of the CHVs role being outlined at policy level, little is known about the intrinsic factors influencing their performance while extrinsic factors such as remuneration have been extensively studied. Therefore, it is imperative to understand the intrinsic factors that motivate CHVs to work effectively and efficiently in resource-limited

settings.

Cervical cancer is a global public health problem (WHO 2019). It is the fourth leading cause of mortality among women with an estimated 570,000 cases and 311,000 deaths reported in 2018 (Bray et al. 2018). Most of the cervical cancer cases occur in Low and Middle-Income Countries (LMIC). In the Sub-Saharan Africa and South Eastern Asia countries, cervical cancer ranks second in incidence (11.6%) and mortality (14.9%) (Bray et al. 2018). In 2018, 47,887 new cases of cancer and 32,987 deaths attributed to cancer were reported in Kenya (GLOBOCAN 2018). Of the new cases reported, cancer of the cervix was the second leading at 11% after breast cancer 12.5%. Cervical cancer is the second leading cause of death among women in Kenya with a prevalence rate of 18.3% across all ages (GLOBOCAN 2018). It is caused by persistent or chronic infection with one or more of the high risk Human Papilloma Virus (HPV) - type 16 and 18 that are sexually transmitted (World Health Organization 2014). Therefore, reducing the burden of infection of HPV attributable to cervical cancer can influence the overall cancer burden through intense community mobilization for cervical cancer screening (Macharia, Mureithi, and Anzala 2019).

Cervical cancer is highly preventable and treatable when identified early by screening and when comprehensive prevention strategy is instituted (Ministry of Health 2018). Developed countries have put in place effective programs to screen eligible women thus detecting pre-cancerous lesions early and subsequently treating them (World Health Organization 2014). Early treatment contributes up to 80% prevention of cervical cancer (World Health Organization 2014). In Kenya, majority of women (74%) have heard about cervical cancer but only 14% have been screened for it (KDHS 2014). According to the Kenya Demographic and Health Survey (KDHS), the knowledge and likelihood of being screened for cervical cancer are lowest among women aged between 15-19 at 59% and 2% respectively, 71% and 11% among rural women and finally 33% and 3% respectively among women with no education (KDHS 2014). This therefore accentuates the need for community sensitization to create awareness of cervical cancer screening (Ministry of Health 2014).

To facilitate uptake of cervical screening services, CHVs need to create awareness within their community through holding community talks with women, educating women about cervical cancer screening during their routine household visit and during health dialogue days scheduled by the county government on a quarterly basis (CUIDS 2018). Awareness creation refers to any effort designed to mobilize prospective clients to understand they need a specific service and utilize it (IPPF 2018). Therefore, awareness creation can be supported through integrated strategies including; use of mainstream platforms such as television, radio and print media such as magazines, use of community health volunteers, integration of screening services with reproductive health services at the facility level (IPPF 2018). A study conducted in Western Kenya revealed that the use of CHVs to collect vaginal swab from women in the community for screening increased the uptake of the services as compared with the control arm where vaginal swab samples were collected in the health facility (Megan Huchko, Saduma Ibrahim, Craig Cohen, and Smith, Robert Hiatt 2018). This therefore indicates the trust and friendliness the community members and CHVs have. It also shows that the CHVs have the capacity to create awareness for screening services not only at the facility level but also at the community level. The trust that the community has for CHVs motivates them to perform their work to the optimum level because they feel recognized and appreciated.

1.2 Significance

This thesis is in line with the implementation of the 2017-2022 National Cancer Control Strategy Pillar 1, which focuses on prevention, early detection using various methods and screening. In addition, it observes the 2010 Constitution of Kenya, Article 43, which bestows on every individual the right to the highest standard of health that is attainable. It is also in line with the 2018-2022 Isiolo County Integrated Plan which had a target of screening 20% of women of reproductive age by 2019 and 50% by 2021 (CUIDS 2018) by addressing CHVs plight on motivation in order to enable them perform their tasks to optimum level. Finally, the findings from this study will inform the Ministry of Health, Community Health division on the practical interventions to motivate CHVs intrinsically during this period when health budgets are limited and cannot sustainably provide CHVs with a monthly stipend and rising cases of cervical cancer cases that could be averted at the community level through utilization of CHVs to create awareness for cervical cancer screening (Ministry of Health 2017). The findings of this study will also help

other researchers doing similar work and would like to expound on research in relation to motivating factors among CHVs.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter captures the global, regional and local perspective of CHVs and cervical cancer. It reviews some of the existing literature on intrinsic motivation factors and knowledge gaps or unanswered questions in relation to the proposed research. It also describes the statement of the problem, justification, research questions and objectives. Lastly it outlines the conceptual framework.

2.1 Global perspective of Community Health Volunteer

In recognition of the importance of primary health care and the increasing rate of cervical cancer cases globally, there has been renewed momentum and interest to strengthen primary health care through utilization of CHVs (Kok, Broerse, et al. 2017). Majority of the countries in Sub-Saharan Africa (SAA) are starting to embrace the importance of CHVs due to shortage of health care workers and increasing burden of communicable and non-communicable diseases including cancer (Kok, Broerse, et al. 2017). There are many types of CHVs based on a country and setting. In some countries, CHVs are salaried government employees whereas in other countries they are unpaid volunteers (Shapira et al. 2017). One common thing though is that all of them are trained individuals who act as intermediaries between the community and healthcare providers.

Many LMICs continue to experience a shortage in the number of skilled health care providers serving the ever-increasing populations faced with increasing cases of infectious, communicable and non–communicable diseases such as cancer (Chung, Hazmi, and Cheah 2017). This is also coupled up by the insufficient health facilities to cater for the needs of growing communities. Therefore, CHVs have been crucial in bridging this gap by providing equitable healthcare and expanding healthcare access to the community through a wide array of preventive, promotional and curative services. Research studies conducted in Malawi and Uganda to assess the CHVs motivation showed that CHVs who faced multiple challenges resulted in poor performance, the challenges included lack of remuneration, inadequate skills, high workload and lack of uniform (Kuule et al. 2017; Chung, Hazmi, and Cheah 2017). A study conducted in Western Kenya,

revealed that the use of CHVs to assist in collection of self-collected vaginal swab by willing women in the community for HPV screening was successful, with a high adoption among CHVs that resulted in increased screening among socially vulnerable under-screened women (Arrossi et al. 2017)**.**

2.2 Structure of Community Health Strategy in Kenya

The health sector in Kenya is devolved, therefore, primary healthcare is placed within the county's mandate. The Community Health Strategy (CHS), launched in 2006, has enabled the country to implement primary health care (PHC) (Ministry of Health 2014). PHC is the provision of essential health care to individuals and communities at an affordable cost (MOH 2006). Varying degrees of success were noted during its implementation which led to the updating of the strategy to the current one 2014 -2019 (Ministry of Health 2014). According to the CHS strategy, Community Health Extension Workers (CHEWs) who are government salaried employees supervise and mentor CHVs. The CHEWS supervises 10 CHVs for every 50,000 households (Ministry of Health 2014). The CHVs are usually either male or female, however, the attrition rate for male CHVs is higher due to societal norms. In urban and marginalized communities, CHVs are constrained in conducting their work due to security issues and migration (Kok, Ormel, et al. 2017)

2.3 Motivation

CHVs ability to perform effectively and efficiently depend on their motivation (Ormel et al. 2019). Motivation is the inherent willingness or desire to act in service of a goal and is categorized into two; intrinsic and extrinsic based on Self Determination Theory (Deci and Ryan 2008). Both intrinsic and extrinsic factors are powerful forces in shaping the performance of the CHVs (Deci and Ryan 2008). Intrinsic motivation exists without the influence of external rewards such financial remuneration whereas extrinsic motivation is generated from external rewards such as financial remuneration (Vansteenkiste, Lens, and Deci 2006). Intrinsic motivators include altruism, empathy and the desire for self- fulfillment (Vansteenkiste, Lens, and Deci 2006).

Different studies conducted across the world revealed that some CHVs are motivated to work because of the recognition they get from the community by being called "village doctors",

willingness to learn and help the community where as others work with the hope of being employed in future (Kok, Broerse, et al. 2017; Kok, Ormel, et al. 2017; Kok et al. 2018). The terms of engagement of CHVs differs in several countries. In some Countries they are salaried for example in Rwanda, they are paid based on performance (Shapira et al. 2017). Therefore in countries such as Kenya which experience continuous financial challenges and unable to sustain the CHV program through the monthly provision of stipend, it is important to utilize other strategies that will motivate the CHVs to work such as focusing on intrinsic motivation.

2.4 Universal Health Coverage

Universal Health Coverage (UHC) is currently the main focus of majority of the countries across the world towards the achievement of Sustainable Development Goals (Verrecchia, Thompson, and Yates 2019). UHC aims at providing equitable access to healthcare among individuals and communities. Majority of the LMIC are increasingly adopting UHC as their health policy priority (McCollum et al. 2019). Kenya has adopted UHC as one of the presidential big 4 agenda initiatives (Wangia Elizabeth 2018) and the aim of UHC in Kenya was to ensure that by 2022 every Kenyan would have access to healthcare services without suffering financial burdens (Wangia Elizabeth 2018). Although implementation of UHC covers preventive and promotional services, most resources are geared toward curative services and less on primary health (Verrecchia, Thompson, and Yates 2019). This is worrying because public health intervention often offers better value for money compared to curative services. The public health interventions include using the CHVs to educate community members about good health practices and create awareness on the availability of some services at the facility e.g. cervical screening services.

2.5 Overview of Cervical Cancer

Globally, cervical cancer is the fourth most common cancer and second most frequent cancer amongst women(GLOBOCAN 2018) . LMIC accounts for 90% of the new cervical cancer cases and deaths (World Health Organization 2014), which is an outright indicator of health inequality. Urgent attention is needed to avert the rising new cases. In 2018, Kenya reported 47,887 new cancer cases of which 11% were attributed to cervical cancer (Ministry of Health 2017). Cervical

cancer is highly preventable if early diagnosis and effective treatment is done (Health 2018). The primary screening methods for cervical cancer in Kenya include; Pap smear test, which looks for precancerous cells, caused by human papilloma virus, in the cervix (Ministry of Health 2018). The pap smear sample collection is done by a health provider and recently research has shown that clients can do self-collection for HPV testing (Megan Huchko, Saduma Ibrahim, Craig Cohen, and Smith, Robert Hiatt 2018). If the results of the sample collected turns out positive, the client is required to undergo colposcopy and if not available, the Visual inspection with acetic acid (VIA) alone or combined with visual inspection with Lugol's iodine (VILI) will be used. If the result from either of the second screening method turns positive, the client will be referred for cryotherapy treatment and further management at the facility (Ministry of Health 2018). If the pap-smear and the other screening method results is negative, the client will be advised to go back for rescreen after 3 years (Ministry of Health 2018).

Currently, interventions such as the Human Papilloma virus (HPV) vaccines that are available in public health facilities in Kenya and can significantly reduce the risk of cervical cancer are in use (Health 2018). All eligible women (25 - 49 years) should be screened at least once every three years according to WHO recommendations (World Health Organization 2014). To this effect, there is need to promote cervical cancer screening especially at the household level. Kenya adopted the WHO recommendation and currently advocates for all eligible women age between 25- 49 years to be screened once every 3 years and 50-65 years once every 5 years. Despite this recommendation, only 14 % of women age between 14- 49 have ever been screened in Kenya (Ministry of Health 2017) Study conducted in Kenya revealed that despite high awareness, screening uptake was sub-optimal (Choi et al. 2020). It is on this backdrop that calls for feasible approaches to improve screening in Kenya and the need to utilize the CHVs to heighten screening.

2.6 Self Determination Theory

Self Determination Theory (SDT) has been applied in various cultures and domains including healthcare (Deci and Ryan 2008). The theory states that people are naturally self-motivated, active, eager and attracted to succeed because success by itself is rewarding and fulfilling. It also recognizes that people can be passive and dissatisfied. Several studies conducted in Sub Saharan Africa evaluating CHVs performance revealed that poor CHV performance is attributed to lack of

motivation such as lack of recognition of their work, training, poor working conditions such as lack of bags to carry their commodities and dwindling financial support i.e. monthly stipend (Greenspan et al. 2013; Gaëlle Vareilles et al. 2017; Kuule et al. 2017; Ormel et al. 2019). SDT also outlines that when people are intrinsically motivated, they perform effectively because of the positive feeling that results from the activity itself (Deci and Ryan 2008). Finally, the theory is centered on inherent and psychological needs of competence, relatedness and autonomy (Adams, Little, and Ryan 2000).

2.6.1 Competence

CHVs are trained individuals who act as intermediaries between health care and community (Ministry of Health 2014). CHVs have basic knowledge on healthcare management and can treat common illnesses such as malaria and diarrhea at the community level and refer complicated cases for specialized care at the health facility (Ministry of Health 2014; Onono et al. 2018). They also provide health education such as risk factors for cervical cancer and link women to health facilities for screening (Ministry of Health 2014). For CHVs to be competent, they need to be properly trained and master the skills to handle health cases at the community level. A study done in Western Kenya to assess CHV knowledge levels on cervical cancer revealed that out of 188 CHVs, 68% had poor knowledge about the risk factors for cervical cancer, however, all CHV were aware about cervical cancer (Ochomo et al. 2017). This, therefore, necessitates the need to comprehensively train the CHVs in order to facilitate their day-to-day operations.

2.6.2. Relatedness

Also referred as connection, is a sense of belonging and having close relationship with others (Deci and Ryan 2008). Providing non-monetary incentives such as appreciation, verbal and moral support such as supervision, incorporating CHVs in trainings and health-related events, friendly working environment triggers CHVs to perform optimally and also fulfill their expectations (Gaëlle Vareilles et al. 2017). Also, respect gained from community and family motivates CHVs (Lopar, Arudo, and Okoth 2019). Therefore, to enhance CHVs motivation in creating awareness for cervical cancer screening, issues around relatedness should be prioritized. Evidence suggests that supporting and recognizing the CHVs enhances motivation which leads to high retention rates (Cherrington et al. 2010).

2.6.3 Autonomy

CHV duties are entirely based at the community/ household level (MOH 2006) and flexibility in task performance contribute to their motivation. Autonomy is the degree to which CHVs feel they have the liberty on how to conduct their tasks i.e. planning their household visit schedules (Dickin, Dollahite, and Habicht 2011) however, too much autonomy in absence of close supervision may lead to poor performance. Besides being health volunteers, CHVs also play other societal roles such as being a wife or husband or caregiver, therefore before embarking on their CHV tasks, they first tend to family chores. It is on this backdrop therefore that CHV autonomy needs to be considered for better performance. Research has shown that leadership supportive of autonomy characterized as giving opportunity for choice, supporting competence and acknowledging CHVs perspectives can motivate CHVs to perform optimally (Gaëlle Vareilles et al. 2017).

2.7 Statement of the problem

Globally, CHVs play an essential role in improving access and utilization of health care and attaining universal health coverage (Verrecchia, Thompson, and Yates 2019). However, CHV performance has been influenced by multiple factors, which include contextual factors such as motivation, socio-cultural and political factors. In Kenya, cervical cancer is the second leading cause of mortality among women with a prevalence rate of 18.3% after breast cancer (Ministry of Health 2017). Cervical cancer is highly preventable if early screening is done. However, approximately 80% of cervical cancer patients are diagnosed at an advanced stage when hardly any substantive remedy can be provided (Bray et al. 2018). In Kenya, only 14% of women (15-49 years) have ever been screened for cervical cancer (Ministry of Health 2017). The late diagnosis of cervical cancer has been attributed to, inadequate diagnostic facilities across the country, lack of awareness, high poverty index, and the high cost of treatment (Bray et al. 2018). Despite these factors, cervical cancer burden can be largely reduced through intense community mobilization for the uptake of screening services by using CHVs to create awareness. This can only be done through an integrated mechanism, which involve the implementation of a community health strategy. Until there are access and implementation of community mobilization, which include the utilization of CHVs, the increasing cervical cancer incidence rates will continue to be on the rise (Health 2018).

CHV motivation is commonly divided into intrinsic and extrinsic factors. Both of these factors are important in promoting optimal performance by CHVs. However, focus has been put on the extrinsic factors, which include financial incentives which cannot be sustained by majority of the countries in SSA thus demotivating CHVs and leading to high attrition rates and poor performance (Olaniran et al. 2022). Countries like Kenya rely heavily on Non-Governmental Organizations (NGOs) to support CHVs by providing monthly incentives as a way to motivate them (Kok et al. 2018). Studies have shown that, CHVs are intrinsically motivated through community recognition, autonomy, training, and ad hoc incentives such as t-shirts and work budges. When CHVs feel valued or recognized by the community, colleagues, Nurses, Doctors, and CHEWs their motivation greatly increases. On the contrary, excessive workload and limited autonomy lead to demotivation (Kok et al. 2018). Therefore, the exploring of intrinsic motivation factors will help to demystify the monetary incentive scheme and inform the MoH on the alternative factors that can be considered to motivate CHVs to perform optimally.

2.8 Conceptual Framework

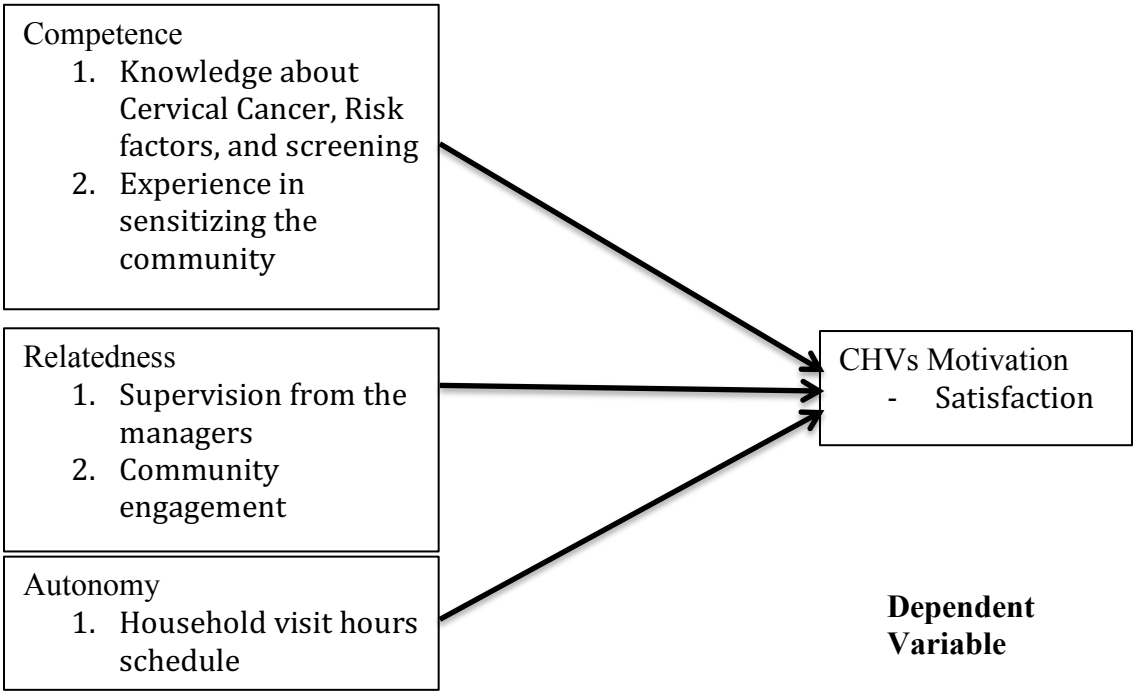

Fig 1: Conceptual Framework adapted from Self Determination Theory (Adams, Little, and Ryan 2000)

2.9 Research question

1. Does training CHVs influence the promotion of cervical cancer screening?
2. How does relatedness of CHVs and supervisors affect the promotion of cervical cancer screening?
3. Does autonomy of CHVs influence the promotion cervical cancer screening?

2.10 Broad objective

To explore the intrinsic factors motivating CHVs to promote cervical cancer screening.

2.10.1 Specific Objectives

The specific objectives include:

1. Describe the competence of the CHVs in promoting cervical cancer screening.
2. Explore the relatedness of CHVs with supervisors in promoting cervical cancer screening.
3. Explore the autonomy of CHVs in promoting cervical cancer screening.

CHAPTER 3: METHODOLOGY

3.1 Study Design

A cross-sectional study design was conducted among Community Health Volunteers.

3.2 Study Area

The study area was Isiolo Sub-County located in Isiolo County (Fig 2). Isiolo Sub-County has a total population of 121, 006 (60,414 being male and 60,647 female) and 29,853 households (Kenya National Bureau of Statistics 2019) distributed within 5 wards namely: Wabera, Bulla Pesa, Burat, Ngaremara and Oldonyiro (CUIDS 2018). The average household size in the sub-county is 4.1 (Kenya National Bureau of Statistics 2019). The Sub–County's ecology is mainly semi-arid and majority of the residents are pastoralists and small-scale dairy farmers (Kagunyu, Thuranira, and Wanjohi 2017). The poverty rate is at 70% and adult literacy is 48% in the whole county (CUIDS 2018). Isiolo County was selected as a study area since it was one of the UHC pilot sites and had an active community units supported by CHVs.

3.3 Study population

The study was carried out among CHVs working in Isiolo Sub-county in Isiolo County.

3.4 Sample size determination

Isiolo Sub- County has a total of 360 CHVs (CUIDS 2018). The sub-county is divided into 16 community units (CU). Each CU has at least 20 CHVs and 1 CHV leader. CHV leaders from each community unit were chosen to represent the CHVs. Therefore, 16 CHV leaders were selected to participate in the study. A qualitative study utilizing in-depth interview as a data collection method should have at least 15 – 20 participants (Crouch and Mckenzie 2006).

3.5 Sampling

Purposive sampling was used to recruit 16 CHV leads representing CHVS from each CU in Isiolo sub-county. The 16 CHV leads were purposively selected as they met the recommended threshold (15 – 20) for an in-depth interview.

3.6 Data collection

Data was collected from the participants using an interview guide to aid the dialogue and mobile phone was be used to record the interviews after successful consenting process by the Principal Investigator (PI) and approval from the county administration. Field notes were also taken to capture daily activities. A short guide on particular verbal and body cues was included in the guide for uniformity and relevance of the captured cues (Appendix IV). Participants were also be given a chance to ask any question(s).

A meeting was held between the Isiolo County Health Director and the Sub-County Community Health Focal person in charge of CHVs for briefing regarding the study and sought for approval to interview the CHVs (Appendix V). The Sub-County community health focal person, who is in charge of the CHVs assisted in sensitizing the CHVs regarding the study via phone call. In January 2021 face to face interviews were conducted over 2 days within Isiolo town. Three interviews were done on day one and 3 done on day. two Each of the interview lasted an average of 30 minutes. In February 2021, 10 face to face interviews were conducted. After the interview, each participant was given transport reimbursement of Ksh. 200. COVID-19 protocols were observed by providing each participant with a facemask, sanitizer for use and maintained 2-meter physical distance during the interview.

3.6.1 Materials

The study utilized printed interview guide (Appendix IV), consent forms in English and Swahili language (Appendix I & II), 2 phones (one acting as a backup) for audio- recording and finally a laptop to transcribe and translate, code and analyze the collected data.

3.6.2 Recruiting and Consenting Procedures

16 CHV leads were purposively selected to take part in the in-depth interview. The participants were briefed about the aim of the study and were given a chance to ask any question(s) or seek for clarification. Informed consent forms in English and Swahili were used for consenting depending on the interviewee's language preference. The interviewee and interviewer appended their signature in 2 consent forms of which the interviewer retained one and a copy given to the participant.

3.6.3 Inclusion/Exclusion Criteria

Inclusion Criteria

Registered CHV leads linked to a community unit and working in Isiolo Sub-County who consented to be interviewed.

Exclusion criteria

CHVS who did not agree to participate in the study.

3.6.4 Variables

The variables analyzed were categorized into two: the independent variables and dependent variable. The Socio-demographics details of the participants were also collected.

3.6.4.1 Independent Variables

a) **Competence**

1. Knowledge – the information acquired through training about what cervical cancer is, its risk factors and importance of screening.
2. Experience – The skills gained from practice i.e. sensitizing the community members about cervical cancer screening.

CHVs competence was analyzed based on CHV knowledge of cervical cancer and its risk factors. Also, CHV's experiences in sensitizing the community regarding cervical cancer screening was analyzed based on their responses. Quotes and rich narratives were used to describe CHV competence.

b) **Relatedness**

1. Supervision – the evaluation of CHVs knowledge and practice regarding cervical cancer screening.
2. Community Engagement – the relationship between the community members and CHVs.

Relatedness was analyzed based on two variables; support supervision and community engagement. Information about support supervision was analyzed to check if it influences CHV

motivation, support supervision includes accompanying the CHV to household visits to check if they are sensitizing the community about cervical cancer screening according to the MoH guidelines. Community engagement, provides information on how the community perceives the CHVs. The information provided by the CHVs will be presented in narrative and quotes.

c) Autonomy

1. Household visits schedule – the ability to plan the time to conduct household visits to sensitize the community about cervical cancer screening.

The autonomy of CHVs was analyzed based on the ability of the CHVs to plan their work schedule daily, weekly or monthly.

3.6.4.2 Dependent Variable

a) Satisfaction – The pleasure derived from creating awareness for cervical cancer screening.

The dependent variable (Satisfaction) was analyzed using proportion/frequencies based on the respondent's feedback on likert scale.

3.7 Ethical Consideration

Approval to conduct the study was sought from Kenyatta National Hospital and University of Nairobi-Ethics and Research Committee (KNH/UON – ERC) Ref No: P397/07/2020 on 26th October 2020 (Appendix VIII), National Commission for Science, Technology and Innovation (NACOSTI) License No: NACOSTI/P/20/809, received on 9th December 2020 (Appendix VII) and from the Isiolo County administration in January 2021. Participant's personal identifiers were not collected to ensure confidentiality, instead, numbers with hash tags were used. Audiotapes and field notes will be kept in a lockable cabinet for safety for a maximum of 2 years in the department of public health, University of Nairobi. Access to the audiotapes will only be granted to the PI and supervisors for use in case the data need to be reviewed. Thereafter, the recorded audios will be deleted in the presence of the PI or supervisor and the certificate of destruction submitted to the KNH ethics committee for notification. The collected data was entered into a secured personal laptop and access will only be granted to the PI and supervisors for data analysis.

3.8 Data Analysis

A transcriber/translator was involved in the transcription and translation of data from Kiswahili to English based on the language used during the interview and the recorded audios responses were transcribed verbatim. For accuracy, transcriptions were translated back to the original data. The social demographics characteristics such as age, sex, level of education, marital status, religion and occupation from participants who consented to be part of the study was described by summarizing the data using frequencies and proportions. In analyzing the qualitative data, a tentative coding framework was developed through reading of 16 in-depth interview transcripts as well as topic guides used to collect the data (Appendix V). Appropriate data extracts were sorted according to themes then after, themes were reviewed to ensure that the data within the themes cohere together meaningfully. A final thematic framework was then developed using QSR Nvivo 10 software © (International Pty 2012, Australia).

Independent and dependent variables were analyzed as described below

1. **Independent Variable**

a) **Competence**

CHVs competence was analyzed based on CHV knowledge of cervical cancer and its risk factors. Also, CHV's experiences in sensitizing the community regarding cervical cancer screening was analyzed based on their responses. Quotes and rich narratives were used to describe CHV competence.

b) **Relatedness**

Relatedness was analyzed based on two variables; support supervision and community engagement. Information about support supervision was analyzed to check if it influenced CHV motivation, support supervision included accompanying the CHV to household visits to check if they were sensitizing the community about cervical cancer screening according to the MoH guidelines. Community engagement, provides information on how the community perceives the CHVs. The information provided by the CHVs are presented in narrative and quotes.

c) Autonomy

The autonomy of CHVs was analyzed based on the ability of the CHVs to plan their work schedule daily, weekly or monthly. Quotes were used to describe CHV Autonomy.

2) Dependent Variable

a) **Satisfaction**

The dependent variable (Satisfaction) was analyzed using proportion/frequencies based on the respondent's feedback on likert scale.

Table 1: Summary of thematic analysis

Theme	**Subtheme**	**Frequency n =16**	**Quotations (Examples)**
Competence	Knowledge	14	*"I will tell them it is a disease that affects the reproductive organ. They must go to the hospital to get checked often." CHV #8*
	Risk factors	12	*"If you are married, you must have had intercourse with your husband. So already you are a carrier. However, it has not multiplied so as the symptoms can be seen. Another contributing factor is the woman's immunity. That is why they say if a woman gives birth to many children without spacing, smoking cigarette and if you are HIV positive, your immunity is lowered." CHV #12*
	Screening Services	13	*"I don't know which one, but they were inserting something inside to check. And if someone is found to be ill, they called it, I don't know, [Cryotherapy] something like that." CHV #2,*
	Sensitization experience	15	*"I summon women and meet up under a tree because we do not have a community class or hall and educate the women on testing to a point of them accepting to be taken to do the screening. In fact, most of the women I personally took them for it." CHV #3,*
Relatedness	Supervision	13	*"I feel sometimes they are busy and have no time to come and supervise. Unless they get more people to come and help because the CHV workers are many so one person cannot cover the whole CHV. If for example they start by supervising me, it will take them four*

			months to finish the cycle. Unless they get a specific person to do this job." CHV #9
	Community engagement	7	*Right now, people are more knowledgeable. There are some that agree if you tell them to go for screening. Some are resistant and I must tell them more about the importance. It is better if they know early what diseases they have because they don't know what is inside. And if they have a problem, they can be treated because early detection has treatment. So, it is important to know what ailments your body has. It is like HIV screening; you get tested to know your condition early. Since people are different, once you tell them, some will agree to go. They will tell you, take me to general for screening but others refuse. They say when you go there, they will put a machine and that machine will harm you when you leave there, something like that." CHV #10,*
Autonomy	Task Schedule	8	*"Talk to them… About cervical cancer screening, malnutrition, and hygiene especially in this Corona time." CHV #10*
Motivation	Satisfaction	9	*"This job is all about helping your community. The first thing is you need to help your community. Then at the end of the month, there is something that the county gives you. Even if it is small, it helps you do that work. Instead of sitting with the knowledge that you have, it is better to help your community... There are also trainings that we are taken. The trainings motivate us as we continue living." CHV #2*

3.9 Data Management

The raw audio recorded data was transferred from mobile phone to password protected online drive (Dropbox). Print outs of transcripts, field notes and socio-demographics details of the participants have been stored in a lockable cabinet and access will only be granted to the PI and the supervisors for use. Audio recorded data were encrypted and saved on password protected laptop for security.

CHAPTER 4: RESULTS

4.1 Socio-Demographics

In-depth interviews were administered to 16 participants (10 female and 6 male). Most of the participants, (9/16), were between 30 and 39 years with the median age being 3 years. The youngest participant was 29 years while the oldest was 47 years. In terms of marital status, 14 of the participants were married with one separated and the other single (N=16). By level of education attained, majority (10/16) had primary education as their highest level of education though incomplete. Majority of the CHVs were of Islamic religion (12/16). The main source of income of the CHVs was business (11/16) and another 4 relied on farming while 1 relied entirely on CHV work for income. In terms of workload, 12 out of 16 CHVs were responsible for 30 -100 households with the average number of households supported being 71. Four CHVs reported to be supporting more than 100 households while 3 supporting less than 50 households. The CHV with the least number of households had 32 while 109 households were the largest number of households held by a single CHV. In terms of work-related experience in years, half of the CHVs interviewed, 8 out of 16, had more than 10 years of work related experienced. The other half had between 2 and 9 years. The average years of experience (in years) as volunteer was 7.8 years with the most experienced CHV having 14 years of work-related experience. Table 2 below shows socio demographic details of CHVs interviewed in Isiolo – sub County.

Table 2: Socio-demographics details

Socio-demographic profile:	Frequency, n=16
Sex	
Male	6
Female	10
Age	
20-29y	4
30-39y	9
40-49y	3
Marital Status	
Married	14
Separated	1
Single	1
Level of education attained	
Primary (complete)	4
Primary (incomplete)	6
Secondary (complete)	2
Secondary (incomplete)	4
Occupation	
Casual - CHV	3
Farmer	2
Small business trader	10
Self Employed	1
Religion	
Christian	4
Islam	12
Main source of income	12
Business	11
CHV work	1
Farming	4
Number of supported Households	
<100	12
>101	4
Experience (in years) as volunteer	

< 9y	8
>10y	8

4.2 Competence

4.2.1 Knowledge about cervical cancer, screening and risk factors.

14 out of 16 participants demonstrated knowledge of what cervical cancer is. Out of these 14 participants, eight mentioned that cervical cancer affected the reproductive organ of women; four participants were able to mention sexual intercourse with multiple partners involving one with the disease as a risk factor for the disease. Mention was also made of HPV as vaccine against the disease by four participants.

"Cervical cancer is a disease that affects women and men. Cervical cancer can be transmitted from a man to a woman. If someone is below 18 years, you can also get cervical cancer that is why the HPV vaccination has been brought so people can be treated." CHV #1

"I will tell them it is a disease that affects the reproductive organ. They must go to the hospital to get checked often." CHV #8

"Cervical cancer is a cancer that affects a woman's cervix." CHV #9

Concerning cervical cancer screening, 14 out of 16 participants implied that the procedure involved in confirming whether someone had cervical cancer. They also said that screening was best done at the health facility by a professional health care provider. The 14 participants further confirmed that they provided health education during household visits and in community forums on the importance of early detection, diagnosis, and management of cervical cancer through early screening. Two out of 16 participants did not understand what cervical cancer screening is, one held that it was the provision of information on the disease and its symptoms while the other did not know what cervical cancer screening was.

"Screening is checking to see if someone has a problem. Screening is done because people are usually not aware that they have this disease. So that is why screening is done. If you are found to have the illness, you are referred elsewhere for further investigation." CHV #2,

"Testing using a machine put around the private regions if signs and symptoms are seen, there's medication available." CHV #3,

"It is checking if you have cervical cancer or not. A lot of times people go for the cancer screening to know if they have it or not… Yes, I know because I have gone for the screening." CHV #9,

4.2.2 Cervical Cancer risk factors

The most commonly mentioned risk factors were sexual intercourse with multiple sexual partners (12 out of 16), early sexual debut (3 out of 16), teenage pregnancy and birth (3 out of 16) and use of family planning (especially depo) methods (3 out of 16) then socio cultural practices such as Female Genital Mutilation (FGM) (2 out of 16). Other risk factors mentioned included Abortion, Douching (1/16), Early marriage and smoking (1/16), low immunity due to HIV infection (1/16), and other diseases as well as improper birth spacing (1/16).

Sexual encounter involving multiple sexual partners was explained as a risk factor in that men are carriers of the disease (HPV Virus) and hence would transmit it from one woman to another especially where unprotected sex is involved (12/16). Use of detergents to clean a woman's private part also increased the risk of cervical cancer since the detergents contained chemicals that increased their exposure to the disease (1/16). The participant who mentioned this, opined that women should use only water to clean their private parts.

"Firstly, if a mother gives birth every year, the body becomes weak. Secondly, me as a man, if your wife has it and you go to another woman, or if a man goes to another woman, he can bring to the wife." CHV #11,

"If you are married, you must have had intercourse with your husband. So already you are a carrier. However, it has not multiplied so as the symptoms can be seen. Another contributing factor is the woman's immunity. That is why they say if a woman gives birth to many children without spacing, smoking cigarette and if you are HIV positive, your immunity is lowered." CHV #12,

"The things that cause this cancer include, if your husband has got this virus, you cannot see the virus. So, if the wife sleeps with the man, he will transmit the virus. If your husband has multiple sexual partners, you might get it. The types of food that one eats is also a contributing risk factor. You should not wash your private parts using detergents because they can bring the disease. You are only supposed to wash with water." CHV #2,

"The first is starting to have sexual intercourse at an early age and having multiple partners. Another one is using family planning methods for a long time, let's say you began early. But what I see mostly is having multiple partners." CHV #9,

4.2.3 Cervical Cancer Screening services provided in the county

All the participants (16 out of 16) said that cervical cancer screening services were available across a number of both private and public health facilities where upon sensitizing the women in their communities, they referred and sometimes accompanied suspected cases of cervical cancer for screening and management. The question on the type of the screening conducted was however not answered by a majority (13 out of 16) participants. 3 out of 16 participants that attempted to respond to the question confirmed not knowing the screening type used at the various screening points within the county.

"Yes, I heard it is done there. There was a time they came to the village from the hospital and did the screening." CHV #1,

"Yes, there are screening services in Isiolo." CHV #7,

"There are people who came, and we mobilized the community and they went to be screened." CHV #11,

"I don't know which one is done at Isiolo County Referral Hospital, but I have heard that you can be screened there. The other one I have forgotten what it is called. There was a screening that was being done here, but I don't know the one being offered at General." CHV #16

"I don't know which one, but they were inserting something inside to check. And if someone is found to be ill, they called it, I don't know, [Cryotherapy] something like that." CHV #2,

4.2.4. Experience in sensitizing the community

Majority of the participants (15 out of 16) mentioned that they sensitized the community on cervical cancer screening as part of their roles during one on one discussion during household visits and sometimes in organized community forums within the community. Specific to cervical cancer, majority of the CHVs (14 out of 16) confirmed that they sensitized the community through health talks on what cervical cancer was, the associated risk factors, danger signs, the importance of early diagnosis and treatment, addressed myths and misconceptions about cervical cancer and referred women to the health facility for screening. In certain instances, as confirmed by 2 out of the 16 participants, they mobilized the community for HPV vaccine during campaigns. This was however not the main role of their job as they had other significant topics to address whenever they interacted with the community in the course of their duties e.g. family planning, nutrition etc.

"When we are doing household visits, you will find someone telling you that they have been bleeding for a long time and they don't know where that blood is coming from. I tell them to go to the hospital. Someone maybe went to traditional healers and they were not given medication. When I do household visits, I tell them that bleeding is bad because they don't know where it is coming from. Therefore, it is important that they go to the hospital to do cervical cancer screening. Or the doctor will check in another way and know what disease you are suffering from and where the bleeding is coming from and why it is not stopping... I tell them to go to the hospital early to be checked, it does not affect their life. It is better to know early and to go for screening… Follow up, okay. If they say they went, or they will go tomorrow, I usually pass by and check if they went." CHV #10,

"I summon women and meet up under a tree because we do not have a community class or hall and educate the women on testing to a point of them accepting to be taken to do the screening. In fact, most of the women I personally took them for it." CHV #3,

"We used to do this type of job but right now it is all about Covid-19, breastfeeding, family planning, etc. For cervical cancer we just brush on it and tell them to go to the general hospital so that they can learn more." CHV #6,

All the participants (16 out of 16), mentioned that not enough effort was not put to increase screening coverage despite the community's improving perspective around cervical cancer screening. To increase cervical cancer screening, majority (9 out of 16) of the participants recommended more sensitization/training on cervical cancer in order to empower them to provide the right information and in a timely manner to increase referrals and also make them more effective in diagnosing cervical cancer cases early for management. It was also suggested by 3 out of 16 participants that the county governments and NGOs in the health sector should consider providing more employment opportunities for CHVs to focus on sensitization and referral for cervical cancer screening. Employing more CHVs would also reduce the workload and hence increase their efficiency. In addition, stipend should be provided to the CHVs. Finally, there was need to increase facilitation for CHVs to be able to provide standard information on cervical cancer. This should be through provision of reference materials including Information, Education and Communication (IEC) materials.

"They have not been educated yet. Even the CHV staff, we have not been educated or trained enough about cervical cancer. So, we need some training so we can go educate others." CHV #14,

"I am not satisfied. We were last trained in 2017, maybe things have changed but we are not aware… It is important to go for training or refresher courses, so you know what is happening. If you combine it with what you already know, it will help." CHV #2,

"Yes, if the government cares, they should at least employ us and get something to take home." CHV #9,

"Being trained, being given books that talk about it so that we can read and be knowledgeable. I can be able to educate them about cervical cancer after I get the training." CHV #6,

4.3 Relatedness

4.3.1 CHV supervision from the managers

Participants were asked if they had ever been trained on cervical cancer screening upon which 9 out of 16 responded in the affirmative. Of the 9, 7 confirmed being trained between 2015 and 2020.

The other 2 couldn't remember when they were trained. Of the 16 CHVs interviewed, 7 had not been trained on cervical cancer. Of the 7, 4 provided cervical cancer screening sensitization from reading materials. On supervision, only 3 out of the 9 participants who had confirmed having been trained on cervical cancer screening confirmed having been supervised while conducting their household visit but not specifically on sensitization on cervical cancer screening in the community. The other 6 had never been supervised while conducting sensitization on cervical cancer screening. The supervision was considered inadequate by 13 out of 16 participants and improvement by increasing the number of CHEWs to support the CHVS was needed. Though this was partly attributed to covid-19 pandemic, it was also largely due to high workload due to competing tasks and priorities among the supervisors (CHEW). It was however reported that monthly and quarterly review meetings were used to address several issues affecting CHV work in the community. According to 8 out of 16 participants, the CHEW was the go-to person whenever they were stuck with issues at the community. This was followed closely by the nursing officers in charge from the attached facilities who were mentioned by 3 out of 16 participants. The other reference points included personal research and m-health platforms accessible to them.

"There were NGOs that came and trained us… They were called Sharp… They came only once and disappeared… A long time ago" CHV #11

"We have never attended any training. The doctors just share information that we go use and mobilize the community." CHV #3

"Yes, I have been trained… It was some time back, like 2015." CHV #12

"They used to do supervision before, but now with Covid, there is no supervision. But we used to have supervision when doing household because we were treating children in this household visits. But for cancer, no." CHV #2

"I have been supervised. They usually combine all of them and supervise you. Like if you have made the household visits and what you talked about but not specifically for cancer." CHV #9

"It is only the CHEW whom we go to when we have questions and the one who does supervision when we do household visits. If I don't find him/her that day, then when he/she comes for supervision, I will ask when the woman who asked the question is there." CHV #2

"I ask the CHEW… When [I] cannot access the CHEW, I would go through some books we were given that has information about such stuff." CHV #5

"If I am unable to answer, I send them to my facility… [to the] Nursing officer in charge." CHV #12

"I feel the supervision is not enough because for instance, we are the ones who supervise us. Now these people that [inaudible 00:07:14] for cervical cancer at least should be added, when they come for supervision, that part should also be added as part of the household supervision." CHV #14

"I feel sometimes they are busy and have no time to come and supervise. Unless they get more people to come and help because the CHV workers are many so one person cannot cover the whole CHV. If for example they start by supervising me, it will take them four months to finish the cycle. Unless they get a specific person to do this job." CHV #9

4.3.2 CHV Community Engagement

Seven out of 16 participants, revealed that the cervical cancer perception varies across gender and age. Women have become more receptive because of the empowerment they have received from the sensitization by the CHVs as reported by 7 out of 16 CHVs. Empowered women are seeking screening services and are asking more questions regarding cancer screening from the CHVs. Men on the other hand are more adamant, resistant, and scared about the disease and the sensitization efforts. Younger girls are also more receptive of the information compared to the older women.

"Right now, people are more knowledgeable. There are some that agree if you tell them to go for screening. Some are resistant and I must tell them more about the importance. It is better if they know early what diseases they have because they don't know what is inside. And if they have a problem, they can be treated because early detection has treatment. So, it is important to know what ailments your body has. It is like HIV screening; you get tested to know your condition early. Since people are different, once you tell them, some will agree to go. They will tell you, take me to general for screening but others refuse. They say when you go there, they will put a machine and that machine will harm you when you leave there, something like that." CHV #10,

"Some women are surprised and wonder how they will get this disease. But because we are all women, you are also a woman, we educate them and listen to them when they are talking… They are attentive because they ask questions. When a person asks questions, you know that they have been listening attentively. But if they don't ask questions, you just know they are embarrassed. At times they are scared but they do ask questions because they fear the disease... In our meetings, the women are usually the majority. Men are usually few and when they ask questions, we tell them there is one that affects men which is called prostrate. Some men say it is a lie, there is no way they can bring a disease to their wives. So, they resist. CHV #2,

"Some are not serious; they don't really listen. They seem shy. You find some listening well. You even find some find it hard to ask question because of fear… you find some are older women and they feel shy because am younger and I talk about such stuff." CHV #5,

4.4. Autonomy

4.4.1 Household visit hours schedule

The average time spent each day working as a CHV was estimated at between 3 and 4 hours daily. This translates to 14 hours weekly on average. In terms of tasks that CHVs mostly spend their time on, the most mentioned was sensitization on cervical cancer screening and general hygiene and sanitation especially handwashing (8 out of 16), followed by sensitization on family planning including referral for family planning services (7 out of 16). The others were sensitization on nutrition, immunization for under 5's and covid-19 containment measures and best practices such as handwashing and social distancing among others as table 3 shows.

Table 3: Household Visit schedule

Service Area:	**Frequency, n=16**
Sensitization on Cervical cancer screening	8
Sensitization on general hygiene and sanitation especially handwashing	8
Sensitization and referral for Family Planning	7

Sensitization on Nutrition for under 5's	6
Sensitization on Covid - 19	5
Sensitization and referral for immunization for under 5's	5
Sensitization and referral on antenatal care services;	4
Sensitization on exclusive breastfeeding	2
Sensitization on diarrheal diseases	2
Sensitization on HIV	1
Sensitization and referral for hospital delivery;	1

"Talk to them… About cervical cancer screening, malnutrition, and hygiene especially in this Corona time." CHV #10

"When I go for household visits, the first thing I do when I arrive is to ask if there is a sick person there, such as diabetes, HIV such things. After that, I will start to talk about immunization for children under five. I will tell them the importance of immunization and then give the children and then I will talk about good nutrition. Next if there is a pregnant woman, I must check and tell her the importance of going to the clinic. She should give birth in a hospital, [inaudible 00:11:59] I must teach them. When she gives birth, she should go to which hospital and she should have something small that she has kept aside. When it is time to give birth, she will go and not be stressed. Then on the talks, I tell them about HIV and then also about Covid. I then talk about cervical cancer." CHV #11,

3 out of 16 CHVs confirmed that all the tasks they were doing were part of their role and that they did everything that was expected of them. For these 3, the tasks involved helping members of the community with handouts (includes transport facilitation during referrals), taking children to school especially those in school going age and promoting family planning where it conflicted with their religious beliefs. These according to majority of the participants (12 out of 16) who reported, was done out of compassion and not because it was expected of them.

"*What I feel I should not be doing; one example is maybe I come across someone who has tuberculosis. I am not supposed to attend to him. Maybe the person comes for medicine once and does not come back again. They become a defaulter. Someone can come and explain the defaulter's case at the facility. They will explain that there is a sick person you must make sure he is taken*

care of. That is work for a doctor not me. Those are the positive things. You can come across a pregnant woman and the child is almost nine months, those are outside of duties and I am not fully trained. So, I force myself to do the job." CHV #1

"County has not told me to teach them how to go to school but if I meet children in the house, I tell the mother to take them to school." CHV #10

Majority of the CHVs (11 out of 16) felt that they should be added more roles. According to 4 out of 11 participants additional task was necessary if it was related to health and wellbeing of the members of the community that they served since they desired a healthy community. One participant recommended task shifting from the service providers to relieve them of pressure hence allowing them time to focus on providing quality services at the facility. 5 out of 16 participants who did not agree to added responsibilities for the CHVs mentioned that the CHVs were already overwhelmed by their current workload. They instead recommended that more CHVs should be recruited to reduce the number of households under the care of a CHV for improved efficiency and impact in their roles.

"It is okay if someone gets help. The important thing is a sick person gets treatment." CHV #11

"No. we cannot be added more work because if we would have fewer households, we would be okay with any additions. You also find people you teach do not live in the same village and most households are scattered and not in one area [inaudible 00:12:41] one. It's like three different CBDs." CHV #

4.5 CHV Motivation: Satisfaction of CHVs

Majority of the participants (9 out of 16) were not satisfied with their job in relation to awareness creation for cervical cancer screening. Four CHVs were fairly satisfied, two were satisfied and one was totally not satisfied with their job in relation to awareness creation for cervical cancer screening. This was mainly due to low stipend which was not being paid on time, lack of capacity building initiatives for CHVs on cervical cancer screening to empower the community and lack of enough facilitation to enable CHVs do their work smoothly at the community level.

All the participants (16 out of 16) attributed their motivation to community (humanity) and to God.

Majority of the CHVs, 10 out of 16, attributed their satisfaction to gaining and utilizing new knowledge and skills for betterment of the society in which they live. 7 out of 16 attributed their motivation to stipend from the work; Saving lives (3 out of 16), while 1out of 16 attributed motivation to expanded social network and the words of encouragement from supervision.

"What made me volunteer is the community. Some people are illiterate, and people feel embarrassed talking about some things. So, I must come in and help my people so that their condition does not to worsen… Supervision, like [when the supervisor comes and tells you, 'You have done a great job, or you need training or something else.' … God shall repay me. So, if I do this work, God will repay me in another way because I am a volunteer." CHV #11

"This job is all about helping your community. The first thing is you need to help your community. Then at the end of the month, there is something that the county gives you. Even if it is small, it helps you do that work. Instead of sitting with the knowledge that you have, it is better to help your community... There are also trainings that we are taken. The trainings motivate us as we continue living." CHV #2

"The thing that satisfies me the most is seeing my community being helped, that motivates me. You can hear about cancer and get screened early and that can save one's life because in the early stages of cancer, one can be helped… The second thing that motivates me is lives can be saved. That makes me even work harder. That really motivates me because I have seen I can save lives by talking to people... So, they can help themselves. Because if they sit there, they can lose hope in life and lose their lives. That motivates me to go on." CHV #9

The three most recommended measures to address motivation for the CHVs were increased skills development through training (15 out of 16), increased stipend and payment made in a timely manner (9 out of 16) and proper facilitation for assigned work in terms of required materials such as Information, Education and Communication (IEC) materials and provision of facemasks during Covid-19 period (7 out of 16). Other suggested improvement was provision of more employment opportunities for CHVs (3 out of 16).

"I would like to be promoted from where I am. They can pay me so that I am not where I am right now and not volunteer work only. The government should take care of us and help us and in turn we help our community… There is no money in CHV work. My money is there, and it takes long.

Since last year 2020 till now, we have not been paid. It is almost one year plus, so it is my hard work. Sometimes they take you to seminars, you can be given a little money, or you just look for something to do." CHV #1

"If we get the county support… All manner of support...Money is one… Like security, we should be given a lot of things. We want to be trained more. We to go the community so we know. Some even call you at night if they are about to give birth and they tell you they are about to give birth. You must call the ambulance to go pick them." CHV #12

"It is being taught then being given books with images so that in the field you can show the mothers how cervical cancer is… I cannot say much, it's just transport that's all because of the distance." CHV #5

CHAPTER 5: DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Discussion

Key Findings

- The majority of CHVs had knowledge about what cervical cancer is and had sensitized the community regarding the risk factors of cervical cancer. However, the most of the CHVs could not mention the cervical screening methods in use.
- Half of the CHVs were not supervised in relation to sensitizing the community about cervical cancer screening. The support supervision done was based on other health issues such as malaria and not specific to cervical cancer. Seven out of sixteen CHVs revealed that they had good relation with the community and that that the cervical cancer perception varies across gender and age. Women have become more receptive because of the empowerment they have received from the sensitization by the CHVs
- All the CHVs revealed that they had the autonomy to plan their schedule. The CHVs dedicated at least 4 hours daily to do CHV work which is in line with the recommended 3 hours as outlined in the Kenya Community Health Strategy (2020-2025). The flexible working hours enabled them to schedule their time based on their priorities and this motivated them to do their work since they were able to multi-task.
- From the study, majority of the CHVs were not satisfied with their job in relation to awareness creation for cervical cancer screening. This was mainly due to lack of capacity building initiatives such as subject specific training for cervical cancer screening in order to empower the community to utilize the screening facilities available and also lack of enough facilitation e.g. provision of brochures and booklets (describing what cervical cancer is) to enable CHVs work effectively and efficiently.

5.1.1 CHV Competence

The findings from this study revealed that although most CHVs had heard about cervical cancer, they were not able to comprehensively define it showing a knowledge gap. This is in agreement with the findings from studies conducted in Kisumu and Malaysia whose aim was to assess the CHVs knowledge on cervical cancer . The studies established that CHVs were unable to correctly

define cervical cancer leading to low utilization of screening services in the community (Ochomo et al. 2017; Chung, Hazmi, and Cheah 2017). The sub-optimal knowledge can be attributed to the low level of education. In addition, the lack of training of CHVs , support supervision from their immediate mangers contributed to the low knowledge (Ochomo et al. 2017; Chung, Hazmi, and Cheah 2017). On the other hand, findings from a study conducted in Migori county whose objective was to assess the effectiveness of trained CHVs in promoting cervical cancer screening in the community, revealed that CHVs who had been trained on Cervical screening prior to study implementation recorded higher number of referrals to health facility as compared to those who has not been trained (Choi et al. 2020). These are in tandem with the findings from this study which showed that the CHVs who had been trained on cervical cancer were able to create cervical cancer awareness in the community during their weekly household visits as compared to those who had never been trained.

Despite majority of the CHVs having demonstrated knowledge of what cervical cancer screening and its risk factors was, most of them were not aware of the screening methods available for use. This findings were consistent with the outcomes from studies conducted in Kisumu county, whose objective was to assess CHVs knowledge, attitude and practice in relation to cervical cancer, which showed that the poor knowledge of methods of cervical cancer screening was attributed to lack of training and support from the supervisors (Ochomo et al. 2017; Ochomo, Ndege, and Itsura 2020). It is also in tandem with the findings from a study conducted in Malaysia whose aim was to assess the role performance of CHV and its associated factors, showed that CHVs who were intrinsically motivated through training had good role performance hence contributing to the improved overall performance of the organization (Chung, Hazmi, and Cheah 2017).

5.1.2 CHV Relatedness

Supervision is an important source of motivation. It enables the CHV gain recognition and strengthen the relationship between them and their supervisors and also enhance their skills through on job training. Based on the results, majority of the CHVs disclosed that that how they relate with their supervisors and the community influence their motivation. In addition, the CHVs mentioned that their supervisors, Community Health Extension Officers (CHEWs), were their go-

to person whenever they were stuck with issues that needed to be addressed. The CHVs also revealed that the good rapport between them and their supervisors and the recognition received at the community motivated them.

Contrary to the study conducted in Uganda, whose goal was to measuring health care workers (HCW) productivity and its relationship to CHV Performance, showed that the relationship between the health care workers and CHVs was a threat in their career because the community members trusted the CHVs more to open up about their health problems than the HCW based at the facility (Kozuki and Wuliji 2018). The current study found out that the CHWs described their relationship with their supervisors as very good which has immensely motivated them to continue with their tasks since they get the support they require to carry out their tasks in the community. This is in agreement with the Namibian experience which explored how supportive supervision and job design foster autonomy among CHVs, showed that with mutual understanding on agreed roles and responsibilities, it would be possible to have positive interpersonal relationships, and also have the liberty to plan your work schedule accordingly without having to be micro managed by the supervisors (Dickin, Dollahite, and Habicht 2011). This study found out that that the CHVs feel inadequate when left on their own and require constant supervision. In addition, the CHVs wished that the CHEWs could increase the number of contact hours to enable them learn more.

Despite high reporting of good rapport between the CHVs and supervisors. Sub-optimal supervision at the household level was reported by the CHVs based on the study findings that showed that half of the participants who had been trained on cervical cancer screening had been supervised while conducting household visit. In addition, the supervision was not specific to the cervical cancer screening but general. The inconsistent supervision was attributed to the COVID - 19 pandemic, CHEW workload and competing tasks. The sub-optimal supervision affected the satisfaction of CHVs in relation to creating awareness for cervical cancer screening. The inconsistent supervision is in contrary to what is stipulated in the Kenya Community Health Strategy which recommends for each CHV to be provided with support supervisor on a monthly basis. This therefore revealed a gap in supervision which need to be addressed in order to ensure the optimal motivation of CHVs to inform their effective performance at the community level. As reported by (Chung, Hazmi, and Cheah 2017; Stekelenburg, Kyanamina, and Wolffers 2018) poor

quality supervision did not yield better performance by the CHVs in their studies conducted in Malaysia and Zambia to assess the CHV performance.

CHV's volunteer spirit does not preclude the desire for financial support. As noted from this study findings, some of the CHVs alluded their motivation to receiving financial incentive from attending trainings and supporting donor funded projects within the community. On further inquiry regarding the monthly stipend recommended by the ministry of health, most CHVs not to have received their stipend for the last two quarters. Besides this this study only focusing on the inherent factors that lead to CHV motivation, the monetary incentive was not included as part of the study objectives, nonetheless its mention by the CHV is discussed to outline the need to factor in the monetary incentive which complement their role as CHV and to emphasize its implementation as outlined in the Kenya Community Health Strategy 2020-2025, which recommends each CHV to be provided with a stipend of Kenya shilling 2,000 on a monthly basis (MOH Kenya 2020). To support this finding, a qualitative study conducted in Tanzania to explore the sources of motivation of CHVs, showed that despite CHVs volunteering, they require financial support to cater for their needs such as; paying their children's school fees, buying household items to sustain their livelihood and paying bills, as some of them relied entirely on CHV work (Greenspan et al. 2018).

This study findings showed that majority of the CHVs felt motivated by the community as they were recognized as "village doctors". This earned them respect in the community and thus enhanced their performance. These findings are in tandem with the findings from a study conducted in Malaysia which assessed the role performance of CHV and its associated factors, that revealed that CHV recognition as "doctors" enhanced their performance (Chung, Hazmi, and Cheah 2017). The Malaysia study enrolled CHVs in an intensive training and were supervised on a weekly basis by a HCW to ensure that the CHVs are conducting their roles professionally as outlined by their guiding principles (Chung, Hazmi, and Cheah 2017). In addition, this finding agrees with those from Focus Group Discussions (FDGs) conducted in Kisumu where CHVs stated that they like it when community members refer to them as "Daktari" or "Sister" as well as when community members consult them when one is unwell (Ochomo et al. 2017).

5.1.3 CHV Autonomy

The Kenya Community Health Strategy (2020-2025), recommends the CHVs to dedicate at least 3 hours daily to CHV related duties. The findings from this study revealed that the average hours dedicated to do CHV work was 3 hours which is in line with the recommended time by the Ministry of Health (MOH Kenya 2020). All the CHVs mentioned that they had the autonomy to plan their work without having their supervisor monitor them. The flexible working hours enabled them to schedule their time based on their priorities and this motivated them to do their work since they were able to multi-task. The study findings are in line with the outcomes form a study conducted in South Africa which explored how incentives and expectation gaps influence motivation showed that the flexible working hours enhance CHVs participation in community projects (Ormel et al. 2019). Despite this, nearly half of the CHVs complained about the distance they had to cover from one household to the other by foot due to lack of resources such as money to board a bicycle or motorbike. Due to the distance, the CHV would visit 1 household per day instead of 2 (based on their plan) and this would affect their other personal roles and plans therefore leading to demotivation. Nevertheless, if provided with resources such as motorbikes or bicycles the CHVs would work more efficiently.

A study carried out in India showed that CHVs who were frequently called by their supervisors and asked if they had time to discuss CHV related work or provided with technical guidance on how to carry out their duty felt appreciated since they were given the chance to decide if they wanted to discuss the issues over the phone or to be contacted later (Kaphle, Matheke-Fischer, and Lesh 2016). The findings revealed that autonomy include CHVS creating their individualized schedules for the community and supported to quickly solve any technical issues faced enhanced their motivation and led to higher retention rates (Kaphle, Matheke-Fischer, and Lesh 2016; Malcarney et al. 2017). The findings are in tandem with results from this study, that showed that CHVs are motivated by the ability to be able to plan their work scheduled independently and supported by their supervisors.

5.1.4 Satisfaction

From the study, majority of the CHVs were not satisfied with their job in relation to awareness creation for cervical cancer screening in Isiolo Sub-County. This was mainly due to lack of

capacity building initiatives for cervical cancer screening in order to empower the community to utilize the screening facilities available and also lack of enough facilitation to enable CHVs work effectively and efficiently. The finding is similar to those of different studies conducted across Africa which highlighted the low satisfaction of CHVs mainly due to low knowledge of cervical cancer screening and inadequate support from the supervisors (Ochomo et al. 2017; Ochomo, Ndege, and Itsura 2020; Greenspan et al. 2013; Megan Huchko, Saduma Ibrahim, Craig Cohen, and Smith, Robert Hiatt 2018; Ormel et al. 2019; Kok et al. 2018).

5.2 Study Limitation

There are several limitations to this study that could be addressed in future research. First, due to financial constraints, this study focused only on 16 CHV leads in Isiolo-sub-county who represented other CHVs working within the same sub-county. Therefore, the opinions of the interviewed CHVs might not be similar with the CHVs they represented. In addition, the CHVs only represented one sub-county, therefore, the findings from the study may not be representative with what other CHVs from other sub-counties would reveal therefore cannot be generalized. Future, studies could explore interviewing other CHVs and also the management in order to understand the intrinsic factors motivating the CHVs. Second, the study focused on the self-determination theory (Adams, Little, and Ryan 2000) which is centered on inherent and psychological needs of competence, relatedness and autonomy. Besides the three needs, there could be other inherent needs that motivate an individual and was not included in this study. Therefore, other researchers could explore other inherent factors that contribute to CHV motivation. Isiolo sub-county is classified as a semi-arid region and prone to interclan and tribal clashes making the region insecure. During the study, no cultural challenges were experienced since all of the interviews were conducted in a at the link facility of the CHVs as earlier envisioned. Finally, the study focused on face to face in-depth interviews which may have introduced some level of social desirability. Future studies could explore the inclusion of focus group discussions among the CHVs to explore the inherent motivating factors from other CHVs besides the CHV leads.

5.3 Conclusion

The study concludes that despite CHVs acting as change agents to encourage and educate the community members to take care of their own health by adopting healthier lifestyle and utilizing health services such as cervical cancer screening, they were not satisfied with their role in relation to creating awareness for cervical cancer screening at the community level. CHVs have limited knowledge in defining cervical cancer and describing the screening methods in use which reveals a knowledge gap which could be addressed through focused training and continuous on job training to ensure in-depth understanding of cervical cancer screening which ultimately lead to CHVs having the required information in creating awareness at the community level.

Informed by the study findings, CHVs require consistent supportive supervision to enable them work effectively. The supportive supervision is one of the factors that intrinsically motivate the CHVs. Therefore, supportive supervision should be consistent as outlined in the Kenya Community health strategy 2020-2025 which stipulates that each CHV should be supervised on a monthly basis. The one to one supervision is a platform for the CHV to ask their supervisor (Nurse or public health officer) health related questions that need to be addressed and the supervisor also gets to mentor the CHV and address knowledge gaps identified during the household supervision.

Based on the study findings, majority of CHVs attributed their satisfaction to gaining and utilizing new knowledge and skills for betterment of the society in which they live in, expanding social network, saving lives and recognition they receive from the community. This however, does not preclude the need for financial support from the government. Therefore, besides the inherent motivation factors, the CHVs need financial support in order to enable them cater for other needs such paying bills and buying household items. This therefore calls for the actualization of the Community health strategy that recommends the provision of a monthly stipend to the CHVs.

CHVs value the relationship between themselves, supervisors and the community through support supervision and recognition received from the community. The good rapport between the CHVs and their supervisors enhances their motivation and also the recognition and trust received from the community as community health providers boosts their motivation leading to optimal performance and ultimately improving the health outcomes of the community

5.4 Recommendation

Community health volunteers in Kenya continue to play a major role in promoting the utilization of cervical cancer screening services at the community level. Based on the findings from this study, it is recommended that:

- The county government should support the CHVs through provision of information, education and communication materials such as brochures and facilitate the training of CHV by providing the opportunity and resources such as training venue and training experts, to enhance their knowledge on cervical cancer screening in order to offer quality services to the community.

- CHVs should be empowered through one-on -one support supervision and mentorship. The support supervision is done by the nurses or public officers link to a specific community or facility as outlined in the Kenya community health strategy 2020-2025. The one on one support supervision will enable to address the knowledge gaps exhibited by the CHVs. It also enhances mentorship which boosts CHVs motivation. In addition, the CHVs should be recognized and appreciated for their work to ensure that they are highly motivated intrinsically in recognition of scarcity of funds to sustain the CHV monthly stipend.

- Besides the monetary motivation which is normally not provided on monthly basis as recommended due to limited funds, the county should consider implementing the three inherent psychological needs of competence, relatedness and autonomy among the CHVs to supplement the unsustainable monthly stipend. However, this does not preclude the need for the CHVs to be remunerated on a monthly as per the community health strategy guideline. The monthly stipend is one of the extrinsic factors that motivate them .

- CHVs work should be recognized at the county level by word of appreciation e.g. during the health dialogue days which involves the community, health care providers and the CHVs, provision of appreciation certificates or commodities to enable them work effectively such as identification badges and branded MoH CHV t-shirts. Through this, CHVs will be highly motivated leading to optimal performance and good retention rates.

References

Adams, Nicole, Todd D. Little, and Richard M. Ryan. 2000. "Self-Determination Theory." *Development of Self-Determination Through the Life-Course* 55 (1): 47–54. https://doi.org/10.1007/978-94-024-1042-6_4.

Arrossi, Silvina, Melisa Paolino, Laura Thouyaret, Rosa Laudi, and Alicia Campanera. 2017. "Evaluation of Scaling-up of HPV Self-Collection Offered by Community Health Workers at Home Visits to Increase Screening among Socially Vulnerable under-Screened Women in Jujuy Province, Argentina." *Implementation Science* 12 (1): 1–11. https://doi.org/10.1186/s13012-017-0548-1.

Bray, Freddie, Jacques Ferlay, Isabelle Soerjomataram, Rebecca L. Siegel, Lindsey A. Torre, and Ahmedin Jemal. 2018. "Global Cancer Statistics 2018: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries." *CA: A Cancer Journal for Clinicians* 68 (6): 394–424. https://doi.org/10.3322/caac.21492.

Cherrington, Andrea, Guadalupe X. Ayala, John P. Elder, Elva M. Arredondo, Mona Fouad, and Isabel Scarinci. 2010. "Recognizing the Diverse Roles of Community Health Workers in the Elimination of Health Disparities: From Paid Staff to Volunteers." *Ethnicity and Disease* 20 (2): 189–94. https://doi.org/10.13016/odom-fok7.

Chidyaonga-Maseko, Fresier, Maureen Leah Chirwa, and Adamson Sinjani Muula. 2015. "Underutilization of Cervical Cancer Prevention Services in Low and Middle Income Countries: A Review of Contributing Factors." *Pan African Medical Journal* 21: 1–9. https://doi.org/10.11604/pamj.2015.21.231.6350.

Choi, Yujung, Sandra Y. Oketch, Konyin Adewumi, Elizabeth Bukusi, and Megan J. Huchko. 2020. "A Qualitative Exploration of Women's Experiences with a Community Health Volunteer-Led Cervical Cancer Educational Module in Migori County, Kenya." *Journal of Cancer Education* 35 (1): 36–43. https://doi.org/10.1007/s13187-018-1437-2.

Chung, Melvin Hsien Liang, Helmy Hazmi, and Whye Lian Cheah. 2017. "Role Performance of Community Health Volunteers and Its Associated Factors in Kuching District, Sarawak." *Journal of Environmental and Public Health* 2017. https://doi.org/10.1155/2017/9610928.

Cometto, Giorgio, Nathan Ford, Jerome Pfaffman-Zambruni, Elie A. Akl, Uta Lehmann, Barbara McPake, Madeleine Ballard, et al. 2018. "Health Policy and System Support to Optimise

Community Health Worker Programmes: An Abridged WHO Guideline." *The Lancet Global Health* 6 (12): e1397–1404. https://doi.org/10.1016/S2214-109X(18)30482-0.

Crouch, Mira, and Heather Mckenzie. 2006. "Trend Report Etat de La Question The Logic of Small Samples in Interview-Based Qualitative Research" 45 (4): 483–99. https://doi.org/10.1177/0539018406069584.

CUIDS. 2018. "Isiolo County Intergrated Development Plan (CDP)," no. March. https://doi.org/10.1017/S0022278X00014853.

Deci, Edward L., and Richard M. Ryan. 2008. "Facilitating Optimal Motivation and Psychological Well-Being across Life's Domains." *Canadian Psychology* 49 (1): 14–23. https://doi.org/10.1037/0708-5591.49.1.14.

Dickin, Katherine L., Jamie S. Dollahite, and Jean Pierre Habicht. 2011. "Enhancing the Intrinsic Work Motivation of Community Nutrition Educators: How Supportive Supervision and Job Design Foster Autonomy." *Journal of Ambulatory Care Management* 34 (3): 260–73. https://doi.org/10.1097/JAC.0b013e31821dc63b.

GLOBOCAN. 2018. "Population Factsheet-Kenya" 985: 1–2. http://gco.iarc.fr/today/data/factsheets/populations/404-kenya-fact-sheets.pdf.

Greenspan, Jesse A., Shannon A. McMahon, Joy J. Chebet, Maurus Mpunga, David P. Urassa, and Peter J. Winch. 2013. "Sources of Community Health Worker Motivation: A Qualitative Study in Morogoro Region, Tanzania." *Human Resources for Health* 11 (1). https://doi.org/10.1186/1478-4491-11-52.

Health, Ministry of. 2018. "Kenya National Cancer Screening Guidelines," 1–122.

IPPF. 2018. "A How-to-Guide to Cervical Cancer Screening and Treatment Programmes."

Kagunyu, Anastasia Wanjiku, Elias Gitonga Thuranira, and Joseph Gatura Wanjohi. 2017. "Development Agents and Their Role in Cushioning the Pastoralists of Isiolo Central Sub-County, Kenya, against Negative Effects of Climate Variability." *Pastoralism* 7 (1). https://doi.org/10.1186/s13570-017-0103-3.

Kaphle, Sangya, Michael Matheke-Fischer, and Neal Lesh. 2016. "Effect of Performance Feedback on Community Health Workers' Motivation and Performance in Madhya Pradesh, India: A Randomized Controlled Trial." *JMIR Public Health and Surveillance* 2 (2): e169. https://doi.org/10.2196/publichealth.3381.

KDHS. 2014. "Kenya Demographic and Health Survey."

Kenya National Bureau of Statistics. 2019. *2019 Kenya Population and Housing Census Volume 1: Population by County and Sub-County*. *2019 Kenya Population and Housing Census*. Vol. I. https://www.knbs.or.ke/?wpdmpro=2019-kenya-population-and-housing-census-volume-i-population-by-county-and-sub-county.

Kok, Maryse C., Jacqueline E.W. Broerse, Sally Theobald, Hermen Ormel, Marjolein Dieleman, and Miriam Taegtmeyer. 2017. "Performance of Community Health Workers: Situating Their Intermediary Position within Complex Adaptive Health Systems." *Human Resources for Health* 15 (1): 1–7. https://doi.org/10.1186/s12960-017-0234-z.

Kok, Maryse C., Hermen Ormel, Jacqueline E.W. Broerse, Sumit Kane, Ireen Namakhoma, Lilian Otiso, Moshin Sidat, et al. 2017. "Optimising the Benefits of Community Health Workers' Unique Position between Communities and the Health Sector: A Comparative Analysis of Factors Shaping Relationships in Four Countries." *Global Public Health* 12 (11): 1404–32. https://doi.org/10.1080/17441692.2016.1174722.

Kok, Maryse C., Frédérique Vallières, Olivia Tulloch, Meghan B. Kumar, Aschenaki Z. Kea, Robinson Karuga, Sozinho D. Ndima, Kingsley Chikaphupha, Sally Theobald, and Miriam Taegtmeyer. 2018. "Does Supportive Supervision Enhance Community Health Worker Motivation? A Mixed-Methods Study in Four African Countries." *Health Policy and Planning* 33 (9): 988–98. https://doi.org/10.1093/heapol/czy082.

Kozuki, Naoko, and Tana Wuliji. 2018. "Measuring Productivity and Its Relationship to Community Health Worker Performance in Uganda: A Cross-Sectional Study." *BMC Health Services Research* 18 (1): 1–10. https://doi.org/10.1186/s12913-018-3131-9.

Kuule, Yusufu, Andrew Eric Dobson, Desalegn Woldeyohannes, Maria Zolfo, Robinah Najjemba, Birungi Mutahunga R. Edwin, Nahabwe Haven, Kristien Verdonck, Philip Owiti, and Ewan Wilkinson. 2017. "Community Health Volunteers in Primary Healthcare in Rural Uganda: Factors Influencing Performance." *Frontiers in Public Health* 5 (MAR): 1–8. https://doi.org/10.3389/FPUBH.2017.00062.

Lopar, Samuel Kipunaa, John Arudo, and John M Okoth. 2019. "Contribution of Community Health Volunteers in Immunization" 8 (6): 13–20. https://doi.org/10.9790/1959-0806051320.

Macharia, Lucy Wanjiku, Marianne Wanjiru Mureithi, and Omu Anzala. 2019. "Cancer in Kenya: Types and Infection-Attributable. Data from Two National Referral Hospitals." *AAS*

Open Research 1 (May): 25. https://doi.org/10.12688/aasopenres.12910.3.

Malcarney, Mary Beth, Patricia Pittman, Leo Quigley, Katherine Horton, and Naomi Seiler. 2017. "The Changing Roles of Community Health Workers." *Health Services Research* 52: 360–82. https://doi.org/10.1111/1475-6773.12657.

McCollum, Rosalind, Miriam Taegtmeyer, Lilian Otiso, Maryline Mireku, Nelly Muturi, Tim Martineau, and Sally Theobald. 2019. "Healthcare Equity Analysis: Applying the Tanahashi Model of Health Service Coverage to Community Health Systems Following Devolution in Kenya." *International Journal for Equity in Health* 18 (1): 1–12. https://doi.org/10.1186/s12939-019-0967-5.

Megan Huchko, Saduma Ibrahim, Craig Cohen, Cinthia BlatJennifer, and Bukusi Elizabeth Smith, Robert Hiatt. 2018. "Cervical Cancer Screening through Human Papillomavirus Testing in Community Health Campaigns versus Health Facilities in Rural Western Kenya." *International Journal of Gynecology & Obstetrics, 141(1), 63–69. Doi:10.1002/Ijgo.12415*.

Ministry of Health. 2014. "Strategy for Community Health Republic of Kenya 2014-2019," 1–44.

———. 2017. "Ministry of Health National Cancer Control Strategy 2017-2022." *Ministry of Health, Kenya. National Cancer Control Strategy*, 2017–22. http://www.health.go.ke/wp-content/uploads/2017/10/NATIONAL-CANCER-CONTROL-STRATEGY-2017-2022-KENYA-.pdf.

MOH. 2006. "Taking the Kenya Essential Package for Health to the Community: A Strategy for the Delivery of Level One Services." www.hsrs.health.go.ke.

MOH Kenya. 2020. "Kenya Community Health Strategy 2020 - 2025," 1–44.

Ng'ang'a, Ann, Mary Nyangasi, Nancy G Nkonge, Eunice Gathitu, Joseph Kibachio, Peter Gichangi, Richard G Wamai, and Catherine Kyobutungi. 2018. "Predictors of Cervical Cancer Screening among Kenyan Women: Results of a Nested Case-Control Study in a Nationally Representative Survey." *BMC Public Health* 18 (3): 1221.

Ochomo, Edwin Onyango, Harrysone Atieli, Sussy Gumo, and Collins Ouma. 2017. "Assessment of Community Health Volunteers' Knowledge on Cervical Cancer in Kadibo Division, Kisumu County: A Cross Sectional Survey." *BMC Health Services Research* 17 (1): 1–13. https://doi.org/10.1186/s12913-017-2593-5.

Ochomo, Edwin Onyango, Samson Ndege, and Peter Itsura. 2020. "Focused Training of

Community Health Volunteers on Cervical Cancer in Rural Kisumu." *Journal of Cancer Education*. https://doi.org/10.1007/s13187-020-01839-6.

Olaniran, Abimbola, Barbara Madaj, Sarah Bar-Zeev, Aduragbemi Banke-Thomas, and Nynke van den Broek. 2022. "Factors Influencing Motivation and Job Satisfaction of Community Health Workers in Africa and Asia—A Multi-Country Study." *International Journal of Health Planning and Management* 37 (1): 112–32. https://doi.org/10.1002/hpm.3319.

Onono, Maricianah, Mohammed Abdi, Isaya Opondo, Jane Okung'u, Elijah Asadhi, Rachel Nyamai, Lydia Karimurio, Peter Okoth, and Shamim Ahmad Qazi. 2018. "Using the RE-AIM Framework to Evaluate the Implementation of Integrated Community Case Management in Kenya." *Acta Paediatrica, International Journal of Paediatrics* 107: 53–62. https://doi.org/10.1111/apa.14662.

Orang'O, Elkanah Omenge, Juddy Wachira, Fredrick Chite Asirwa, Naftali Busakhala, Violet Naanyu, Job Kisuya, Grieven Otieno, Alfred Keter, Ann Mwangi, and Thomas Inui. 2016. "Factors Associated with Uptake of Visual Inspection with Acetic Acid (VIA) for Cervical Cancer Screening in Western Kenya." *PLoS ONE* 11 (6): 1–12. https://doi.org/10.1371/journal.pone.0157217.

Ormel, Hermen, Maryse Kok, Sumit Kane, Rukhsana Ahmed, Kingsley Chikaphupha, Sabina Faiz Rashid, Daniel Gemechu, et al. 2019. "Salaried and Voluntary Community Health Workers: Exploring How Incentives and Expectation Gaps Influence Motivation." *Human Resources for Health* 17 (1): 1–12. https://doi.org/10.1186/s12960-019-0387-z.

Shapira, Gil, Ina Kalisa, Jeanine Condo, James Humuza, Cathy Mugeni, Denis Nkunda, and Jeanette Walldorf. 2017. "Effects of Performance Incentives for Community Health Worker Cooperatives in Rwanda," no. May: 34. http://documents.worldbank.org/curated/en/573571494939902839/pdf/WPS8059.pdf.

Stekelenburg, Jelle, Sindele Simasiku Kyanamina, and Ivan Wolffers. 2003. "Poor Performance of Community Health Workers in Kalabo District, Zambia." *Health Policy* 65 (2): 109–18. https://doi.org/10.1016/S0168-8510(02)00207-5.

Vansteenkiste, Maarten, Willy Lens, and Edward L. Deci. 2006. "Intrinsic Versus Extrinsic Goal Contents in Self-Determination." *Educational Psychologist* 41 (1): 19–31. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.489.1502&rep=rep1&type=pdf.

Vareilles, Gaelle, Bruno Marchal, Sumit Kane, Taja Petrič, Gabriel Pictet, and Jeanine Pommier.

2015. “Understanding the Motivation and Performance of Community Health Volunteers Involved in the Delivery of Health Programmes in Kampala, Uganda: A Realist Evaluation.” *BMJ Open* 5 (11). https://doi.org/10.1136/bmjopen-2015-008614.

Vareilles, Gaëlle, Jeanine Pommier, Bruno Marchal, and Sumit Kane. 2017. “Understanding the Performance of Community Health Volunteers Involved in the Delivery of Health Programmes in Underserved Areas: A Realist Synthesis.” *Implementation Science* 12 (1): 1–12. https://doi.org/10.1186/s13012-017-0554-3.

Verrecchia, Robert, Rachel Thompson, and Robert Yates. 2019. “Universal Health Coverage and Public Health: A Truly Sustainable Approach.” *The Lancet Public Health* 4 (1): e10–11. https://doi.org/10.1016/S2468-2667(18)30264-0.

Viviano, Manuela, Pierre De Beaudrap, Pierre Marie Tebeu, Jovanny T. Fouogue, Pierre Vassilakos, and Patrick Petignat. 2017. “A Review of Screening Strategies for Cervical Cancer in Human Immunodeficiency Virus-Positive Women in Sub-Saharan Africa.” *International Journal of Women’s Health* 9: 69–79. https://doi.org/10.2147/IJWH.S103868.

Wangia Elizabeth, Kandie Charles. 2018. “POLICY BRIEF Refocusing on Quality of Care.” http://www.health.go.ke/wp-content/uploads/2019/01/UHC-QI-Policy-Brief.pdf.

WHO. 2016. “Global Strategy on Human Resources for Health: Workforce 2030.” *Who*, 64. https://doi.org/10.1017/CBO9781107415324.004.

———. 2018. *WHO Guideline on Health Policy and System Support to Optimize Community Health Worker Programmes. The British Journal of Psychiatry*. Vol. 111. https://doi.org/10.1192/bjp.111.479.1009-a.

———. 2019. “Cervical Cancer.” https://www.who.int/cancer/prevention/diagnosis-screening/cervical-cancer/en/.

World Health Organization. 2014. “Comprehensive Cervical Cancer Control.” *Geneva*, 366–78. http://apps.who.int/iris/bitstream/10665/144785/1/9789241548953_eng.pdf?ua=1.

APPENDICES

Appendix I: Consent Form (English)

PARTICIPANT INFORMATION AND CONSENT FORM

Title of Study: Assessment of intrinsic motivation factors motivating community health volunteers to promote cervical cancer screening: A Case of Isiolo Sub - County

Principal Investigator\ and institutional affiliation: Everline Bosek, Postgraduate Student, School of Public Health - University of Nairobi

Introduction:
I would like to tell you about a study being conducted by the above listed researcher. The purpose of this consent form is to give you the information you will need to help you decide whether or not to be a participant in the study. Feel free to ask any questions about the purpose of the research, what happens if you participate in the study, the possible risks and benefits, your rights as a volunteer, and anything else about the research or this form that is not clear. When we have answered all your questions to your satisfaction, you may decide to be in the study or not. This process is called 'informed consent'. **Audio tape recorders will be used during the interview to record the whole discussion to ensure that the interviewer captures all the information required.** Once you understand and agree to be in the study, I will request you to sign your name on this form. You should understand the general principles which apply to all participants in research: i) Your decision to participate is entirely voluntary ii) You may withdraw from the study at any time without necessarily giving a reason for your withdrawal iii) Refusal to participate in the research will not affect the services you are entitled to in this health facility or other facilities.
May I continue? **YES / NO**
This study has approval by The Kenyatta National Hospital-University of Nairobi Ethics and Research Committee protocol No. _____

What is this study about?

The researcher listed above is interviewing Community Health Volunteers (CHVs). The purpose of the interview is to find out the factors that intrinsically motivate the CHVs to create awareness for cervical cancer screening. Participants in this research study will be asked questions about what motivates them to work and will not undergo any medical test.

There will be approximately 16 participants in this study purposively chosen. Therefore, I am asking for your consent to consider participating in this study.

What will happen if you decide to be in this research study?
If you agree to participate in this study, you will be interviewed by a trained research assistant in a private area where you feel comfortable to answer questions. The interview will last approximately 25 minutes. The interview will cover topics such as demographic; year of birth, sex, education level, ethnicity, marital status, employment, years worked as a CHV and intrinsic motivation factors. After the interview, the interview recording will be archived for analysis.

Are there any risks, harms discomforts associated with this study?
You will not be exposed to any risks or hazards by taking part in this study. We will keep everything you tell us as confidential as possible. We will use a code number to identify you in a password-protected computer database and will keep all of our paper and tape records in a locked file cabinet. However, no system of protecting your confidentiality can be absolutely secure, so it is still possible that someone could find out you were in this study and could find out information about you. If there are any questions you do not want to answer, you can skip them. You have the right to refuse the interview or any questions asked during the interview. Furthermore, all interviewers are professionals with special training in this interview.

Are there any benefits being in this study?

There may be no immediate benefit to you should you decide to take part in this study. However, information gathered will help the country and county to improve the future engagement of CHVs.

Will being in this study cost you anything?

There will be no additional cost involved for participating in the study and you will not receive any compensation for your participation.

Will you get refund for any money spent as part of this study?

Since there will be no money spent in taking part in the study, there will be no refund made to you.

What if you have questions in future?

If you have further questions or concerns about participating in this study, please call or send a text message to Everline Bosek at 0782 973 445

For more information about your rights as a research participant you may contact the Secretary/Chairperson, Kenyatta National Hospital-University of Nairobi Ethics and Research Committee Telephone No. 2726300 Ext. 44102 email: uonknh_erc@uonbi.ac.ke.

What are your other choices?
Your decision to participate in research is voluntary. You are free to decline participation in the study and you can withdraw from the study at any time.

STATEMENT OF CONSENT

Participant's statement

I have read this consent form or had the information read to me. I have had the chance to discuss this research study with the investigator. I have had my questions answered in a language that I understand. The risks and benefits have been explained to me. I understand that my participation in this study is voluntary and that I may choose to withdraw any time. **I have also been notified that the interview will be audio recorded.** I freely agree to

participate in this research study.

I understand that all efforts will be made to keep information regarding my personal identity confidential.

I agree to participate in this research study YES […] NO [….]

Participant printed name:…….

Participant signature:…….. Date: ……

Researcher's statement

I, the undersigned, have fully explained the relevant details of this research study to the participant named above and believe that the participant has understood and has willingly and freely given his/her consent.

Researcher's Name: …… Date:…….

Signature: ……

Role in the study: …… (*i.e. study staff who explained informed consent form.*

Appendix II: Swahili Consent / Fomu ya idhini

UTAFITI WA HABARI NA FOMU YA KUTUMIA

Kichwa cha Utafiti: Upimaji wa sababu za uhamasishaji wa ndani zinazoshawishi wajitolea wa afya ya jamii katika kuunda mahitaji ya uchunguzi wa saratani ya shingo ya kizazi: Kesi ya Kaunti ndogo ya Isiolo

Mpelelezi mkuu \ na ushirika wa kitaasisi: Everline Bosek, Mwanafunzi wa Uzamili, Shule ya Afya ya Umma - Chuo Kikuu cha Nairobi

Utangulizi:

Napenda kukuambia juu ya utafiti unaofanywa na mtafiti aliyeorodheshwa hapo juu. Madhumuni ya fomu hii ya idhini ni kukupa habari utahitaji kukusaidia kuamua ikiwa sio mshiriki katika utafiti. Jisikie huru kuuliza maswali yoyote juu ya madhumuni ya utafiti, nini kinatokea ikiwa unashiriki katika utafiti, hatari na faida zinazowezekana, haki yako kama kujitolea, na kitu kingine chochote kuhusu utafiti au fomu hii ambayo haij wazi. Wakati tumejibu maswali yako yote kwa kuridhika kwako, unaweza kuamua kuwa kwenye masomo au la. Utaratibu huu unaitwa 'ridhaa iliyo na habari'. Mkanda wa sauti kitatumika wakati wa mahojiano kurekodi mjadala mzima ili kuhakikisha kuwa mhojiwa anachukua habari zote zinazohitajika. Mara tu utakapoelewa na kukubali kuwa katika masomo, nitakuomba utie saini na jina lako kwenye fomu hii. Unapaswa kuelewa kanuni za jumla zinazotumika kwa washiriki wote katika utafiti wa matibabu: i) Uamuzi wako wa kushiriki ni hiari ii) Unaweza kujiondoa kutoka kwa masomo wakati wowote bila ya kutoa sababu ya kujiondoa kwako iii) Kukataa kushiriki katika utafiti hautaathiri huduma unayostahiki katika kituo hiki cha afya au vifaa vingine.

Naweza kuendelea? NDIO ( ) LA( )

Utafiti huu umedhibitishwa na Itifaki ya Kamati ya Maadili ya Kitaifa ya Hosiptali Kuu ya Kenyatta and ya Chuo Kikuu cha Nairobi. Maadili na Utafiti Na……..

Je! Utafiti huu ni nini?

Mtafiti aliyeorodheshwa hapo juu anahoji wajitoleaji wa Afya ya Jamii (CHVs). Madhumuni ya mahojiano ni kujua sababu zinazohamasisha sana CHVs kuunda mahitaji ya uchunguzi wa saratani ya kizazi. Washiriki wa utafiti huu wataulizwa maswali juu ya nini kinachowachochea kufanya kazi na hawatafanya mtihani wowote wa matibabu.

Kutakuwa na washiriki takriban 16 katika utafiti huu waliochaguliwa kwa kukusudia. Kwa hivyo, ninaomba idhini yako ya kufikiria kushiriki katika utafiti huu.

Je! Nini kitatokea ikiwa utaamua kuwa katika utafiti huu?

Ikiwa unakubali kushiriki katika utafiti huu, utahojiwa na msaidizi wa utafiti aliyefunzwa katika eneo la kibinafsi ambapo unahisi vizuri kujibu maswali. Mahojiano yatadumu takriban dakika 25. Mahojiano yatashughulikia mada kama vile idadi ya watu; mwaka wa kuzaliwa, jinsia, kiwango cha elimu, ukabila, hali ya ndoa, ajira, miaka ilifanya kazi kama CHV na sababu za uhamasishaji. Baada ya mahojiano, rekodi ya mahojiano itakuwa kumbukumbu kwa uchambuzi.

Je! Kuna hatari zozote, zinaleta athari mbaya zinazohusiana na utafiti huu?

Hautafunuliwa kwa hatari yoyote au hatari kwa kushiriki katika utafiti huu. Tutaweka kila kitu unachotwambia kama siri iwezekanavyo. Tutatumia nambari ya kukutambulisha katika hifadhidata ya kompyuta iliyolindwa na nywila na tutaweka kumbukumbu zetu zote za karatasi na mkanda katika baraza la mawaziri lililofungwa. Walakini, hakuna mfumo wa kulinda usiri wako unaweza kuwa salama kabisa, kwa hivyo bado inawezekana kwamba mtu angegundua kuwa ulikuwa kwenye utafiti huu na anaweza kupata habari juu yako. Ikiwa kuna maswali ambayo hutaki kujibu, unaweza kuyaruka. Una haki ya kukataa mahojiano au maswali yoyote yaliyoulizwa wakati wa mahojiano. Zaidi ya hayo, mahojiano yote ni wataalamu walio na mafunzo maalum katika mahojiano haya.

Je! Kuna faida zozote za kuwa katika utafiti huu?

Kunaweza kuwa hakuna faida ya haraka kwako ikiwa utapoamua kuchukua sehemu katika utafiti huu. Lakini, habari iliyokusanywa itasaidia nchi na kata kuboresha ushiriki wa siku zijazo wa CHV.

Je! Kuwa katika utafiti huu kutagharimu chochote?

Hakutakuwa na gharama ya ziada kuhusika kwa kushiriki katika utafiti na hautapokea fidia yoyote kwa ushiriki wako.

Je! Utapata malipo kwa pesa yoyote inayotumika kama sehemu ya utafiti huu?

Kwa kuwa hakutakuwa na pesa iliyotumiwa kuchukua sehemu katika masomo, hakutakuwa na pesa yoyote iliyotolewa kwako.

Je! Ikiwa una maswali katika siku zijazo?

Ikiwa una maswali zaidi au wasiwasi juu ya kushiriki katika utafiti huu, tafadhali piga simu au tuma ujumbe wa maandishi kwa Everline Bosek ; 0782 973 445

Kwa habari zaidi juu ya haki yako kama mshiriki wa utafiti, unaweza kuwasiliana na Katibu / Mwenyekiti, Hospitali ya Kitaifa ya Kenyatta and Chuo Kikuu cha Nairobi Nambari ya simu 2726300 Ext. 44102 barua pepe: uonknh_erc@uonbi.ac.ke.

Chaguo zako zingine ni nini?

Uamuzi wako wa kushiriki katika utafiti ni wa hiari. Uko huru kukataa kushiriki katika masomo na unaweza kujiondoa kutoka kwa masomo wakati wowote.

HABARI ZA KIUMBUSHO

Taarifa ya Mshiriki

Nimesoma fomu hii ya idhini. Nimepata nafasi ya kujadili utafiti huu na mpelelezi wangu. Nimepata maswali yangu kujibiwa kwa lugha ambayo naelewa. Ninaelewa kuwa ushiriki wangu

katika utafiti huu ni wa hiari na kwamba naweza kuchagua kujiondoa wakati wowote. Nakubali kwa bure kushiriki katika utafiti huu. Nimearifiwa pia kuwa mahojiano hayo yatarekodiwa .

Ninaelewa kuwa juhudi zote zitafanywa kuweka habari kuhusu siri yangu ya kibinafsi.

Ninakubali kushiriki katika utafiti huu NDIYO […] HAPANA [….]
Mshiriki aliyechapishwa jina: ……
Saini ya Mshiriki: …… .. Tarehe: ……

Appendix III: **Questionnaire**

SECTION A: SOCIO-DEMOGRAPHIC DATA – EVERY RESPONDENT

1. Sex (a) Male [ ] (b) Female [ ]
2. What is your age? _____Years
3. Marital status a) Single [] b) Married [ ] c) Widow/Widower [ ] d) Separated/Divorced
4. Level of education a) Primary [] b) Secondary [ ] g) Tertiary [ ] i) None [ ]
5. Occupation a) None [] b) Business [] c) Formal employment d) farmer (peasant)[ ] e) farmer (large scale) []f) casual labour [] g) Others (specify)…….
6. Religion a) Christian [] b) Muslim [] c) Other (specify)……..
7. What is your main source of income? a) Salaried [] b) Self - employed [] e) Supported by family [] f) Others, Specify……..
8. How many households do you support? a) <9 [] b) 10 - 20 [ ] c) >21 [ ]
9. How long have you been volunteering as a CHV? a) Less than six months [] b) six months- 1yr [] c) 1-2 yrs. d) 3-4 yrs. [] e) 5yrs and above

Appendix IV: Interview Guide

Instructions for Interviewers

1. Take consent
2. Fill in information on the recording sheet
3. Provide introduction and explain process
4. Ensure that all participants understand and agree with the ground rules
5. **During the interview look out for body cues such as head nodding (up and down – meaning Yes, side ways – NO, Thumbs up – yes,).**

- Note down any facial expression and prompt further the interviewee regarding the facial expression

- Incase of hesitation to answer any question, take note and do not coerce the interviewee to provide answers to your questions

Introduction, good morning/afternoon, My name is (Interviewer) and I am working with Ms. Everline Bosek. The interview should be about 45 minutes. Your participation in today's

discussion is voluntary. You can choose to leave at any time. You will not lose any benefits if you do not participate. You will also not gain any additional benefits if you do participate. Everything we discuss here is confidential. Nothing that you say will be linked to your name. Before we begin, do you have any questions?

Respond to all questions and then ask, would you all like to continue?

SECTION B: Competence of CHVs in promoting Cervical Cancer Screening.

10. What is Cervical Cancer and cervical cancer screening?

11. What are the risk factors for cervical cancer?

(Use checklist of risk factors)

12. What Cervical Cancer Screening services are provided in this county?

13. Do you offer any community or household education/sensitization about cervical cancer screening as part of your work? If Yes, which ones

14. If No, what could be done to support you as a CHV to ensure that you sensitize the community?

SECTION C: Relatedness of CHVs

16. Have you been trained on cervical cancer and screening?

17. If yes, when? (Month and year). **If No, skip to section D**

18. Have you been supervised during your household activities?

(Probe for whether there are any visits to households with supervisor, supervision meetings, etc.)

19. Who do you go to when you have a problem in carrying out your duties?

(Probe for whether it is someone other than the supervisor)

20. What do you think about the supervision that you receive? How can this supervision be improved?

21. What does the community feel about you educating them about cervical cancer screening?

SECTION D: Autonomy of CHVs

22. How much time do you spend each week carrying out your duties?

(Probe for whether there is an overspill of CHW work beyond the designated hours they are recommended to carry out their duties)

23. What do you spend most of your time on?

24. Are there tasks that you are asked that you should not be doing? Are there tasks that you are not doing that you think you should be doing?

25.Do you think that CHWs can take on more duties?

(If yes, probe for examples of what these duties could be)

SECTION E: CHV Motivation: Satisfaction of CHVs

25. On a scale of 1 to 5 how would you rate your job satisfaction as a CHW in relation to awareness creation for cervical cancer screening?

a) Totally unsatisfied [ ] b) Not satisfied [ ] c) Fairly satisfied [ ] d) Satisfied [ ] e) Very satisfied [ ]

26. What things influence your job satisfaction as a CHV?

(Probe for: workload, working environment, collegues and supervision)

28. Would you suggest ways on how to mitigate the reason mentioned above? _____

_____

Facilitator notes:

- After the last question has been asked, tell the participants: We have now come to the end of our discussion. Before we close, do you have any final questions for me?
- Thank the participant for his/her time to participant in the interview.

Appendix V: CODEBOOK

Case #	Case	Codes	Text
1	CHV #1	0.1 Age	I am 26.
1	CHV #10	0.1 Age	31
2	CHV #11	0.1 Age	39
3	CHV #12	0.1 Age	25
5	CHV #3	0.1 Age	I'm 27.
6	CHV #4, ,	0.1 Age	I am like 47 years.
7	CHV #5,	0.1 Age	I am 38.
8	CHV #6,	0.1 Age	28
9	CHV #7,	0.1 Age	36
10	CHV #8,	0.1 Age	I am 44 years.
11	CHV #9,	0.1 Age	I am 39.
1	CHV #1,	0.2 Marital Status	I am married.
1	CHV #10,	0.2 Marital Status	Are you married? Yes.
2	CHV #11,	0.2 Marital Status	I am married.
3	CHV #12,	0.2 Marital Status	I am married.
5	CHV #3, ,	0.2 Marital Status	I'm married.
6	CHV #4, ,	0.2 Marital Status	I am married.
7	CHV #5,	0.2 Marital Status	I am married.
8	CHV #6,	0.2 Marital Status	I am married.
9	CHV #7,	0.2 Marital Status	Separated.
10	CHV #8,	0.2 Marital Status	I: 44. Are you married? Yes.
11	CHV #9,	0.2 Marital Status	Single.
1	CHV #1,	0.3 Level of education	Level of education is standard eight.
1	CHV #10,	0.3 Level of education	Form one.
2	CHV #11,	0.3 Level of education	Let's say form three.
3	CHV #12,	0.3 Level of education	Form four.
5	CHV #3, ,	0.3 Level of education	Eight.
6	CHV #4, ,	0.3 Level of education	Class eight.
7	CHV #5,	0.3 Level of education	I got to form two and dropped out.
8	CHV #6,	0.3 Level of education	Form four.
9	CHV #7,	0.3 Level of education	Class eight.
10	CHV #8,	0.3 Level of education	I reached standard seven, primary.
11	CHV #9,	0.3 Level of education	I reached form two.
1	CHV #1,	0.4 Occupation	I work for CHV at Star Complex Hospital. I am not a perment employee, just casual.
2	CHV #10,	0.4 Occupation	I am a volunteer. I also run a small business.
2	CHV #11,	0.4 Occupation	I am a businessman.
3	CHV #12,	0.4 Occupation	I am a farmer.
5	CHV #3, ,	0.4 Occupation	Besides CHV work nothing else.
6	CHV #4, ,	0.4 Occupation	I don't have a job only the CHV one. Going around the community
7	CHV #5,	0.4 Occupation	I am self-employed.
8	CHV #6,	0.4 Occupation	I do business.
9	CHV #7,	0.4 Occupation	Business.
10	CHV #8,	0.4 Occupation	A little bit of business.
11	CHV #9,	0.4 Occupation	I am a farmer.
1	CHV #1,	0.5 Religion	Yes, I am Muslim.
2	CHV #10,	0.5 Religion	Okay. Then you are Muslim, religion? Yes.
2	CHV #11,	0.5 Religion	Muslim.

3	CHV #12,	0.5 Religion	I: Muslim.
5	CHV #3, ,	0.5 Religion	Christian, Catholic.
6	CHV #4, ,	0.5 Religion	Muslim.
7	CHV #5,	0.5 Religion	Catholic.
8	CHV #6,	0.5 Religion	Muslim.
9	CHV #7,	0.5 Religion	Christian.
10	CHV #8,	0.5 Religion	Muslim.
11	CHV #9,	0.5 Religion	Christian.
1	CHV #1,	0.6 Main source of income	There is no money in CHV work. My money is there [inaudible 00:01:21] and it takes long. Since last year 2020 till now, we have not been paid. It is almost one year plus, so it is my hardwork. Sometimes they take you to seminars, you can be given a little money or you just look for something to do. Even the hospital [inaudible 00:01:46] I work for them. It is little [inaudible 00:01:5
2	CHV #10,	0.6 Main source of income	So, the business that I do is the one that gives me income.
2	CHV #11,	0.6 Main source of income	I work for CHV and business.
3	CHV #12,	0.6 Main source of income	Farming.
5	CHV #3, ,	0.6 Main source of income	I do some business in the markets.
6	CHV #4, ,	0.6 Main source of income	Source? I sometimes prepare cakes, doughnuts, mandazis, Nyeri Nyeri, I don't know if you know this one. That is what I use to rais my kids.
7	CHV #5,	0.6 Main source of income	Its [inaudible 00:01:01] these livestock. Yes and livestock. I am a livestock farmer.
8	CHV #6,	0.6 Main source of income	The business is what brings me money at home.
9	CHV #7,	0.6 Main source of income	Business.
10	CHV #8,	0.6 Main source of income	It is mine. I sell grocery.
11	CHV #9,	0.6 Main source of income	Source of income, I mainly do some odd jobs. I harvest my crops from the farm and some I sell, others I consume [inaudible 00:02:10].
1	CHV #1,	0.7 Number of households supported	32
2	CHV #10,	0.7 Number of households supported	68
3	CHV #11,	0.7 Number of households supported	42
3	CHV #12,	0.7 Number of households supported	100
5	CHV #2, Angola	0.7 Number of households supported	41 household
5	CHV #3, ,	0.7 Number of households supported	53
6	CHV #4, ,	0.7 Number of households supported	76 households.
7	CHV #5,	0.7 Number of households supported	I support 100 household.
8	CHV #6,	0.7 Number of households supported	Like 100, if not 100 [inaudible 00:01:44] then I have 70.
9	CHV #7,	0.7 Number of households supported	100
10	CHV #8,	0.7 Number of households supported	109 households.
11	CHV #9,	0.7 Number of households supported	I have 35 households.
1	CHV #1,	0.8 Experience (in years) as volunteer	Almost 11 years, I started in 2010.
2	CHV #10,	0.8 Experience (in years) as volunteer	I started volunteering a long time ago, in 2007.
3	CHV #11,	0.8 Experience (in years) as volunteer	Almost 11 years.
3	CHV #12,	0.8 Experience (in years) as volunteer	I: 10 years now.
5	CHV #3, ,	0.8 Experience (in years) as volunteer	Close to nine years, this is the tenth.
6	CHV #4, ,	0.8 Experience (in years) as volunteer	Right now like three years, three or four years.
7	CHV #5,	0.8 Experience (in years) as volunteer	I: So, its four years?
8	CHV #6,	0.8 Experience (in years) as volunteer	For four years right now.
9	CHV #7,	0.8 Experience (in years) as volunteer	Six years.
10	CHV #8,	0.8 Experience (in years) as volunteer	From 2009

11	CHV #9,	0.8 Experience (in years) as volunteer	10 plus years.
1	CHV #1,	1.1.1 What is Cervical Cancer?	Cervical cancer is a disease that affectws women and men. Cervic cancer can be transmitted from a man to a woman. If someone is below 18 years, you can also get cervical cancer that is why the H vaccination has been brought so people can be treated.
2	CHV #10,	1.1.1 What is Cervical Cancer?	Yes, I know, it is cancer that affects the private parts.
3	CHV #11,	1.1.1 What is Cervical Cancer?	It is cancer [inaudible 00:03:15] a baby.
3	CHV #12,	1.1.1 What is Cervical Cancer?	Cervical cancer is a disease that is found in men and those men don't know that they have it. But if you are a person who changes partners often, it is easy for you to get the disease.
4	CHV #2, Angola	1.1.1 What is Cervical Cancer?	Cervical cancer is a disease that is caused by, what is it called? Women's reproductive organs, cervix.
5	CHV #3, ,	1.1.1 What is Cervical Cancer?	It is a disease that affects mothers.
6	CHV #4, ,	1.1.1 What is Cervical Cancer?	I know it as cancer of the reproductive organs.
7	CHV #5,	1.1.1 What is Cervical Cancer?	Cervical cancer is the disease that affects the female reproductive system.
8	CHV #6,	1.1.1 What is Cervical Cancer?	I know cervical cancer as cancer that affects women. It is usually the private parts.
9	CHV #7,	1.1.1 What is Cervical Cancer?	Cervical cancer is a disease that can be gotten by a woman if the person moves from one person to another.
10	CHV #8,	1.1.1 What is Cervical Cancer?	I will tell them it is a disease that affects the reproductive organ. They must go to the hospital to get checked often.
11	CHV #9,	1.1.1 What is Cervical Cancer?	Cervical cancer is a cancer that affects a woman's cervix.
1	CHV #1,	1.1.2 What is cervical cancer screening?	It is being checked. I understand screening and also have gone through it.
2	CHV #10,	1.1.2 What is cervical cancer screening?	Screening is to go and get checked if you have it or not.
3	CHV #11,	1.1.2 What is cervical cancer screening?	Checking like telling the mother to go to the hospital to check her condition.
3	CHV #12,	1.1.2 What is cervical cancer screening?	I: And screening, cervical cancer screening? Screening is cervical cancer screening. You will go do a screening. I: Where? Cervical cancer screening is checking inside. I: So, what are they checking They check to see if you have the disease or not.
4	CHV #2, Angola	1.1.2 What is cervical cancer screening?	Screening is checking to see if someone has a problem. Screening done because people are usually not aware that they have this disease. So that is why screening is done. If you are found to have the illness, you are referred elsewhere for further studying.
5	CHV #3, ,	1.1.2 What is cervical cancer screening?	Testing using a machine put around the nether regions [inaudible 00:02:42] if signs and symptoms are seen, there's medication available.
6	CHV #4, ,	1.1.2 What is cervical cancer screening?	Screening is checking when you are being checked.
7	CHV #5,	1.1.2 What is cervical cancer screening?	Cervical cancer screening is the relaying of information, teaching people about the disease and where it affects or giving them symptoms of the disease.
8	CHV #6,	1.1.2 What is cervical cancer screening?	I have not been taught that.

9	CHV #7,	1.1.2 What is cervical cancer screening?	When they do the screening and they find something; they will tel you. Something like an infection that was there, you will be given medication and advised. But if you refuse, we continue with the teaching. We tell them if you don't go for screening, you will conceive but the baby will come out because the membrane is ver weak. So, they are eager to go for screening.
10	CHV #8,	1.1.2 What is cervical cancer screening?	Screening is examining.
11	CHV #9,	1.1.2 What is cervical cancer screening?	It is checking if you have cervical cancer or not. A lot of times people go for the cancer screening to know if they have it or not.
1	CHV #1,	1.2 Cervical Cancer risk factors	The first risk factor is family planning depo. The second one is wh a woman has reached menopause and is still getting monthly peri The third one having multiple sexual partners. This can cause cervical cancer.
1	CHV #1,	1.2 Cervical Cancer risk factors	
1	CHV #1,	1.2 Cervical Cancer risk factors	Starting sexual intercourse at an early age, below 18 can also cau this.
2	CHV #10,	1.2 Cervical Cancer risk factors	Like the example of someone bleeding for too long, if it is not checked, that bleeding can cause it.
3	CHV #11,	1.2 Cervical Cancer risk factors	Firstly, if a mother gives birth every year, the body becomes weak Secondly, me as a man, if your wife has it and you go to another woman, or if a man goes to another woman, he can bring to the wife.
3	CHV #12,	1.2 Cervical Cancer risk factors	Cervical cancer is a disease that is found in men and those men don't know that they have it. But if you are a person who changes partners often, it is easy for you to get the disease.
3	CHV #12,	1.2 Cervical Cancer risk factors	Yes, on a woman. Having multiple sex partners.
4	CHV #12,	1.2 Cervical Cancer risk factors	This community of ours.
4	CHV #12,	1.2 Cervical Cancer risk factors	Another one is getting married when you are still young.
4	CHV #12,	1.2 Cervical Cancer risk factors	I: So, men don't have cervical cancer. It is a virus known as HPV, human papillomavirus. Men are carriers, okay? It is not a bad virus It is spread when a man starts sleeping with different women, hap ndiyo unapata cervical cancer. Every woman also is a carrier of th virus.
4	CHV #12,	1.2 Cervical Cancer risk factors	I: Yes. If you are married, you must have had intercourse with yo husband. So already you are a carrier. However, it has not multipl so as the symptoms can be seen. Another contributing factor is th woman's immunity. That is why they say if a woman gives birth to many children without spacing, smoking cigarette and if you are H positive, your immunity is lowered.
4 4	CHV #2, Angola	1.2 Cervical Cancer risk factors	The things that cause this cancer include, if your husband has got this virus, you cannot see the virus. So if the wife sleeps with the man, he will transmit the virus. If your husband has multiple sexua partners, you might get it. The types of food that one eats is also contributing risk factor. You should not wash your private parts using detergents because they can bring the disease. You are only supposed to wash with water.
5 5	CHV #3, ,	1.2 Cervical Cancer risk factors	One that I know is moving around with men, also early pregnancie for those below 18 years of age whose reproductive organs haven fully grown. This can cause the disease.

6	CHV #4, ,	1.2 Cervical Cancer risk factors	Giving birth when you are young, like not spacing the children. Before the reproductive organs can heal well, you get another chil I think these are the risk factors.
7	CHV #5,	1.2 Cervical Cancer risk factors	This disease is brought about by female genital mutilation, this disease can be caused by that problem.
7	CHV #5,	1.2 Cervical Cancer risk factors	Another thing is young girls giving birth, affecting the genitals causing the disease.
9 9	CHV #7,	1.2 Cervical Cancer risk factors	You could get cervical cancer if you started having sex at an early age and if you have multiple partners.
10	CHV #8,	1.2 Cervical Cancer risk factors	How one can contract? You can get it from a man. If the man has it cannot affect him but will affect the woman. If he moves from o woman to another, he will spread it.
11 11 11	CHV #9,	1.2 Cervical Cancer risk factors	The first is starting to have sexual intercourse at an early age and having multiple partners. Another one is using family planning methods for a long time, let's say you began early. But what I see mostly is the one of having multiple partners.
11	CHV #9,	1.2 Cervical Cancer risk factors	Abortion.
1	CHV #1,	1.3 Cervical Cancer Screening services provided in the county	Yes, I heard it is done there. There was a time they came to the village from the hospital and did the screening.
2	CHV #10,	1.3 Cervical Cancer Screening services provided in the county	So, if you tell them to go to hospital, will they get the help, that screening there? Yes, they will.
4	CHV #12,	1.3 Cervical Cancer Screening services provided in the county	Yes.
4	CHV #2, Angola	1.3 Cervical Cancer Screening services provided in the county	Yeah, there was a time some people were doing it but right now I am not sure if it being done at general. You know this Covid has come with a lot of things, people right now don't go.
5	CHV #3, ,	1.3 Cervical Cancer Screening services provided in the county	Yeah, it is done.
6	CHV #4, ,	1.3 Cervical Cancer Screening services provided in the county	At times we take people at the GK prison for screening.
7	CHV #5,	1.3 Cervical Cancer Screening services provided in the county	We send them to the local health center.
8	CHV #6,	1.3 Cervical Cancer Screening services provided in the county	Yes, Isiolo General.
9	CHV #7,	1.3 Cervical Cancer Screening services provided in the county	Yes, there are screening services in Isiolo.
10	CHV #8,	1.3 Cervical Cancer Screening services provided in the county	Yes.
11	CHV #9,	1.3 Cervical Cancer Screening services provided in the county	Yes, APU dispensary and also Isiolo General.
3	CHV #11,	1.3.1 Type of cervical cancer screening conducted in the county	There are people who came, and we mobilized the community and they went to be screened.
1	CHV #1,	1.3.1 Type of cervical cancer screening conducted in the county	I don't know which one is done at Isiolo County, but I have heard you can be screened there. There is one called [inaudible 00:05:0 The other one I have forgotten what it is called. There was a screening that was being done here, but I don't know the one bei offered at General.
4	CHV #2, Angola	1.3.1 Type of cervical cancer screening conducted in the county	I don't know which one, but they were inserting something inside check. And if someone is found to be ill, they called it, I don't kno [Cryotherapy 00:03:21] something like that.
8	CHV #6,	1.3.1 Type of cervical cancer screening conducted in the county	I don't know.

1	CHV #1,	1.4.1 The specific community or household education/sensitization roles on cervical cancer screening	I: Okay. Do you as a CHV give talks about cervical cancer in the community? Yes, we do. I: Okay. Where do you give those talks? the village. I: Where in the village? In the house, under a tree, where? Just in the village. You start by mobilizing the first day. Th when the number is good, we go to the village where we conduct household visits and give the talks in the middle of the village or under a tree. At times we do it at a nursery school. We educate them. The big problem is even with the availability of the HPV, on a few people have been injected.
2	CHV #10,	1.4 Offers any community or household education/sensitization about cervical cancer screening as part of roles/work 1.1.2 What is cervical cancer screening?	When we are doing household visits, you will find someone telling you that they have been bleeding for a long time and they don't know where that blood is coming from. I tell them to go to the hospital. Someone maybe went to traditional healers and they wer not given medication. When I do household visits, I tell them that bleeding is bad because they don't know where it is coming from. Therefore, it is important that they go to the hospital to do cervica cancer screening. Or the doctor will check in another way and kno what disease you are suffering from and where the bleeding is coming from and why it is not stopping.
3	CHV #11,	1.4.1 The specific community or household education/sensitization roles on cervical cancer screening	We go to do CHV work when we visit households, we have also gone through that.
4	CHV #12,	1.4.1 The specific community or household education/sensitization roles on cervical cancer screening	I call all of them. Like right now I visit 100 households. So when I go to the field, I tell them like tomorrow let us meet and I will educate them a little bit. I gather all the women and tell them, if y do this go to the hospital to be checked and educate yourself.
4	CHV #2, Angola	1.4 Offers any community or household education/sensitization about cervical cancer screening as part of roles/work	Yes, I do. It is part of our job description. We stress on the issues about cancer.
4	CHV #2, Angola	1.4.1 The specific community or household education/sensitization roles on cervical cancer screening	We go to households. I: To households? Yes. We tell them the symptoms and what a person can do. Because there is bleeding, someone might think it is their monthly period but it is not that. It comes frequently and someone is usually in pain. They also feel p during intercourse. We teach them these things.
5	CHV #3, ,	1.4.1 The specific community or household education/sensitization roles on cervical cancer screening	I summon women and meet up under a tree because we do not have a community class or hall and educate the women on testing to a point of them accepting to be taken to do the screening.
6	CHV #4, ,	1.4 Offers any community or household education/sensitization about cervical cancer screening as part of roles/work	At home when we do household visits. Someone may explain the problem they have, like I feel pain down here. At times it is an elderly woman who is in menopause stage like 70 years, and they tell you they are bleeding a little. We encourage them to go and g screened, we bring them for screening. Some will just say there is problem down there, it is painful. We tell them to go get checked.

7	CHV #5,	1.4 Offers any community or household education/sensitization about cervical cancer screening as part of roles/work	Yes mothers I meet and teach them.
8	CHV #6,	1.4 Offers any community or household education/sensitization about cervical cancer screening as part of roles/work	We used to do this type of job but right now it is all about Covid-1 breastfeeding, family planning, etc. For cervical cancer we just bru on it and tell them to go to the general hospital so that they can learn more.
9			Anywhere apart from the household, like if you are going at home and you pass through the salon. You will find most women gather in salons. That is one place where you can get them. You can also find them in churches and teach them. You can even pass through households and decide to teach, and you will find people joining in Therefore, we get a lot of women coming for screening.
9			Yes. They tell us a day when they do screening but the rest of the days, they teach about family planning as it goes hand in hand wit it. They should use family planning because it helps in spacing the children.
9	CHV #7,	1.4 Offers any community or household education/sensitization about cervical cancer screening as part of roles/work	I: I do. We talk to them and sometimes they want to hear more. And not only the community, they can go as youths, they meet yo and ask you questions because they know who you are.
9			I understand it. When we go to the community, we teach them th cervical cancer is a disease that can be gotten by a person who ha sex with multiple people and women can get it from their husband They then ask about the symptoms. We tell them to go for screening but some of them are afraid. You then sit them down an educate them on the symptoms such as if you have sex with your husband and it is painful or see blood, those are symptoms. Or yo can have a bad smell coming from your private parts, it is good to go for screening. The first and second staged can be treated and you will get medication, but if it is in third or fourth stage, there is no treatment. The women become afraid and agree to be screene You will find a lot of women going for screening when this exercis is happening because they are afraid. Because you tell a woman, i you really love your family, it is good to for a check up four times year.
10	CHV #8,	1.4 Offers any community or household education/sensitization about cervical cancer screening as part of roles/work	Yes, we tell them to go for screening. Some women were saying when you go for screening, they insert a metal inside. We told the that is a lie, they should go for screening to know their status. The usually go.

11	CHV #9,	1.4.1 The specific community or household education/sensitization roles on cervical cancer screening	First there is the household visit. When I go for such visits, I have touch on the topic of cancer also. I come from a pastoral community. I often to the village and talk to them. I also do talks groups, most of them are women groups.
1	CHV #1,	1.4.2 What can be done to support CHVs to sensitize the community on cervical cancer	They have not been educated yet. Even the CHV staff, we have no been educated or trained enough about cervical cancer. So, we ne some training so we can go educate others.
1	CHV #1,	1.4.2 What can be done to support CHVs to sensitize the community on cervical cancer	There is [inaudible 00:06:51] we had not been trained. When peo started being given HPV vaccination, some people came to train u in that area so we can sensitize the community about the vaccination. But no one has sat us down to tell us about cervical cancer. So, a lot of CHV staff have not been trained
2	CHV #10,	1.4.2 What can be done to support CHVs to sensitize the community on cervical cancer	I am okay. As I have stated I dropped out in form one, I started reading about CHV, we were taken for training, we were taught ar now we are here to help the community. The only thing I can request is we are given more training so that we can help the community further.
5	CHV #2, Angola	1.4.2 What can be done to support CHVs to sensitize the community on cervical cancer	I am not satisfied. We are last trained in 2017, maybe things have changed but we are not aware.
6	CHV #3, ,	1.4.2 What can be done to support CHVs to sensitize the community on cervical cancer	Yes, if the government cares, they should at least employ us and g something to take home.
8	CHV #5,	1.4.2 What can be done to support CHVs to sensitize the community on cervical cancer	I see what would help me do my work well, you know sometime [inaudible 00:17:32] we don't get medicine well. You get question sick people who need to be referred and you have no medicine. possible provide us with the medicine. Another thing is the work load makes it hard, if we had less households to supervise it wou make our work easier. Movement from one manyatta to anothe takes over an hour without a means of transport like a motorbike This makes work difficult.
8	CHV #6,	1.4.2 What can be done to support CHVs to sensitize the community on cervical cancer	Being trained, being given books that talk about it so that we can read and be knowledgeable. I can be able to educate them about cervical cancer after I get the training.
10	CHV #8,	1.4.2 What can be done to support CHVs to sensitize the community on cervical cancer	Right now, I don't have knowledge about cancer. I would like to b trained so that we know how to handle someone who has cervical cancer. In Isiolo there is UCH. We at CHV heard that UHC helps people in Isiolo. But as CHV, it has not helped us. We want to be employed by UHC.
10	CHV #7,	1.4.2 What can be done to support CHVs to sensitize the community on cervical cancer	After being tested and if you find you have it, you should know th there is no medicine. So, there they will ask you what they can do You tell them the woman must eat a balanced diet, to eat a lot of vegetables and fruits. They will ask why? You tell them a woman's body is self-cleansing, all the uncleanliness is removed. So, eating balanced diet is important. So, they will ask you, is that how you prevent it? You tell them it is not only the woman who will eat the balanced diet, the whole family should eat a balanced diet. You wi hear them say that is good teaching and they will come again and again.
2	CHV #10,	2.1 Has been trained on cervical cancer and screening	Yes, a long time ago.

3	CHV #11,	2.1.1 When was trained on cervical cancer screening	I: Okay. Where were you trained? In the facility. I: Facility? There were NGOs that came and trained us. I: Pardon? There were NGO that came here. I: Can you remember the name of the NGO? The were called Sharp. I: Sharp. But not a lot. They came only once a disappeared.
4	CHV #12,	2.1 Has been trained on cervical cancer and screening	Yes, I have been trained.
4	CHV #2, Angola	2.1 Has been trained on cervical cancer and screening	Yes, we were trained.
6	CHV #3, ,	2.1 Has been trained on cervical cancer and screening	We have never attended any training. The doctors just share information that we go use and mobilize the community.
6	CHV #4, ,	2.1 Has been trained on cervical cancer and screening	Yes.
7	CHV #5,	2.1 Has been trained on cervical cancer and screening	Yes.
8	CHV #6,	2.1 Has been trained on cervical cancer and screening	It's like an infection. I have not been trained a lot, but yes.
10	CHV #8,	2.1 Has been trained on cervical cancer and screening	No.
11	CHV #9,	2.1 Has been trained on cervical cancer and screening	Yes, we have been trained once.
2	CHV #10,	2.2 Has been supervised during household activities	We are usually with chu.
3	CHV #11,	2.2 Has been supervised during household activities	No.
4	CHV #12,	2.2 Has been supervised during household activities	No, I have never been supervised.
4	CHV #2, Angola	2.2 Has been supervised during household activities	They used to do supervision before, but now with Covid, there is n supervision. But we used to have supervision when doing househo because we were treating children in this household visits. But for cancer, no.
7	CHV #4, ,	2.2 Has been supervised during household activities	We have never bene supervised. Like our superior going with us, never, but…
8	CHV #5,	2.2 Has been supervised during household activities	They have never come.
9	CHV #7,	2.2 Has been supervised during household activities	There has been no supervision. Once we were with Nelly who wor for Amref. She came to the household visits to see how we teach.
11	CHV #9,	2.2 Has been supervised during household activities	I have been supervised. They usually combine all of them and supervise you. Like if you have made the household visits and wha you talked about but not specifically for cancer.
3	CHV #11,	2.3 The 'go to' place/person when there's a problem in carrying out duties	I: At the facility.
4	CHV #12,	2.3 The 'go to' place/person when there's a problem in carrying out duties	If I am unable to answer, I send them to my facility.. [to the] Nursing officer incharge.
4	CHV #2, Angola	2.3 The 'go to' place/person when there's a problem in carrying out duties	It is only the CHEW whom we go to when we have questions and the one who does supervision when we do household visits. If I don't find him/her that day, then when he/she comes for supervision, I will ask when the woman who asked the question is there.
7	CHV #4, ,	2.3 The 'go to' place/person when there's a problem in carrying out duties	If not reachable, when we have a meeting or a training, I ask thos questions.

8	CHV #5,	2.3 The 'go to' place/person when there's a problem in carrying out duties	when you cannot access the CHEW, I would go through some boo we were given that has information about such stuff.
9	CHV #7,	2.3 The 'go to' place/person when there's a problem in carrying out duties	When I do household visits and someone asks me a question that don't know the answer to, I cannot just leave. I will tell them I wil come another day so we can talk about it. I then go and ask my chu.
10	CHV #8,	2.3 The 'go to' place/person when there's a problem in carrying out duties	We used to read on the phone through M-learning.
11	CHV #9,	2.3 The 'go to' place/person when there's a problem in carrying out duties	Yes, I call our doctors at the link facility at APU or chiu.
3	CHV #11,	2.4 Perception regarding the supervision received	It should be added.
4	CHV #2, Angola	2.4 Perception regarding the supervision received	I feel the supervision is not enough because for instance, we [inaudible 00:07:09] are the ones who supervise us. Now these people that [inaudible 00:07:14] for cervical cancer at least should be added, when they come for supervision, that part should also b added as part of the household supervision.
7	CHV #4, ,	2.4 Perception regarding the supervision received	It is good because I also get a bit more knowledge and I can teac the households that I visit.
10	CHV #7,	2.4 Perception regarding the supervision received	Supervision should be added
11	CHV #9,	2.4 Perception regarding the supervision received	It is not enough because at times it comes after three or four months or even longer. So it is not enough.
3	CHV #11,	2.4.1 How the supervision can be improved	Okay. So why do you want it to be added. What is it lacking? Like for cancer, we don't know a lot. I: Okay. If we knew a lot about t cancer. I: Mmhmm? If we know a lot about the cancer, we will kn [inaudible 00:08:41] not only once. If we knew, we would have a problem in this community.
4	CHV #12,	2.4.1 How the supervision can be improved	It is not enough. We should be trained.
4	CHV #12,	2.4.1 How the supervision can be improved	I: Okay, so more supervision? Yes.
9	CHV #7,	2.4.1 How the supervision can be improved	If I can get more, I would be happy. But the training they give us now, they volunteer.
11	CHV #9,	2.4.1 How the supervision can be improved	I feel sometimes they are busy and have no time to come and supervise. Unless they get more people to come and help because the CHV workers are many so one person cannot cover the whole CHV. If for example they start by supervising me, it will take them four months to finish the cycle. Unless they get a specific person t do this job.
2	CHV #10,	2.5 Community's feelings about sensitization on cervical cancer screening	Right now, people are more knowledgeable. I: People know. The go to the hospital.

3	CHV #11,	2.5 Community's feelings about sensitization on cervical cancer screening	There is no problem because we are used to each other. But [inaudible 00:09:04] there, they know me as the village doctor. I: They call you the village doctor? The village doctor. I: Okay. So, in case of anything, they tell me what the problem is. So, there is nothing that we hide from each other. I: So, they take it well. Ver well. They have no problem. I: They tell you everything? They say everything.
4	CHV #12,	2.5 Community's feelings about sensitization on cervical cancer screening	I: Yes, how do they react when you start talking to them about cervical cancer? And when you explain that it is a disease that affects the reproductive areas, how do they react? It has its challenges. If you go to women and start telling them, many peop see but now they know, we educate them well. We also tell them stop that mentality. I: What are the challenges? Some women sta asking what this young person knows, things like that. But we tell them [inaudible 00:11:16]. But we educate them well. I: So if you continue educating them well… They calm down and listen. I: The listen and take it positively. They believe us.
5	CHV #2, Angola	2.5 Community's feelings about sensitization on cervical cancer screening	Some women are surprised and wonder how they will get this disease. But because we are all women, you are also a woman, we educate them and listen to them when they are talking.
7	CHV #4, ,	2.5 Community's feelings about sensitization on cervical cancer screening	They agree to get screened.
8	CHV #5,	2.5 Community's feelings about sensitization on cervical cancer screening	Some are not serious; they don't really listen. They seem shy. You find some listening well. You even find some find it hard to ask question because of fear.
10	CHV #7,	2.5 Community's feelings about sensitization on cervical cancer screening	For example, when you are in the community and teaching women you may find the husbands also want to know what you are telling the wives. When you see that, you ask them to give the children chores, so they don't hear what you are talking about because the are young. And you sit them down and educate them. Most men g scared when they hear the disease can kill. At times they tell you they have never heard of something like that. They are happy to g the information.
11	CHV #9,	2.5 Community's feelings about sensitization on cervical cancer screening	At first, it was very hard, but right now it is like the gospel. It is easier to talk to people about it. Since most of the households I vi they have my number, at times after leaving a household, you will get a call from someone who wants to talk about cancer. They will tell you they want to go for screening but they are scared. This means they are willing to go for screening. Some will opt not to go for screening because they say if they find out that they have it, they will die faster.
1	CHV #1,	3.1 Time spent each week carrying out CHV duties	Doing CHV work is just sacrificing. You can leave here in the morning, let's say at 8:00 and where you are going is far. You can come back at 2:00 or 3:00 and you just cover half the households because you cannot be able to do all of them in one day. So I will half on Monday and half on Friday. That is how I do it.

2	CHV #10,	3.1 Time spent each week carrying out CHV duties	Two hours.
3	CHV #11,	3.1 Time spent each week carrying out CHV duties	Like two hours.
4	CHV #12,	3.1 Time spent each week carrying out CHV duties	5 hours.
5	CHV #2, Angola	3.1 Time spent each week carrying out CHV duties	In a week, you are required to visit two or three households per day. You choose the days and times you would want to go visit as long as you visit three or five households. And when you visit a household, you can even take one hour talking to them because a times there is a lot to talk about, not only about cervical cancer. There is good health, nutrition, immunization, if the woman is pregnant, you will take time to advise her.
7	CHV #4, ,	3.1 Time spent each week carrying out CHV duties	Two or three hours. I visit two to three households.
8	CHV #5,	3.1 Time spent each week carrying out CHV duties	I: Two hours.
8	CHV #6,	3.1 Time spent each week carrying out CHV duties	Like two hours.
10	CHV #7,	3.1 Time spent each week carrying out CHV duties	I: Two hours?
10	CHV #8,	3.1 Time spent each week carrying out CHV duties	Four, five hours approximately.
11	CHV #9,	3.1 Time spent each week carrying out CHV duties	I have told you around eight hours because the other hours you spend walking. You leave your house at around 9:00 and reach there around 10:00.
1	CHV #1,	3.2 What most time is spent on	When doing CHV work, I talk about a lot of things. The first thing talk about is mostly how to take care of children below five years. talk about breastfeeding. The second one is about children who ar [inaudible 00:09:32] is not good, nutrition. The third one, I look fo children who have not been immunized. The fourth one is about family planning. I also talk about HPV nowadays. It is mostly fami planning and HPV. People are still scared, they think like family planning, it will bring them problems. So you have to educate ther Family planning, the young ones ask for the injection for 10 years. So we have to take them through it slowly. So we talk about famil planning, HPV, handwashing, Covid, diarrhea and how people sho use the toilet. You touch on every topic. We did not used to take a lot of time but now there are so many things to talk about includir Covid.
2	CHV #10,	3.2 What most time is spent on	About cervical cancer screening, malnutrition, and hygiene especia in this Corona time.
3	CHV #11,	3.2 What most time is spent on	I must do household visits, [inaudible 00:10:34]. So, I must go house-to-house so I can meet the target for [inaudible 00:10:38]. During [inaudible 00:10:39] I must tell them about cancer or fami planning, I must go through all that.
4	CHV #12,	3.2 What most time is spent on	If it is CHV, we talk about family planning a lot.

5	CHV #2, Angola	3.2 What most time is spent on	When I go for household visits, the first thing I do when I arrive is to ask if there is a sick person there, such as diabetes, HIV such things. After that, I will start to talk about immunization for childre under five. I will tell them the importance of immunization and the give the children [inaudible 00:11:42] and then I will talk about good nutrition. Next if there is a pregnant woman, I have to check [inaudible 00:11:52] and tell her the importance of going to the clinic. She should give birth in a hospital, [inaudible 00:11:59] I ha to teach them. When she gives birth, she should go to which hospital and she should have something small that she has kept aside. When it is time to give birth, she will go and not be stressed Then on the talks, I tell them about HIV and then also about Covi I then talk about cervical cancer.
6	CHV #3, ,	3.2 What most time is spent on	Some days you visit households, and if you find a sick child you re them and after three days you go pick them. If they are expectant you send them to the clinic.
7	CHV #4, ,	3.2 What most time is spent on	Cervical cancer. Since my community is mostly Cushite's, they mar their girls at a very young age like 14 years. We also give birth without spacing. So, I like telling them about cancer and family planning.
8	CHV #5,	3.2 What most time is spent on	Like diarrhea the diseases.
8	CHV #5,	3.2 What most time is spent on	The other is checking and reminding mothers about taking childre to clinics or the pregnant women going to clinics and Covid-19 stu Those and family planning also.
8	CHV #6,	3.2 What most time is spent on	We talk about cervical cancer, but I just touch on it briefly so that they are aware.
10	CHV #7,	3.2 What most time is spent on	There is so much to talk about in the household visits. There are many questions that are asked, not only on cervical cancer. For example, someone can tell you they have not given birth again aft eight years. So, you will ask them what family planning they are using. They will tell you they get the three-month injection. You w tell them that is not good. They can use Norplant or coil. They will ask you why. You will tell them if you use Norplant, the moment y remove it, if your child is one year and some months or two years even three years, you will conceive.
11	CHV #9,	3.2 What most time is spent on	I also do immunization. There are so many immunization defaulte especially this time of Corona. Many people are not visiting hospitals. They say Corona is in hospitals. So there are immunizati defaulters which I talk about, FP, and also nutrition. Mostly I concentrate on children below the age of five and pregnant wome and nutrition. If I pass somewhere and see there is no toilet or it needs repairs, I have to address it. So I do a lot of things especial addressing immunization defaulters and FP and pregnant women, women who don't like FP. That is where I get a chance to talk abo cancer to the young and old.

1	CHV #1,	3.3 Tasks that you are asked that you should not be doing	What I feel I should not be doing; one example is maybe I come across someone who has tuberculosis. I am not supposed to atter to him. Maybe the person comes for medicine once and does not come back again. They become a defaulter. Someone can come a explain the defaulter's case at the facility. They will explain that there is a sick person [inaudible 00:12:23] you have to make sure he is taken care of. That is work for a doctor not me. Those are th positive things. You can come across a pregnant woman and the child is almost nine months, those are things that are outside of duties and I am not fully trained. So, I force myself to do the job.
2	CHV #10,	3.3 Tasks that you are asked that you should not be doing	When you do household visits, you come across a woman who is very needy. You will find she has not even drunk tea since mornin she has many children. When you visit such a household, you will also get tired, you will use things like going home to look for tea, milk or even take credit in a shop. You will cook the tea so that yo can sit down and talk as you drink the tea.
2	CHV #10,	3.3 Tasks that you are asked that you should not be doing	No, that is me doing it voluntarily.
2	CHV #10,	3.3 Tasks that you are asked that you should not be doing	To take children to school, children who are at home.
2	CHV #10,	3.3 Tasks that you are asked that you should not be doing	County has not told me to teach them how to go to school but if I meet children in the house, I tell the mother to take them to scho
3	CHV #11,	3.3 Tasks that you are asked that you should not be doing	There is no work that I cannot do.
3	CHV #11,	3.3 Tasks that you are asked that you should not be doing	There is none.
4	CHV #12,	3.3 Tasks that you are asked that you should not be doing	No.
5	CHV #2, Angola	3.3 Tasks that you are asked that you should not be doing	No, because all these duties are for CHV workers.
6	CHV #3, ,	3.3 Tasks that you are asked that you should not be doing	I just do what my work prompts me to.
7	CHV #4, ,	3.3 Tasks that you are asked that you should not be doing	There is no work that has been added. However, I am scared abo the family planning job. There was a time we were given condoms to distribute to the community. My religion does not allow this. I a scared to give this thing to the community. That is the only think I was afraid of. The rest, I am not scared.
8	CHV #5,	3.3 Tasks that you are asked that you should not be doing	I don't see any. There's none, unless sometimes it's difficult to go through all houses in the community because you have other duti You struggle to provide for self in other ways, so one tries to do th CHV work for very few hours then you … it's not enough to just do the CHV work only.
8	CHV #6,	3.3 Tasks that you are asked that you should not be doing	No.
10	CHV #7,	3.3 Tasks that you are asked that you should not be doing	There are things you must go to the community to teach them, lik what is infection and how do you get infections. So, we are forced talk about them when we go for visits.
10	CHV #8,	3.3 Tasks that you are asked that you should not be doing	No.
12	CHV #9,	3.3 Tasks that you are asked that you should not be doing	Because CHV is volunteer work, you are not told what to do.

12	CHV #9,	3.3 Tasks that you are asked that you should not be doing	So, there are jobs that I do that I am not supposed to be doing. L if you go for household visit and you find a person is sick, you hav to refer them to the hospital and you have to pay for their transpo if they don't have. That is not part of my job description. Sometim you even have to take the person to the hospital if their condition worse. You can come across a woman who is pregnant and has n attended MP, she is almost six months into the pregnancy. So you will be forced to take her because maybe she is far or she does n want to go. You see, this is work that I am not supposed to be doing.
12	CHV #9,	3.3 Tasks that you are asked that you should not be doing	You will find a child who is supposed to be immunized but the mother would rather go look after cattle. So you will take the child and tell the mother you go to the hospital. I will pay for the transport even if it is a boda boda. These are not jobs meant for CHV.
12	CHV #9,	3.3 Tasks that you are asked that you should not be doing	Yeah, we are not supposed to do but because we are humans, yo look at someone and just help.
12	CHV #9,	3.3 Tasks that you are asked that you should not be doing	In my opinion, there is no work that a CHV worker cannot do. I do everything because I love it.
1	CHV #1,	3.3.1 Tasks that you are not doing that you think you should be doing	There is none.
2	CHV #10,	3.3.1 Tasks that you are not doing that you think you should be doing	Like right now I have told you the way you I help the parent, that not work that the county has told me to do but…
5	CHV #2, Angola	3.3.1 Tasks that you are not doing that you think you should be doing	You know when you go to households, you go with CHV content, you cannot go with your own content. For example, like family planning you are taught so you can teach.
7	CHV #4, ,	3.3.1 Tasks that you are not doing that you think you should be doing	You might come across a sick child in the community and the mother is poor. At times even I don't have money to take them to hospital, or any way to help them. That is a big problem.
8	CHV #5,	3.3.1 Tasks that you are not doing that you think you should be doing	There's nothing I'm supposed to do that I don't unless it's sometimes this work we do, we are told of things about malaria, t MRBC. It seems as though we are to do but we do not have the information and booklets so we don't do it.
1	CHV #1,	3.4 Thinks that CHWs can take on more duties	I: Okay. In your opinion, do you think CHVs should be added mor work? Added work? No. [Inaudible 00:13:41] there is no work the cannot do. Since it is voluntary, there is nothing they cannot do. Okay. Like which jobs? Any job. Since CHV workers learn a lot of things, they have become like the village doctors. They understan lot of things. They are trained for two weeks, one month, they ca do everything after the training. So there is no work they can't do. Anything to do with health, they can do because they volunteer fo everything. I: True. It is like that.
2	CHV #10,	3.4 Thinks that CHWs can take on more duties	The two hours are enough.
3	CHV #11,	3.4 Thinks that CHWs can take on more duties	It is okay if someone gets help. The important thing is a sick perso gets treatment.
4	CHV #12,	3.4 Thinks that CHWs can take on more duties	Yes, they should be added more duties.
5	CHV #2, Angola	3.4 Thinks that CHWs can take on more duties	If it relates to health, then it should be added. But if it is not healt related, what do you do? Our work is in relation to health, becaus nowadays we also check if one has malaria and treat them. We ha medication.

6	CHV #3, ,	3.4 Thinks that CHWs can take on more duties	Yes, a lot. There's [inaudible 00:08:17] because we have witnesse nothing in 10 years. We volunteer and choose to love the job. We wait for polio season where we get paid 500 bob a day. With all these trainings as mothers with families and kids in school. We me a lot of challenges like people are skeptical about the work we do since it is volunteer work. It is a struggle.
7	CHV #4, ,	3.4 Thinks that CHWs can take on more duties	If it is helping the community, I will not hesitate to do it.
8	CHV #5,	3.4 Thinks that CHWs can take on more duties	No. we cannot be added more work because if we would have few households, we would be okay with any additions. You also find people you teach do not live in the same village and most households are scattered and not in one area [inaudible 00:12:41] one. It's like three different CBDs.
10	CHV #7,	3.4 Thinks that CHWs can take on more duties	Yes. I think it is good because you might find a woman in the community is afraid to go to the hospital and ask a doctor some things. But because you are close to them, they can ask you any question. And you will advise them to go to the hospital, you can even go with them. I think that is good.
10	CHV #8,	3.4 Thinks that CHWs can take on more duties	Yes.
12	CHV #9,	3.4 Thinks that CHWs can take on more duties	No because we are already overloaded.
8	CHV #6,	3.4.1 Examples of more duties the CHV should take on	Like educating the community, being trained, and then training th community, just helping out.
10	CHV #8,	3.4.1 Examples of more duties the CHV should take on	We can do tree planting and watering the trees and grass.
1	CHV #1,	4.1 Rating of CHV job satisfaction in relation to awareness creation for cervical cancer screening	Three.
2	CHV #10,	4.1 Rating of CHV job satisfaction in relation to awareness creation for cervical cancer screening	2
3	CHV #11,	4.1 Rating of CHV job satisfaction in relation to awareness creation for cervical cancer screening	Two.
4	CHV #12,	4.1 Rating of CHV job satisfaction in relation to awareness creation for cervical cancer screening	Number 2.
7	CHV #4, ,	4.1 Rating of CHV job satisfaction in relation to awareness creation for cervical cancer screening	Maybe 4.
8	CHV #5,	4.1 Rating of CHV job satisfaction in relation to awareness creation for cervical cancer screening	Okay, I understand. I give that like a two.
9	CHV #6,	4.1 Rating of CHV job satisfaction in relation to awareness creation for cervical cancer screening	I am satisfied.
10	CHV #7,	4.1 Rating of CHV job satisfaction in relation to awareness creation for cervical cancer screening	4

10	CHV #8,	4.1 Rating of CHV job satisfaction in relation to awareness creation for cervical cancer screening	I: 2.
12	CHV #9,	4.1 Rating of CHV job satisfaction in relation to awareness creation for cervical cancer screening	I can give it a three.
1	CHV #1,	4.2 Job satisfaction influencers for CHVs	I am satisfied but I need more training.
1	CHV #1,	4.1 Rating of CHV job satisfaction in relation to awareness creation for cervical cancer screening	I cannot give it 100 out of 100, but I can give it 75%. I: On that scale, how would you rate it? One to five? I: Yes. The first thing, I fight for HPV in the front line because I have sisters and I am also that age bracket.
2	CHV #10,	4.2 Job satisfaction influencers for CHVs	Even with all those challenges, I have also gained a lot form CHV. How? I have gained knowledge that I didn't have before. I: What type of knowledge? I have read a lot, I have certificates, I know about homebased care, how to treat sick people at home. To begi with I did not have any certificate. We have read about communit strategy and we are giving support to our community. We tell ther if anything comes up. So, I believe I have acquired a lot of knowledge. I: Okay. This is the work that makes you feel… I feel okay. I: Are you satisfied with the CHV work? I am satisfied.
3	CHV #11,	4.2 Job satisfaction influencers for CHVs	What made me volunteer is the community. Some people are illiterate, and people feel embarrassed talking about some things. So, I must come in and help my people so that their condition doe not to worsen.
4	CHV #12,	4.1 Rating of CHV job satisfaction in relation to awareness creation for cervical cancer screening	What makes me volunteer, is I am a religious person. I go to the mosque. In the mosque, we are also advised to help people within our community, our neighbors so that you live well. I follow this principle. That is why I volunteer. Helping people is good that is w I volunteer.
5	CHV #2, Angola	4.2 Job satisfaction influencers for CHVs	This job is all about helping your community. The first thing is, you need to help your community. Then at the end of the month, ther is something that the county gives you. Even if it is small, it helps you do that work. Instead of sitting with the knowledge that you have, it is better to help your community.
6	CHV #3, ,	4.2 Job satisfaction influencers for CHVs	We are taken too many trainings that has taught us a lot. We are now able to save lives, help treat malaria since we have the medication in our homes. Now [inaudible 00:09:52] we are very thankful for the education.
7	CHV #4, ,	4.2 Job satisfaction influencers for CHVs	It is only a job, when I am trained, I am happy to teach others.
8	CHV #5,	4.2 Job satisfaction influencers for CHVs	It is now that the education has come to the village community ar people have started to understand the disease. Also the importanc of good diet. It's like many understand now that CHVs started goi around.
9	CHV #6,	4.2 Job satisfaction influencers for CHVs	I am satisfied when I help my community. I am satisfied when I g help from the clinical staff and then help the community at large. can teach the women and help them. That gives me satisfaction.

10	CHV #7,	4.2 Job satisfaction influencers for CHVs	CHV work is a calling. Some will do it for two hours because they have other commitments. Some will demand to know when you w visit them. So, it is a calling.
10	CHV #8,	4.2 Job satisfaction influencers for CHVs	If there is money.
12	CHV #9,	4.2 Job satisfaction influencers for CHVs	The thing that satisfies me the most is seeing my community bein helped, that motivates me. You can hear about cancer and get screened early and that can save one's life because in the early stages of cancer, one can be helped.
1	CHV #1,	4.2 Job satisfaction influencers for CHVs	Promotion, more work and better pay, training so we can be more knowledgeable.
2	CHV #10,	4.3. Mitigation measures for the job satisfaction influencers mentioned	We want more training so we can gain more knowledge.
3	CHV #11,	4.2 Job satisfaction influencers for CHVs	Training yeah. More training, so that at least…
4	CHV #12,	4.2 Job satisfaction influencers for CHVs	If we get the county support. I: Support from the county. If we g support and they take care of us, we will get morale to do the job well. I: What type of support? All manner of support. I: Tell me one. To be honest, even money. I: Money? R Money is one.
5	CHV #2, Angola	4.3. Mitigation measures for the job satisfaction influencers mentioned	Another one is, the motivation that we are given is not enough. They can add what they give us so that it becomes five. They give us three, if they give us give, they will have motivated us to work more.
6	CHV #3, ,	4.3. Mitigation measures for the job satisfaction influencers mentioned	I am content only that there's a problem, the jab to be given to ki under 10 years has those 10 year olds refusing them

7	CHV #4, ,	4.3. Mitigation measures for the job satisfaction influencers mentioned	Maybe to be given something small that will make us happy. I: Wh is a small thing? Like money. It gives you morale to work well.
8	CHV #5,	4.3. Mitigation measures for the job satisfaction influencers mentioned	It is being taught then being given books with images so that in th field you can show the mothers how cervical cancer is.
9	CHV #6,	4.3. Mitigation measures for the job satisfaction influencers mentioned	Going for trainings.
10	CHV #7,	4.3. Mitigation measures for the job satisfaction influencers mentioned	They can bring more trainings and trainers. That will be more satisfying.
10	CHV #8,	4.3. Mitigation measures for the job satisfaction influencers mentioned	2, I should be added more knowledge.
12	CHV #9,	4.3. Mitigation measures for the job satisfaction influencers mentioned	Number one, motivate CHV workers.

Appendix VI: Map of Isiolo County

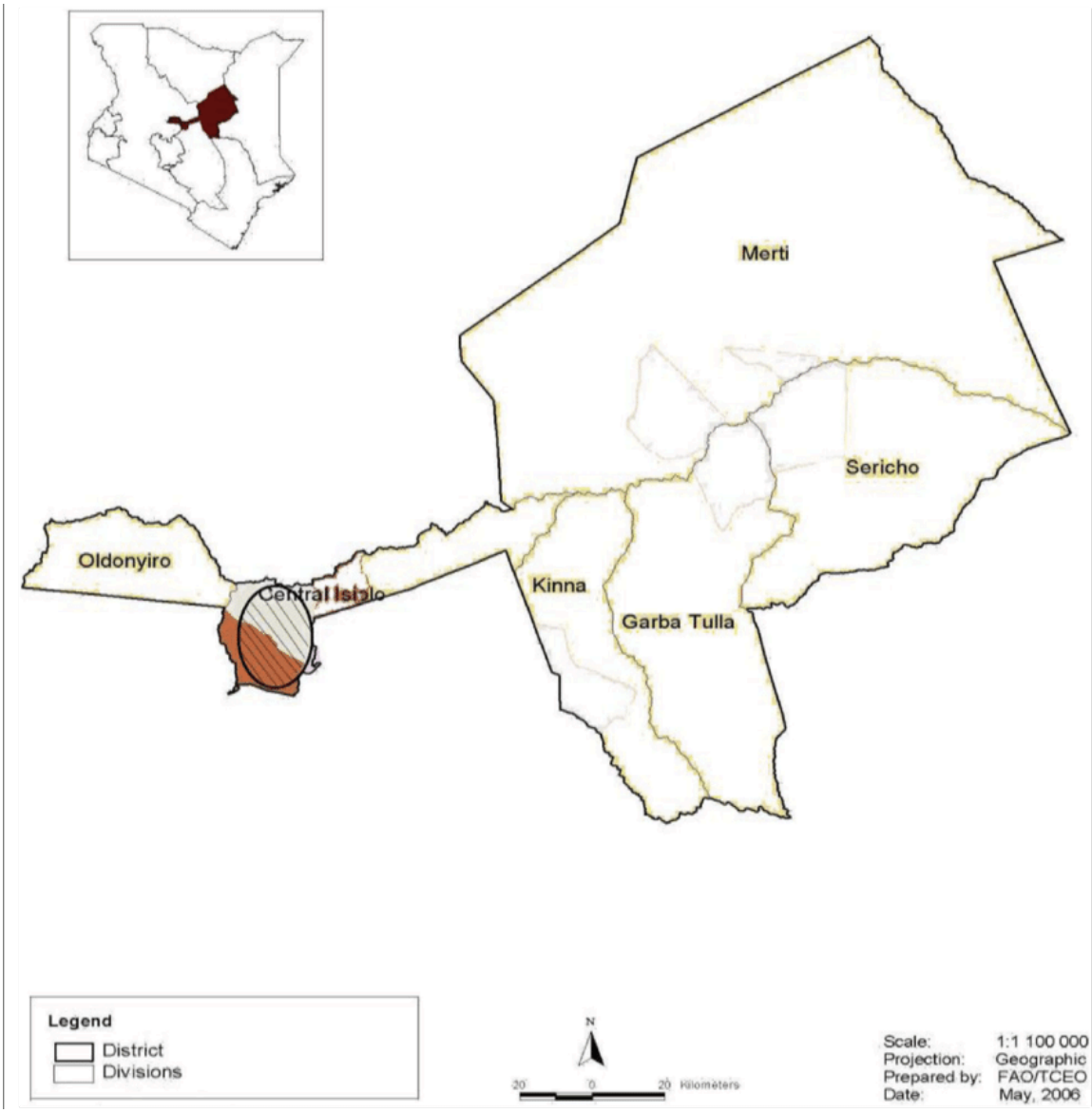

Fig. 2 A Map of Isiolo County showing (Circled region is Isiolo Sub-County

Appendix VII: NACOSTI - Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **877487**

Date of Issue: **09/December/2020**

RESEARCH LICENSE

This is to Certify that Miss.. Everline Chepkoech Bosek of University of Nairobi, has been licensed to conduct research in Isiolo on the topic: ASSESSMENT OF INTRINSIC FACTORS MOTIVATING COMMUNITY HEALTH VOLUNTEERS TO PROMOTE CERVICAL CANCER SCREENING: A CASE OF ISIOLO SUB - COUNTY for the period ending : 09/December/2021.

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Appendix VIII: KNH-UON ERC APPROVAL

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Ref: KNH-ERC/A/371

26th October 2020

APPROVED
26 OCT 2020
KNH/UoN-ERC

Everline Bosek
Reg. No.H57/12696/2018
School of Public Health
College of Health Sciences
University of Nairobi

Dear Everline

RESEARCH PROPOSAL –ASSESSMENT OF INTRINSIC FACTORS MOTIVATING COMMUNITY HEALTH VOLUNTEERS TO PROMOTE CERVICAL CANCER SCREENING: A CASE OF ISIOLO SUB-COUNTY (P397/07/2020)

This is to inform you that the KNH- UoN Ethics & Research Committee (KNH- UoN ERC) has reviewed and **approved** your above research proposal. The approval period is 26th October 2020 – 25th October 2021.

This approval is subject to compliance with the following requirements:

a. Only approved documents (informed consents, study instruments, advertising materials etc) will be used.
b. All changes (amendments, deviations, violations etc.) are submitted for review and approval by KNH-UoN ERC before implementation.
c. Death and life threatening problems and serious adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the KNH-UoN ERC within 72 hours of notification.
d. Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to KNH- UoN ERC within 72 hours.
e. Clearance for export of biological specimens must be obtained from KNH- UoN ERC for each batch of shipment.
f. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. (*Attach a comprehensive progress report to support the renewal*).
g. Submission of an *executive summary* report within 90 days upon completion of the study. This information will form part of the data base that will be consulted in future when processing related research studies so as to minimize chances of study duplication and/ or plagiarism.