

**EFFECT OF COMMUNITY HEALTH STRATEGY IN ADVANCING
SOCIAL ACCOUNTABILITY IN THE HEALTH SYSTEM IN NAIROBI
COUNTY, KENYA**

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DECLARATION

This thesis is my original work and has not been presented for a degree or any other award in any other University.

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DEDICATION

To my loving parents, Mr. James and Mrs. Pacy Abuga, my husband Tom Obiri and children Natalie Obiri, Nathaniel Obiri and Ethan Obiri.

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ABSTRACT

The goal of community health strategy is to increase participation in improving the quality of health services in Kenya by incorporating health users' voices. The community's health workforce consists of community health assistants/officers and community health volunteers. Their position in the health system enables them to act as community mouthpieces, combating inequities and advocating for community rights and needs to government structures. However, knowledge asymmetry, inadequate supportive supervision, and provision of working tools affect how community health volunteers advocate for themselves and their communities. The study's overarching goal was to assess the effect of community health strategy on advancing social accountability in Kenya's health system. The specific objectives were to evaluate the influence of Community Health Volunteers' characteristics and practices, contextual factors, and community dialogue in advancing social accountability in the health systems. In addition, the effect of training community health volunteers on social accountability was evaluated. This was a quasi-experimental study design with a pre-test and post-test carried out in Embakasi North and Embakasi Central sub-counties in Nairobi County, Kenya. It took over 12 months to design and implement a training intervention that addressed key aspects of social accountability, such as how to report complaints and compliments. The study involved 180 Community Health Volunteers who consented to participate in the intervention and comparison groups. Stratified sampling was used to select the community health volunteers who participated in the study. To collect data and interpret findings, a convergent mixed methods approach was used. Quantitative data was analysed using SPSS version 28. The transcribed data from four focus group discussions, 15 KII, and minutes were analysed using a thematic framework indexed by Atlas.ti 22 software. After training, cumulative test scores improved significantly with at pre-test score (mean= 48.2, SD = 9.5) and post-test score (mean = 71.1, SD = 9.36; $p < 0.001$). Findings showed that the number of CHVs reporting complaints in the intervention group increased from 11 (12.2 %) to 57(63.3 %). In addition, the likelihood of CHVs recording complaints in the intervention was ($b=.554$, $p=.011$, $OR=1.740$) compared to the comparison group ($b=.010$, $p=.506$, $OR=1.010$) at the end of the study. In conclusion, community health volunteers social accountability practices were enhanced through training, supportive supervision and provision of working tools. The study recommended that the Ministry of Health's department of community health services adapt the social accountability-training guide. Further research should be conducted to determine the extent to which the CHV's intermediary role influences health system responsiveness.

TABLE OF CONTENTS

DECLARATION	i
COPYRIGHT	iii
DEDICATION	iv
ACKNOWLEDGEMENT	v
ABSTRACT	vi
LIST OF TABLES	x
LIST OF FIGURES	xii
ABBREVIATIONS AND ACRONYMS	xiii
CHAPTER ONE: INTRODUCTION	1
1.1 Background Information.....	1
1.2 Statement of the Problem.....	4
1.3 Purpose of the Study	5
1.4 Research Objectives.....	5
1.5 Research Questions.....	6
1.6 Justification of the Study	6
1.7 Significance of the Study	7
1.8. Limitations of the Study	8
1.9 Delimitations of the Study	9
1.10 Assumptions.....	9
1.11 Operational Definition	10
CHAPTER TWO – LITERATURE REVIEW	13
2.1 Introduction.....	13
2.2 Introduction to Social Accountability	13
2.3 Historical Background of Community Health Volunteers	19
2.4 Influence of CHVs Characteristics on SAc in the Health System in Kenya	22
2.5 Community Health Volunteers Practices and Social Accountability	24
2.6 Community Health Strategy Contextual Factors	30
2.7 Community Health Dialogues and Social Accountability	38
2.8 Effects of Training Community Health Volunteers on Social Accountability	44
2.9 Theories related to Social Accountability.....	46

2.10 Conceptual Framework.....	53
2.11 Chapter Summary	55
CHAPTER THREE: RESEARCH METHODOLOGY	57
3.1 Introduction.....	57
3.2 Study Design.....	57
3.3 Study Area	63
3.4 Target Population.....	65
3.5 Sample Population	67
3.6 Sample Size Determination and Sampling Procedure	68
3.7 Data Collection Instruments	70
3.8 Pretesting of Tools	75
3.9 Data Analysis and Presentation	77
3.10 Ethical Considerations	81
CHAPTER FOUR: RESULTS AND DISCUSSION.....	82
4.1 Introduction.....	82
4.2 Response Rate and Reliability Test	83
4.3 Socio-demographics Characteristics of the Community Health Volunteers	85
4.4 Test of Normality.....	87
4.5 Social Accountability (Dependent Variable).....	88
4.6 Training.....	89
4.7 The Influence of Community Health Volunteers Practices on Social Accountability.....	90
4.8 Contextual Factors that influence Social Accountability	107
4.9 Influence of Community Dialogue on Social Accountability	125
4.10 Inferential Statistics	141
4.11 Effect of CHVs Training in Improving Social Accountability.....	158
4.12 Summary of Findings.....	169
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	173
5.1 Introduction.....	173
5.2 Summary of the Study	173
5.3 Conclusions.....	177

5.4 Recommendations.....	179
REFERENCES.....	181
APPENDICES.....	204
Appendix i: Informed Consent Letter	204
Appendix ii: Focused Group Discussion Guide	206
Appendix iii: Key Informant Guide.....	210
Appendix iv: Document Analysis Criteria.....	211
Appendix v: Social Accountability Knowledge & Practices Questionnaire	212
Appendix vi: Pre-test & Post Test	220
Appendix vii: Pre_Post Test Scores.....	222
Appendix viii: Generation of Themes and Sub-themes from the transcribed data.....	223
Appendix ix: KEMU Ethical Clearance	228
Appendix x: NACOSTI ETHICAL CLEARANCE	230
Appendix xi: Nairobi Metropolitan Approval Letter.....	231
Appendix xii: Training Guide used during the Intervention.....	232

LIST OF TABLES

Table 3.1 Distribution and Number of CHVs selected to participate in the study	68
Table 3.2 Research Instruments	70
Table 4.1 Reliability Statistics	84
Table 4.2 Socio-demographic Characteristics of Community Health Volunteers	86
Table 4.3 Normality Test	87
Table 4.4 CHVs Reporting Complaints	89
Table 4.5 Number of CHV trained in Social Accountability.....	89
Table 4.6 Baseline Findings of CHVs Practices in Social Accountability	92
Table 4.7 End line Results CHVs practices in Social Accountability	94
Table 4.8 Suggestion of improving complaints and compliments handling.....	106
Table 4.9 Baseline Results of Contextual Factors that influence Social Accountability.....	109
Table 4.10 End line Results Contextual Factors that influence Social Accountability	110
Table 4.11 Baseline and End line Findings of CHVs treatment by the health provider and community	120
Table 4.12 Baseline and End line Findings of Community Dialogue	126
Table 4.13 Model Summary	142
Table 4.14 Baseline Results of Logistic Regression Analysis between CHV Characteristics and Social Accountability	144
Table 4.15 End line Results of Logistic Regression Analysis between CHV Characteristics and Social Accountability	145
Table 4.16 Model summary for CHVs practices and Social Accountability.....	148
Table 4:17 Baseline of Logistic Regression between CHVs Practices and Social Accountability.....	150
Table 4:18 End line of Logistic Regression between CHVs Practices and Social Accountability.....	151
Table: 4.19 Model Summary	152
Table 4.20 Baseline and End line Results of Logistic Regression between Contextual Factors and Social Accountability	154
Table 4.21 Baseline and End line Results of Logistic regression between Contextual Factors and Social Accountability	155
Table 4.22 Model Summary	157

Table 4.23 Baseline and End line Results of Logistic regression of community dialogues and Social Accountability.....	157
Table 4.24 Model Summary for Multivariate Logistic Regression	159
Table 4.25 Multivariate Logistic Regression Results at Baseline	161
Table 4.26 Multivariate Logistic Regression Results at End line.....	163

LIST OF FIGURES

Figure 2.1 Principle-Agent theory Source	48
Figure 2.2 Long route and short route of accountability.....	49
Figure 2.3 An alternate middle route to accountability	50
Figure 2.4 Components and procedures for successful SAc initiatives.....	53
Figure 2.5 Conceptual Framework	54
Figure 3.1 Study procedure.....	58
Figure 3.2 Mixed – Method Convergence Model design	60
Figure 3.3 Steps of the Intervention.....	62
Figure 3.4 Steps of analysing qualitative data	81
Graph 4.1: CHVs Pre_Post Test Scores.....	222

ABBREVIATIONS AND ACRONYMS

CHVs	Community Health Volunteers
CHC	Community Health Committee
CHS	Community Health Strategy
CHA	Community Health Assistant
CHU	Community Health Unit
FGD	Focus Group Discussion
HFC	Health Facility Committee
KI	Key Informant
KCHS	Kenya Community Health Strategy
MOH	Ministry of Health
SAc	Social Accountability
SDGs	Sustainable Development Goals
PB	Participatory Budgeting
PETs	Public Expenditure Tracking Surveys
UNDP	United Nations Development Programme
VHWs	Village Health Workers
WHO	World Health Organisation

CHAPTER ONE: INTRODUCTION

1.1 Background Information

The overall goal of the health-care system is to improve health and health equity while meeting the expectations of health clients (World Health Organization [WHO], 2007). The World Health Organization (WHO) has developed a health systems structure that defines health systems in terms of six building blocks: service delivery, health workforce, information, medical products, vaccines and technologies, financing, and leadership/governance (WHO, 2007). This study focused on how to strengthen the leadership/governance and service delivery pillar. Leadership and governance entail ensuring the existence of policy mechanisms, as well as effective monitoring, coalition building, enforcement, commitment to system design, and accountability. Creating adequate interfaces between the community and the government is one of the challenges of improving governance. In this regard, social accountability initiatives can serve as a vehicle for transmitting information and structuring interactions between the government and citizens (Camargo & Jacob, 2011).

Good service delivery ensures that those in need receive dependable, safe, and high-quality personal and non-personal health interventions with minimal waste of resources when and where it is required (WHO, 2010). This can be accomplished by focusing on client's expectations and satisfaction. Social accountability (SAc) is one of the service delivery principles outlined in Kenya's health policy, and it is expected to improve health system responsiveness (Ministry of Health [MOH], 2014).

Social accountability refers to strategies in which citizens express their opinions on the quality of services, the performance of service providers, or the performance of policymakers, who are then asked to respond to citizens and account for their actions and decisions (Lodenstein et al., 2017). The model includes variety of innovations that encourage health clients to express their opinion on health service. Health clients face obstacles in the health system that necessitates expression. In the United States, health system mistreats one out of every six women (Vedam et al., 2019). Similarly, in India women have complained of mistreatment by health care providers (Hamal et al., 2019; Sudhinaraset et al., 2016). Women in Kenya have complained of mistreatment and humiliation during childbirth, which has been related to their socioeconomic status (Afulani et al., 2019; Oluoch-Aridi et al., 2018). According to Abuya et al. (2015), research in Kenya found a 20% prevalence of disrespect and violence during childbirth. These results called for further research on how to encourage health clients to speak up about their concerns, as this had a detrimental effect on health-seeking behaviour. Likewise, Karanja et al. (2012) established that dissatisfied patients were less likely to comply with care, so it is important to have systems in place to cope with patient expectations (Abuya et al., 2015; Karanja et al., 2012).

Health clients also have difficulties voicing or expressing their concerns. Women in Nepal did not complain about maternal services because they lacked the authority to do so directly to the health facility. Instead, they used other networks, such as female community health volunteers, to discuss their maternal health issues, health care experiences, and concerns (Gurung et al., 2017; Panday et al., 2019). However, a

study in Congo established that by women not expressing their concerns resulted to increased maternal mortality (Mafuta et al., 2017) while a study in Kenya established that gender relations and other socio-cultural factors influenced how complaints were filed (Wangũi, 2015).

Further evidence has indicated that SAc can be used to solve certain health-care bottlenecks through innovative strategies. These innovations could include the use of intermediary mechanisms like Community Health Volunteers (CHVs) to recognize and relay complaints from clients to health systems and vice versa. The Alma Ata Declaration of 1978 reaffirmed the importance of community involvement in creating "people-centred" health systems. Clients of healthcare services are increasingly being regarded as people who should be able to openly voice their concerns to influence the responsiveness of the health-care system (Sheikh et al., 2014).

The World Health Organization defines CHVs as members of the communities where they work, chosen by the communities, and accountable to the communities for their activities, and they should be supported by the health system (WHO, 2007). CHVs serve as a link between communities and the health care system. This function can enable them to facilitate both upward and downward accountability, which is to the community and the health system. These functions may include presenting community issues to the health facility and capacity built the society on health rights and entitlements (MOH, 2014). Health system shapes the continuum care of the community health system however there is a missing link in ensuring social

accountability. Therefore, this research aimed at exploring SAc within the community health systems by examining the effect of community health strategy in advancing social accountability through a training model.

1.2 Statement of the Problem

CHVs are recruited from the community in order to fill the gap between the health care system and the community. The hope is that they will inform the health system about community needs and issues, and vice versa. This, however, is not always the case. With a few exceptions, several studies in community health systems and programs indicate that the social accountability generally weak (Schaaf et al., 2018). Case studies from countries like Mozambique, Ethiopia, Indonesia, Bangladesh, Kenya and Malawi, and discovered inadequate effort by CHVs in influencing health services priorities based on their identification of local needs suggesting that collaborative effort may be required (Kane et al., 2016). Factors affecting performance of CHVs, which might include training, supervision, and inadequate working tools among others (Kok et al., 2017) could contribute to such gaps. The majority of studies on the role of CHVs in social accountability are descriptive, with limited documented studies that have used a quasi-experimental design to assess the effectiveness of the CHVs' intermediary role in SAc. The purpose of this quasi-experimental design was to determine the effect of Community Health Strategy (CHS) on advancing social accountability in the health system in Nairobi County, Kenya.

Nairobi is the main commercial centre in the country and it faces the burden of communicable and non-communicable diseases (Nairobi City County Health Sector Strategic and Investment Plan, 2017). Furthermore, it is reported that approximately 58% of Nairobi's population live in informal settlements (United Nation Habitat [UN], 2010) and the city is home to approximately 55, 000 refugees and asylum seekers (United Nations High Commissioner of Refugees [UNHCR], 2010). It is therefore important to have mechanisms that can enhance the voice of its health users especially those in informal settlements and in similar marginalized settings. This study evaluated the extent, which Community Health Strategy advanced Social Accountability in the health system in Nairobi County, Kenya.

1.3 Purpose of the Study

The broad objective of this study was:

- To evaluate the effect of Community Health Strategy in advancing Social Accountability in the Health System in Nairobi County, Kenya

1.4 Research Objectives

- i. To assess the influence of Community Health Volunteers characteristics on Social Accountability in the health system in Nairobi County, Kenya
- ii. To determine the influence of Community Health Volunteers practices on Social Accountability in the health system in Nairobi County, Kenya
- iii. To determine the influence of contextual factor on Social Accountability in the health system in Nairobi County, Kenya

- iv. To determine the influence of Community dialogues on Social Accountability in the health system in Nairobi County, Kenya
- v. To evaluate the effect of training Community Health Volunteers on Social Accountability in the health system Nairobi County, Kenya

1.5 Research Questions

- i. How do Community Health Volunteers characteristics influence Social Accountability in the health system in Nairobi County, Kenya?
- ii. How do Community Health Volunteers practices influence Social Accountability in the health system in Nairobi County, Kenya?
- iii. Which contextual factors influence Social Accountability in the health system in Nairobi County, Kenya?
- iv. How does Community dialogue influence Social Accountability in the health system in Nairobi County, Kenya?
- v. What effect does training the Community Health Volunteers have on Social Accountability in the health system in Nairobi County, Kenya?

1.6 Justification of the Study

Even though CHVs performance literature continues to increase, there are questions that remain unanswered. Queries on how CHVs present community concerns in the health system and vice versa, in what way they implement SAc, by what means community interact with health providers and demand accountability, remain

unanswered, particularly in connection with the role of CHVs as initiators of such relations (Kok et al., 2017; Schaaf et al., 2018).

The Alma Ata declaration 1978 reemphasised the value of achieving ‘people centred’ health systems through community participation. Health clients are progressively seen as people who should be permitted to express their issues aggressively to influence health system responsiveness (Sheikh et al., 2014). Understanding this will contribute towards improving quality of services which is a core component towards achieving universal health coverage and sustainable development goal 3, which is an immediate priority (Kruk et al., 2018). As a result, the purpose of this study was to add to the primary evidence on the effect of community health strategy in advancing social accountability in the health system via a training model.

1.7 Significance of the Study

The intervention clarified and empowered the CHVs on social accountability, resulting in increased efficiency of the role they play in effectively connecting the community and facility. The study improved the community's voice in CHV programming, as they are thought to be vehicles for facilitating community change, particularly in health matters. Community members were able to understand the mechanisms available to them to communicate their issues thanks to CHVs. The health system was aware of health clients' concerns and expectations, which improved service delivery and utilization.

Furthermore, the partnership between the community as health clients and the health facility was strengthened by engaging and providing feedback through known mechanisms. The county and national governments were able to achieve their goals of public engagement and a person-centered approach by ensuring the voice of health clients was heard. Finally, based on the study's findings, important recommendations for improving CHV practices in advancing SAc were made. The findings will inform policy on how to enhance CHVs knowledge on SAc and improve health systems, in particular the pillars of service delivery, leadership and governance.

1.8. Limitations of the Study

There were some limitations to this study. Firstly, the quasi-experimental design limited randomization. This slightly restricted the proficiency to draw conclusions about causality. However, it was appropriate because randomization was not practical. To reduce chances of bias, CHVs were matched for those who received SAc intervention and those who did not. Matching characteristics of the CHVs in the two groups was ensured by looking at aspects such as the functionality of the CHU, the number of active CHVs, the geographical population they served, training status of the basic modules, the period of existence of the community unit and implementing partners among others.

The second constraint concerned data collection techniques. The focus group discussion approach was used as a data collection method with potential limitation of knowledge and power asymmetry with a likelihood of one group being dominated by another. To ensure equal power dynamics and prevent asymmetries between

participants during focus group discussions, the researcher was attentive to create fair and meaningful participation. In the first round of focus group discussions, the researcher took measures such as dividing stakeholder groups, ensuring equal numbers of participants for each of the groups, selecting open-minded participants, selecting a range of representatives, and ensuring that the selection process was purposeful to tap their common experiences.

The third limitation in this study was social desirability bias. There was a chance that participants tried to give responses that were ideal for their role rather than actual practices. However, their candidness about the difficulties they encountered while working was enlightening and served as a foundation for discussing the research findings. Furthermore, the use of mixed methods in data collection aided in the precision of some issues. The fourth limitation was inadequate financial resource, particularly during intervention monitoring; however, the researcher leveraged on the CHV activities to collect feedback from the research participants.

1.9 Delimitations of the Study

Community Health Strategy comprises various components to enhance its success but this study concentrated on CHVs characteristics, CHVs practices, Community Dialogues and training assesses the effectiveness of SAc.

1.10 Assumptions

During this study, it was assumed that all trained CHVs would influence the main elements of SAc. The CHVs were expected to participate voluntarily and without

attrition. It was also assumed that the facility in-charges of the health facilities and the CHAs would support the initiative, take complaints and compliments positively, and work on them. With social accountability as a principle in Kenya Health policy, it was expected that this research would be more acceptable.

1.11 Operational Definition

Answerability: United Nations Development Programme (UNDP, 2010) describes answerability as the duty to offer an explanation and the entitlement to obtain an answer. Answerability is realised when voice or expression triggers response from the health service provider in this study (Camargo & Jacobs, 2013).

Community Health Strategy: is defined as an unique approach to providing health care services to Kenyans. This strategy emphasized a more proactive approach to promoting individual and community health in order to prevent disease occurrence (MOH, 2020).

CHVs Characteristics: This referred to the socio-demographic characteristics of CHVs that influenced how they carried out their duties. They included age, level of education, and years worked.

CHVs Training: This referred to the capacity building of the CHVs in the intervention group using a developed social accountability-training guide.

CHVs Practices: This looked at their unique intermediary role between the communities they served and health-care actors, as well as the complexities of the health-care systems in which they worked (Kok et al., 2017).

Community Dialogue is a forum that brings together people from as many different parts of the community as possible to exchange information, share personal stories and experiences, honestly express perspectives, clarify viewpoints, and work together to solve community problems (MOH, 2020).

Community Health Unit is a service delivery structure that serves a defined geographical area with a population of about 5,000 people (MOH, 2020).

A **community health volunteer** or worker is a member of the community who has been chosen to work in a community health unit (MOH, 2020). The name CHWs and CHVs were used synonymously in this research.

Contextual factors referred to a variety of factors that influenced health workers' capacity and willingness to perform their duties (Kok et al., 2017).

Enforceability refers to the likelihood of consequences if the mandate or expectations are not adequately met (Camargo & Jacobs, 2013).

Health System: A health system encompasses all organization, individuals and events that are specifically intended to promote, restore or preserve health (WHO, 2010).

Social accountability refers to the wide range of actions and mechanisms that citizens can use to hold government leaders and service providers accountable, as well as actions taken by government, society organizations, the media, and other societal actors to support or facilitate these efforts (UNDP, 2010; Wangüi, 2015). Voice, enforceability, and answerability were used to assess social accountability.

Voice: A collection of formal and informal mechanisms through which individuals communicate their interests, views, and opinions and demand accountability from those in positions of power (UNDP, 2010).

CHAPTER TWO – LITERATURE REVIEW

2.1 Introduction

This chapter presents literature on SAc. The study draws on previous studies in the area of social accountability. The components of SAc, which include voice, enforceability, and answerability, have been critically highlighted in the literature. The literature showed how characteristics of CHVs, such as age and level of education, could affect SAc. Literature on CHVs practices, the contextual factors and community dialogue and their influence on Social Accountability are also presented. In addition, the effect of training CHV on performance in relation to SAc is explored. Finally, the theoretical and conceptual frameworks that underpin this research are presented

2.2 Introduction to Social Accountability

Accountability refers to a two-party or actor relationship. The goal of accountability is that those who are required to be answerable face penalties if they do not meet the mandate of right holders (Friis-Hansen et al., 2013). According to Boven (2007), accountability is defined as an actor-forum relationship. The forum can represent the community in this case, and the actor can represent the health provider or those involved in the health system. The forum has the right to ask questions, and the actor must respond and explain their actions. In general, accountability requires those in positions of power to explain and accept responsibility for their decisions and actions. Depending on the nature of the forum, accountability can take the form of political, legal, administrative, professional or social accountability (Boven, 2007).

This study focused on SAc in the health system because of its emphasis on citizen empowerment.

Often known as citizen-led monitoring mechanisms, SAc applies to a wide variety of activities and mechanisms that people may take to keep public officials and service providers accountable (World Bank, 2006). It involves processes that improve accountability through citizen engagement and participation. Through community monitoring, these processes enable communities to actively participate in monitoring government efficiency, gathering evidence, and demanding accountability. According to the literature, these processes have been used successfully in developing countries such as India, Indonesia, Kenya, and Uganda (Rao, 2013; Wangui, 2015). SAc concentrates on the demand-side of good governance therefore strengthening the voice of citizens. SAc is citizen-led action to compel provider to be responsive (Anderson & Van Laerhoven., 2007; Joshi & Houtzager, 2012).

According to scholars, SAc has the biggest opportunity for positive advancement in the provision of critical services. Furthermore, SAc can be a powerful weapon against corruption. SAc can also motivate people and encourage responsive behaviour from government officials, hence improving overall people's lives (Camargo & Stahl, 2016). SAc encourages better governance by enhancing development efficiency and empowerment, particularly in developing countries, where conventional horizontal and vertical (election) accountability have proved to be poor and blunt for holding public official accountable (UNDP, 2010). SAc structures enable ordinary citizens to gain access to information and make requests,

ensuring the leaders' accountability between elections. However, by increasing the availability of information and amplifying citizens' voices, SAc mechanisms have the potential to play a significant part in enhancing service delivery quality. SAc helps in making public decision-making more transparent and collaborative. SAc initiatives can also ensure marginalized people's empowerment by providing them with essential knowledge on their rights and entitlements (Ahmed et al., 2016; UNDP, 2010).

In different nations, empirical data illustrates the application of SAc in the health sector. For instance, Health Facility Committee (HFC) in West and Central Africa were found to address service failures through meetings with the health providers. This resulted to improvements in quality of health service, even though their actions were at times adhoc and informal. Another barrier was the HFC actions in SAc were individualistic and not systematic (Lodestein et al., 2017). In Nepal, Female Community Health Volunteers (FCHVs) and mother groups were found to enhance SAc in maternal health care by conveying to the health sector the concerns of women. Through their meetings with the mothers, the FCHVs could collect their health service experiences and present them to the health facility (Panday et al., 2017). These evidences suggested that when SAc is well implemented, it could help improve the various building blocks of health systems. The use of scorecards to improve maternal health led to increased community participation, transparency, and ownership among health authorities in Ghana. Where there were complicated changes in the system, the level of collaboration between the government and the community determined the level of success in resolving them (Blake et al., 2016).

The tools used in social accountability include but not limited to community scorecards, citizen report cards, suggestion box, public expenditure tracking tools and community based monitoring among others. Some studies have established gaps in some of the approaches and tools that gave room for exploration. For instance, studies in Kenya on the use of suggestion boxes and service charters found them inactive and verbal communication was preferred to the written. Lack of time to read and comprehend them, as well as illiteracy, were significant barriers to understanding complaint handling mechanisms and SAc, particularly in the achievement of complaint channels like short messages (SMS) (Atela et al., 2015; Wangũi, 2015).

2.2.1 Components of SAc

SAc involves three major components, which are voice, enforceability and answerability (Camargo & Jacobs, 2013).

Voice

The principle is that voice is ineffective unless it can prompt response and enforcement. In this case, voice was defined as a collection of formal and informal mechanisms through which individuals communicate their interests, views, and opinions and demand accountability from those in positions of power (UNDP, 2010). The voice definition distinguishes itself from a mere collection of complaints or comments by ensuring that people have a consistent understanding of the public institution's mandate in order to engage effectively. The first prerequisite for "voice" to be effective is citizen capacity building on essential service delivery norms and

their rights and entitlements. Another consideration is the need to aggregate and express evaluations and views that arise from SAc operations, and this should be related to the health system's mandate. Finally, information produced by citizens must be transmitted to the appropriate actors for action. Citizens must maintain constructive communication with providers of services and elected officials in order for their voices to be heard. This may include consultation meetings like community dialogues and action days to disseminate the information gathered and make recommendations for potential solutions (Camargo & Stahl, 2016).

A study in Zambia on Community Voice and Action (CVA) showed sustained changes in some aspects of health system responsiveness by empowering citizens. For instance, health services improved through consensus building. Challenges found in the study included the inability to resolve concerns that needed central level feedback by CVA. The mechanisms that produced these results were effective government cooperation, increased trust, and co-production of goals between the government and society, and the provision of services (Schaaf et al., 2017). CVA resulted in increased utilization of health services and joint problem solving.

Enforceability

Enforceability describes a situation in which repercussions are likely if the mandate is not met adequately. Enforceability is a vital underlying element that influences service providers' incentives to behave responsively regarding the communities they represent. Incentives can be interpreted here in relation to costs of unsatisfactory

performance by health providers typically leading to official punitive action but can also include rewards for good results (Camargo & Jacobs, 2013).

Answerability

According to UNDP (2010), accountability is the duty to account and the right to a response. In this study, answerability was interpreted as a voice triggering response from the service provider. Answerability is significant because it is one of the tangible expressions of the concept of accountability. In the case of SAc, is a two-way mechanism involving people and service providers directly. It also includes a feedback mechanism through which people can learn about the use of the information they provided, such as who received it and what steps are being taken to address the issues identified by the SAc exercise (Camargo & Stahl, 2016).

Putting these three ideas together, SAc necessitates an empowered citizenry with a voice that is communicated to those with enforcement powers in order to induce accountability from health authorities. For SAc be positive with long-term impact on the delivery of public services, all three components, namely voice, enforceability, and answerability, must be present to some extent (Camargo & Jacobs, 2013).

2.1.3 Legislation on SAc in Kenya

SAc is one of the service delivery principles outlined in Kenya's Health Policy. The policy encourages public participation, with a focus on people-centered approaches and SAc in planning and implementation. Another principle is equity service provision and efficiency in the application of health technologies. The principles are

ultimately expected to contribute to a more responsive health system and improved health (MOH, 2014). SAC is entrenched in several articles of Kenya's constitution. According to Article 43 (1), everyone has the right to the best health possible, which includes the right to health care services, including reproductive health care (Government of Kenya [GOK], 2010).

Vision 2030 envisions "equitable and affordable high-quality health care" by implementing programs that encourage public participation and emphasize the importance of individuals and communities taking ownership of their health. To meet this expectation in the health system, there must be consistent ways of ensuring the citizen voice is incorporated (Government of the Republic of Kenya, 2007). County government legislation emphasizes sharing information and public participation in service delivery (County government Act, 2012). It is recognized that only by harnessing and meeting public expectations, desires, knowledge, openness and public engagement when making health related issues can the realization of the highest possible health standards (Article 43. Kenyan Constitution) be achieved (Wangui, 2015). In the next sections, CHVs historical background and their practices has been discussed.

2.3 Historical Background of Community Health Volunteers

Many countries institutionalized community health worker (CHW) programs, particularly after the Alma Ata Declaration of 1978 (WHO, 1978), as a strategy for providing primary health care to underserved populations and addressing the link between poverty, disparities, and community health. Furthermore, the Astana

Declaration 2018 committed to support the participation of individuals, households, communities, and society organizations in the development and implementation of health-related policies and plans. This is accomplished by providing health education and working to meet the standards of individuals and populations for trustworthy health information (WHO & UNICEF, 2018). CHVs, if well capacity built can play a critical role in ensuring that these commitments are met. Empowerment of primary health system users also results in making the different stakeholders in the system more accountable.

Community health workers are identified by various names in different countries. In Kenya, they are well known as Community Health Volunteers (MOH, 2020). World Health Organizations defines CHVs as:

Community health workers should be members of the communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system but not necessarily a part of its organization, and have shorter training than professional workers (WHO, 1989).

CHVs program has been in existence since 1930s with the Chinese barefoot doctor being known to be the early CHWs programmes. However, since the year 2000s there has been renewed interest with CHVs with increased focus on their role of expanding communities' access to basic health care (Schaaf et al., 2018). In Kenya, the CHV programme was launched in 2006 under the community health strategy initiative (MOH, 2006). Evidence from these strategy showed that CHVs could improve the health of the population (Bhutta et al., 2010; Gilmore & McAuliffe,

2013; Perry et al., 2014) stirring confidence that CHVs could be a great resource in achieving universal health coverage.

Previous research on the role of CHVs emphasized their equal importance in community advocacy. CHVs were envisioned as social change agents who advocated for community rights. This point of view is reflected in the Alma Ata Declaration, which established CHVs as the primary pillars of holistic primary health care in 1978. Examples of CHVs projects in Africa motivated by this argument include early-stage CHVs programmes in Tanzania and Zimbabwe. Both took place in the political landscape of decolonization, the Ujamaa movement in Tanzania, and the Zimbabwean liberation battle. These initiatives emphasized self-sufficiency, rural development, and the abolition of poverty and societal inequities. Community health workers programmes have continued in many countries including Indonesia, Ghana, Tanzania, Niger, Ethiopia, and Kenya among others (WHO, 2007; MOH, 2014).

The Community Health Volunteers program in Kenya was started in 2006 as a part of the Community Health Strategy in response to a general decline in health-related indicators despite increased funding for the health sector (MOH, 2006). Since then, through various interventions, the programme has been successful besides challenges in its implementation. The strategy is described as the means by which households and communities actively participate in matters of health. The objective is community enhancement, bringing healthcare closer to the masses, creating community health units (CHUs), and strengthening ties between the community and healthcare facilities.

Findings from an evaluation on community health services in Kenya conducted in 2018, indicated there were 6,087 CHUs out of expected 10,375 CHUs, showing a gap of 4,292 CHUs (41%). This means that Kenya currently has 59% coverage of community health services (MOH, 2020). Kenya's healthcare system is hierarchical, beginning with primary care and ending with the community as the lowest unit (MOH, 2014). The workforce at the community includes Community health volunteers, Community Health Committees and Community Health Assistants/Officers as the technical person. Their mandate and roles are as per the Kenya Community Health Policy 2020. In Nairobi County, there are approximately 746 CHUs with 7460 CHVs. Each CHV in the county is responsible for 100 households (Kenya Health Information System [KHIS], 2020). If the CHVs are trained and given resources needed to implement SAc, they can have a significant impact on health-system accountability.

2.4 Influence of CHVs Characteristics on SAc in the Health System in Kenya

Findings on whether socio demographic characteristics influence CHVs effectiveness vary (Lehmann & Sanders, 2007). These socio demographic characteristics include age, level of education and sex among others. For instance, a study in Busia, Kenya associated socio demographic characteristics like age with performance of CHVs (Crispin et al., 2012). However, age and level of education were established to have no association with CHVs' potential to provide services, specifically in the classification and treatment of pneumonia (Kallander et al., 2006).

2.4.1 Age

Studies have associated age with performance of CHVs. Age of CHVs has been related to appropriate documentation, correct utilization of job aids and customer satisfaction (Acharya et al., 2016; Crispin et al., 2012). Similar findings were documented by Kawakatsu et al. (2012) who added that older CHWs are more likely to exhibit high levels of job performance. Bhattacharyya et al. (2001) added that communities respect older CHVs. This could contribute to their effectiveness compared to the young CHVs. Another explanation could be that older CHVs are better off financially (Kawakatsu et al., 2012) and therefore dedicate more time to voluntary work compared to their younger counterpart whose priority might be to seek employment or green pastures.

2.4.2 Level of Education

In some studies, level of education of CHVs has been found to influence performance. For example, Acharya et al. (2016) found that a high level of education was related to having good knowledge of and delivering satisfactory maternal and child health services in Nepal. Similarly, Crispin et al. (2012) concluded that CHVs with a high level of education are more likely to outperform their peers. There have been suggestions that this could be contributed by school health curriculum (Acharya et al., 2016). Further recommendations have been that education level should be considered while recruiting CHVs. On the contrary, Ande et al. (2004) in his study on Diarrhoea, established that the level of education does not influence CHVs knowledge and performance. They further recommended that the type of CHV alone

may not be enough without some form of training and follow up (Ande et al., 2004; Kawakatsu et al., 2012).

2.5 Community Health Volunteers Practices and Social Accountability

CHVs provide services at the individual, household, and community. They are expected to establish the link between the community and the health facility/system (MOH, 2020). In Kenya, the CHVs are selected by the community members and are attached to a link health facility. Their purpose is to encourage communication and feedback mechanisms between the health system and health clients. This role gives them an opportunity to ensure SAc in the health systems (MOH, 2020). Although CHVs are frequently thought of as being accountable to the community for their actions (WHO, 2007), it is unknown to what extent this is actually the case. They are also recommended as a solution for the human resource capacity of the health system, as well as problems with health care coverage and limited community involvement in the health sector (Schaaf et al., 2018).

Earlier programs emphasized CHVs' roles as community advocates and agents of social change in addition to their roles as health care providers, but today's programs only emphasize their technical functions (WHO, 2007). CHVs will act as social transformational agents by taking services to the community, enhancing society concerns in the health sector, and assisting in the improvement of the quality of government health services through culturally acceptable and physically accessible preventive and curative work (Schaaf et al., 2020).

Most importantly, there is broad agreement that, in order to ensure community acceptance and ownership, CHVs must reflect social and cultural norms of the communities they represent. According to some researchers, the function of CHVs in social transformation has been pushed aside in preference to technical roles (Chung et al., 2017). Ultimately impacting community involvement in health management.

To be effective social change agents, CHVs must first feel empowered and supported by an enabling environment. For instance, they need to be taught soft skills like communication, problem-solving, and maintaining confidentiality at the local level (Ellis et al., 2014). Although CHVs have a wide range of duties, one of their clear and specific obligations is to act as downward accountability intermediaries in a variety of contexts. For instance, speaking up for community concerns at the health center or educating the locals on their rights and entitlements. CHVs might experience significant ascending accountability pressure at the same time.

As volunteers in the Kenyan Health system, striving to achieve the ambitious health service coverage targets, CHVs can feel far more obligated to meet and document service delivery goals than to provide their communities with respectful, quality service or serve communities health needs and priorities. In fact, these obligations may undermine downward accountability, leading CHVs to provide subpar or coercive care (Schaaf et al., 2018). Similarly, their status in the health system best positions them in a position to be accountable both upward and downward.

The Kenya implementer is manual for SAc (2015) specifies the roles of CHVs in SAc. These roles include, but not limited to; encouraging communities to express any concerns prohibiting them from accessing their health rights matters, to be involved in planning, implementing, monitoring, evaluating and giving feedback on SAc activities. They also need to facilitate regular dialogue at the community level and listen, document and address complaints of clients and where necessary escalate them to the Community Health Assistant (CHA). These activities should be conducted under the facilitation of the CHA. In turn, the CHA's role entails providing feedback to the group across all forums on the complaints and compliments raised, as well as opening the suggestion box with the team members and documenting the complaints and compliments. This study sought to determine whether the community health workforce were aware of SAc and how they carried out their responsibilities in accordance with the SAc guidelines.

The link role of CHVs as a service providers, cultural negotiator, and social change agent has been reviewed in literature and program documents. These functions can be seen as progressing from broadening the existing health system to improving the health system and other social determinants of health (Schaaf et al., 2020). A lot of evidence (Aseyo et al., 2018; Gilmore & McAuliffe, 2013) backs up the claim that CHVs can successfully close the service provision gap between the health system and underserved populations. However, there is less evidence to support the cultural negotiator and social change agent roles. If well implemented, the last two functions could lead to SAc progress as they ensure that health consumers are empowered and

that the health system becomes aware of their concerns. The following sections examined these functions in depth.

2.5.1 CHVs Practice of Service Delivery

The CHV service delivery method involves serving as a "service extender" by offering health services to community members who would not otherwise be able to receive them due to a variety of factors (Hodgins et al., 2021). The effectiveness of CHVs in bridging the service delivery gap is amply demonstrated by their ability to deliver home-based preventive and therapeutic services for diseases like malaria, diarrhoea, tuberculosis, HIV, and community health education (Rachlis et al., 2016). By acting as service extenders, CHVs enable the government to fulfil its duties to uphold the right to health. If service expansion addresses existing injustices rather than perpetuating them, it encourages health system accountability. In their nature, majority of CHV initiatives are equity-oriented to the degree that they address rural communities, urban slums, and other areas that are overwhelmingly disadvantaged and difficult to access (Perry & Crigler, 2014).

2.5.2 CHVs Practice in Information Sharing

The role of cultural broker involves the CHVs acting as mediators and empowering communities to assert health and other rights-related (Saprii et al., 2015). This task is vital because it empowers the community on their rights. Information sharing role entails communicating the health system's goals and knowledge to communities in an appropriate and relevant way (Grossman-Kahn, et al., 2018; Mohajer & Singh, 2018). CHVs in Bangladesh, for example, have used traditional music and drama to

create awareness on health (Bhutta et al., 2010). In high-income countries, several CHW programmes are based almost entirely on the role of cultural brokerage. In South-eastern Europe, Roma Health Mediators act as language and cultural interpreters. They also customize health messages to fit the unique circumstances for disadvantaged patients (Roman et al., 2013). The creation of culturally acceptable methods, however, requires that adequate flexibility be given to CHVs to alter health messages when required. On another hand CHVs in Thailand have complained that supervision on activities that focus on procedures have restricted them to customize their assistances based on community priorities (Kowitt et al., 2015).

The goal of CHV programs is to empower communities to assert their health-care rights (Kok et al., 2015). If CHVs feel empowered, they will be able to empower the people they represent. Empowering CHVs will improve their performance and allow them to realize their full potential as representatives of change and health promoters (Kane et al 2016). Educating the community on rights and entitlements has been indicated as a key role of CHVs in enhancing social accountability (MOH, 2020). Knowledge contributes to autonomy of clients and provides ability in making informed decision and the reverse is true. However, studies have demonstrated that most clients are not aware of their rights and can be disadvantageous. Mafuta et al. (2017) illustrated that voice (speaking up) is influenced by client's awareness on their rights. Experiences from a pilot study in Kenya established illiteracy as a big factor for understanding complaint handling mechanism and SAc (Wangui, 2015).

Limited studies have documented the role of CHVs in social accountability; however, their educator and link worker role has been appreciated in various settings. For instance, in India the ASHAs improved their maternal health intervention through educating the mothers and linking them to health care services (Saprii et al., 2015).

2.5.3 Community Health Volunteers Practices as Social Change Agents

CHVs' work as social change agents entails speaking on behalf of the community on health-related issues. According to research, their role as advocates of the community is the least documented. This role is difficult to realize due to political and institutional barriers (Nandi & Schneider, 2014). CHVs that are capacity built and supported have the possibilities to be key actors in promoting authentic community engagement in decision-making processes following health reforms (McCollum et al., 2018). In Kenya, studies have found few actions to promote citizens' understanding of health or their decision-making role after devolution. In addition to citizen participation being clearly documented in policies, studies in Tanzania, Philippines, Indonesia and Kenya identified a lack of funding and rewarding community participation as a barrier to genuine community involvement in identifying priorities (Flores, 2015; Kok et al., 2015; McCollum et al., 2018).

Kok et al. (2017) suggest that in addition to challenging the way things are done from the standpoint of health care, the research team should also hear what CHVs and communities have to say. These will be more effective at identifying and activating processes that can result in better CHV performance. The advantage of

CHV's distinctive intermediary role between communities and the healthcare system could then be maximized, and their role in achieving universal health coverage could be amplified. The objective of this study was to assess how CHVs served as intermediary by informing the health system about community needs and facilitating feedback.

2.6 Community Health Strategy Contextual Factors

According to the literature, various components impact the effectiveness of CHVs, including their role in SAC. Local political context, interactions of CHVs with other community-based structures, supervision, incentives, training, and community perceptions of CHVs were among the factors considered.

2.6.1 Local Political Context

The parameters of SAC are heavily influenced the context and culture of politics. The viability and chances of success of SAC approaches, for example, are heavily reliant on political structure, which must be democratic, multi-party, and guarantee citizens' civil rights (Malena et al., 2004). In an empirically derived framework, consistent public influence has been proposed in tandem with 5 major governance 'outputs' required for effective national CHV program governance (Schneider, 2019). Politicians can either be a hindrance or a champion of CHV programs. Political influence can occasionally ensure consistent funding for CHVs programs; however, political meddling during a program can weaken equity-oriented downward accountability. For example, improper CHV choosing through political influence or

placement of CHVs in areas with low need for ownership of the program, has an impact on communities (Musinguzi et al., 2017; Perry et al., 2013).

CHV recruitment and placement may be prone to power and influence undermining accountability for equitable service delivery. In less centralised governments, community ownership may be prioritized, supporting downward accountability and program sustainability; in more centralised governments, CHVs can be initiate accountability on behalf of the community (Schaaf et al., 2020). In addition, the local political framework affects purposeful community involvement in CHV initiatives (Ostebo et al., 2018). Authoritative regimes weaken the spirit of community participation, leading to programmes being more authoritarian than collective action. Where there strong autocratic rule, government CHVs are perceived as agents of government surveillance (Closser & Jooma, 2013; Ostebo et al., 2018; Scott et al., 2018). A study by Cleary et al. (2013), demonstrated that by CHVs meeting the expectations of their supervisor could delay response to citizen concerns. Such kind of issues gives more reasons why communities need to be empowered to seek accountability.

2.6.2 Community-Based Structures

Community health programs do not operate in a vacuum. In many settings, there are established structures in the health and facilities that promote selection and monitoring of CHVs performance (Pallas et al., 2013). Through joint meetings, collaboration with established functional structures such as village health committees

can facilitate trusting relationships among citizen and health system (Abimbola et al., 2016).

CHV programs can interact with CHCs in a variety of ways, some of which can affect CHVs potential to coordinate accountability. First, there are universal guidelines that advocate CHC participation in CHV selection, to ensure CHV competence and native suitability (Lehmann & Sanders, 2007). A CHV appointed by health professional may be differently accountable from the one selected by the community members. Secondly, in some countries CHVs networking and collaborating with community-based structures has been documented in the nation CHVs policies (Kok et al., 2017). This engagement enhance accountability actions, for example in Chhattisgarh, India, CHVs encourage members of the community to ask VHC to demand accountability in health service delivery (Garg & Pande, 2018).

In Kenya Community health committee (CHC) which consists of members of the community and local administration (Chief) and the community help in selection and supervision of CHVs at a barazas or community meeting (Kenya Community Health Policy, 2020). This practice helps in promoting accountability especially to the community members who have selected the CHVs to represent them on matters health.

2.6.3 Treatment of Community Health Volunteers by the Health System

Treatment of CHVs by the health system entails issues of remuneration, supervision, training and tools of work among others. CHVs ability to perform their role in accountability is by resources and their autonomy in the health system (Østebø et al., 2017; Scott et al., 2019).

Remuneration

Several studies support compensating CHVs commensurate with their work (Zachariah et al., 2009). Reimbursing CHVs for tasks shifted can boost their reliability and trustworthiness. Furthermore, financial compensations must be provided in a fair and consistent manner to prevent distrust among health-care players (Strachan et al., 2012). Payment of CHVs is a necessary motivator because it leads to provision the necessities of CHVs and their dependants from impoverished areas. Ormel et al. (2019) noted the conflict between CHV payments as a way to hold them accountable as it could lead to CHVs being answerable to the health system than the community. Other scholars have supported the risk of shifting remunerated CHVs accountability to the health system, but also not paying them affects their commitment and moral to work (Cherrington et al., 2010; Maes, 2015). Additional evidence from India's has shown CHVs ignoring tasks of advocacy on rights and putting more attention to normal healthcare services (Garg et al., 2018; Scott et al., 2010).

In this regard, strategies are required to guarantee CHVs' ties to their communities by enhancing supervision and performance evaluation that explicitly account for the

CHVs' roles in the health sector and communities (Kok et al., 2017). Mohajer and Singh (2018) proposed having a part-time volunteer and full-time worker being paid with each having distinct roles. Their recommendation is quite similar to the Kenya Quality Model for Health 2015 that recommends having 5 CHAs per 10 CHVs in a community health unit. While the CHVs work part time, the CHA is paid and employed full time. However, implementation of this recommendation has been faced by inadequate employment of CHAs by the government.

Supervision

Supervision refers to a type of interpersonal interaction. Effective supervision by the supervisors of the CHVs in the health sector has been shown to strengthen their recognition (Robertson et al., 2015). On the other hand, if CHVs are not supervised at their workplaces (households), they may become demotivated (Kane et al., 2016; Ormel et al., 2019). Studies on CHV supervision have documented the benefits to include job satisfaction, community and health system commitment and improved performance (Ludwick et al., 2018). For example, researchers in Bihar discovered that setting goals as a team with supervision and rewarding CHV through public recognition improved performance (Carmichael et al., 2019). Community supervision, group supervision, and peer supervision are additional alternative approaches to supervision that remain areas for further research. In community supervision, the community establishes standards, monitors progress, and offers criticism (Schleiff et al., 2021; Westgate et al., 2021).

Provision of Working Tools

The provision of job enablers like CHVs kits and job aids can improve how the community views the role of CHVs in the healthcare system and how confident they are in their ability to do their jobs. Community trust in CHVs and willingness to heed their advice are influenced by the standard of care provided at the facilities to which they refer patients. On the other hand lack of supplies of medication and equipment, as well as subpar care, limit CHVs' capacity to carry out their duties and win the trust of the community (Saprii et al., 2016; Ormel et al., 2019). CHVs risk losing their credibility in the community if health services are unavailable or providers reject or ignore their referrals (Scott & Shanker, 2010; Saprii et al., 2016). For instance lack of CHVs supplies and commodities in Malawi resulted to them evading the community than dealing with the discontent of the community (Kok et al., 2016).

Treatment by the Health Care Providers

Health professionals may treat CHVs with disrespect, which could make it difficult for them to establish productive working relationships hence affect performance of SAc duties. In Zambia, CHVs have reported other health workers do not view them as part of the service delivery team (Top et al., 2015). According to empirical research, many CHVs lack respect and support from the "upper level," which lowers motivation and negatively affects performance. There have been proposals for joint training of CHVs and their supervisors to improve the relationship between health workers and CHVs. Aside from improving their relationship, it may lead to a better understanding of everyone's role and competencies (Kok et al., 2017).

There is a need for effective supervision, which includes educating supervisors on professional abilities, soft skills, and the effect of CHVs' centre position for fostering relationships with communities (Hernández et al., 2019; Hill et al., 2014). CHVs in Malawi and Australia believed nurses thought less of them because of how unimportant they thought their work was or because they had less education (Kok et al., 2016; Topp et al., 2018). Disrespectful treatment of CHVs can have a negative impact on their relationships with healthcare providers, performance and community trust in the health system (Kok et al., 2016).

Community Perceptions of the Community Health Volunteers

The effectiveness of CHVs is linked to relationships of trust between various players (Kok et al., 2017). According to studies, CHVs feel respected and valued by society because of the function they play (Geofrey et al., 2016; Okuga et al., 2015). The willingness of the community to engage with and listen to CHVs is influenced by how motivated and competent the CHVs are, and this in turn influences CHV capacity to serve as service extenders, cultural brokers, or agents of social change. Furthermore, it is well known that the embeddedness of CHV programs shapes their relevance and community acceptance (Kok et al., 2017).

A range of factors influences the interaction between the CHV and the community. For instance, a lack of training or accreditations may make the community less confident that CHVs can effectively address their needs. Well-informed, qualified, and engaged CHVs will foster confidence in the ability of the health system to respond to community needs. Although this can be affected factors like gender,

social economic status, age, acceptance may be higher when CHVs come from the society they serve. Additionally, CHVs are likely to be appreciated if they are chosen by the community, trained and have equipment's and commodities (Grossman-Kahn et al., 2018; Lehmann & Sanders, 2007).

According to a research in Uganda, CHVs' limited knowledge and social status frequently thought to increase approval and less intimidating than health staff, actually have a negative impact on community acceptability. As CHVs gained more expertise during this study, the community's acceptance rose (Okuga et al., 2015). Additionally research by Grossman-Kahn et al. (2018) showed the casualness of the CHV function in Brazil lowered community regard. They suggested that formal certification could boost community trust in CHVs. These studies imply that professionalizing CHVs may not always decrease embeddedness.

A focus on community vs. government priorities could undermine downward accountability. The degree CHVs are perceived to be associated with the government may influence how the community views them. There is evidence that when people consider that CHVs are linked to government whose interests diverge from those of clients, they are less likely to be perceived as improving the accountability of the health system to patients. In India, CHVs are rewarded for encouraging women to give birth in facilities, despite the fact that this may go against some patients' preferences (Gopalan & Varatharajan, 2012; Mukhopadhyay, 2016). In the eyes of the community, CHVs are aligned with the health system because they promote services that reflect health system priorities (George & Joshi, 2012; Musinguzi et al.,

2017; Scott & Shanker, 2010). In contrast, in Thailand, the community's perception of CHVs was enhanced by their collaboration with public health professionals (Kowitt et al., 2015). To sum up, reliable connections between various actors are directly related to CHV's success.

2.7 Community Health Dialogues and Social Accountability

There are various SAc tools and mechanisms that community health workers can use. They include but not limited to; community dialogues, community score cards, social audit, citizen charters, and citizen report cards. These mechanisms if well known by the community health workers and citizens they can be used to enhance voice. This study will focus on community health dialogues. In Kenya, community health dialogue is one of the platforms that be used to enhance community participation (MOH, 2015) however how these platform have been used to raise community concerns and provide feedback remain largely unanswered. The term "community dialogue" has been used frequently in interventions to describe an interactive participatory communication process of information sharing between individuals or groups of individuals with the goal of coming to an agreement and addressing particular issues (Martin et al., 2017).

Community dialogue techniques give group members the chance to engage in critical thinking, challenge presumptions, and create a new vision (Figueroa, 2016). Over the past two decades, a wide range of community engagement initiatives have used CD as a method of participation (Hoxie et al., 2012). However, the process has not

received much documentation or evaluation, especially when used as a means of achieving SAc.

Community dialogue offers a venue for taking into account local aspirations, concerns, and values as well as a place for people to pinpoint problems unique to their context and participate in creating suitable solutions. In concept, it is possible to strengthen community governance of one's own health by working cooperatively toward a specific and attainable action target (Hoxie et al., 2012, Peterson & Hughey, 2004). Many scholars suggest that patients are increasingly viewed as citizens who should be able to actively voice their concerns to influence how responsive the health system is, particularly in nations where the health system consistently fails to deliver services (Molyneux et al., 2012; Sheikh et al., 2014; O'Meara et al., 2011)

Community Dialogue if implemented strategically they can be instrumental in enhancing community participation. Community participation is crucial in improving health service delivery. In context, community participation within the catchment areas and localities of health facilities should be maximised by adopting various activities (MOH, 2006; 2014). The active involvement of affected populations in the formulation, implementation, oversight, and evaluation of policies, programs, and services is referred to as participation (Sachs, 2005). The goal of participation is to promote social cohesion, and it has been linked to community well-being and health (Chuang et al., 2013). It has long been endorsed by international organizations and public health organizations (WHO & UNICEF, 2018) that communities should be

given the tools to manage their own health by being involved in the creation of health strategies, policies, and interventions. Since the Alma Ata declaration in 1978, a key component of health programming has been community involvement. A priority for achieving "people-centred" health systems is meaningful client participation (WHO, 2008).

Some scholars have argued that CHVs may be the only practical and palatable link between the health sector and the community because they have the potential to facilitate community participation. Improving this connection can help the health system achieve the goal of better health (Kahssa et al., 2018). According to a systematic review of the literature on community involvement by George et al. (2017), most studies on the subject place less emphasis on community involvement and empowerment in the governance of health services and more emphasis on participation in health promotion interventions and effective uptake of services.

2.7.1 Community Dialogue Agenda

Participation has been used successfully in many health interventions, such as those for HIV/AIDS, family planning and maternal and child health, (Ho et al., 2015) but there is little information on how it is used to advance SAc, particularly in Kenya. Studies that used CD to engage community members and health care professionals (HCPs) reported success. One such study showed that the dialogue method is a promising participatory approach for involving community members (Crankshaw et al., 2019). The study's dialogue encouraged those with less voice to speak up and contribute to knowledge of the quality of care. Additionally, for the study

participants, the act of inclusion and invitation to participate itself was transformative. Program quality and accountability have specifically improved as a result of interventions that established a forum for discussion among the various stakeholders (Steyn et al., 2016).

Similar results were reported in an intervention study conducted by (Martin et al., 2017). The study found that community dialogues improved residents' awareness and knowledge of a variety of health issues, particularly those related to the CHVs' services for managing and preventing childhood illnesses. It also increased utilization of services and helped in filling health information gaps. Similar experiences were reported in a study to establish improved knowledge of praziquantel as a drug that treats schistosomiasis through in-cooperating CD as an intervention (Rassi et al., 2019). Additionally, these studies demonstrated that community dialogues increased local ownership (King et al., 2020), CHW visibility, and CHW popularity as a conduit between the community and the health sector (Martin et al., 2017). This link is important for successful community engagement (George, 2015).

Previous experiences with community involvement in health show that the unequal relationship between the community and healthcare professionals (HCP) may act as a barrier to effective community involvement. As a result, there are misaligned priorities, community members are unable to communicate their needs, and health professionals are not receptive (Kamuzora et al., 2012). According to scholars, involving the community and healthcare providers in the design, implementation,

and evaluation of the program may increase its effectiveness and sustainability. Additionally, it might enable medical professionals to make practical adjustments that reflect community demands (Lawn, 2008).

Concerns have been raised about how time-consuming, small-scale, and resource-intensive community dialogues are. They can also be challenging to maintain in environments with limited resources, especially when they are provided as part of a research or implementation project (King et al., 2020). On the contrary, there has been successful CD intervention without external facilitation or incentives (Martin et al., 2017) which suggests that CD interventions do not require high-level financials. The most important thing is to embed the approach in community engagement and local ownership (King et al., 2020).

Peer reviewed literature illustrates a number of factors that contribute to effective CD. They consist of the availability of additional support, such as mentoring or one-on-one follow-up to the CHVs acting as facilitators, as well as review meetings and individual supervision visits. These gatherings give CHVs a chance to reflect and talk with their peers or supervisors about any difficulties they had implementing the dialogues and how to fix them (Martin et al., 2017). Introductions and establishing ground rules, having a skilled moderator during dialogues among others contribute to effective dialogues. Participants are especially successful in relaxing during the introduction process. In order to create an environment where health care providers can be open to community feedback, it is important to establish ground rules such as respect for people's opinions, to project voices, to set phones on silent, to try to express points clearly, and to include younger participants. Power dynamics exist in

communities and are likely to be present when creating a community dialogue of any kind. It is advised that time spent introducing participants, establishing goals and expectations, carrying out ice-breaker activities, and agreeing on ground rules should be a key component of the overall dialogue process (Chuang et al., 2013; Crankshaw et al., 2019).

A skilled moderator is crucial to a successful dialogue. Crankshaw et al. (2019) established that a skilled facilitator supported the success of the dialogue. The communication style of the facilitator and the use of simple terms help to create an engaging discussion. In their study, the facilitator used a variety of techniques, such as switching back and forth between the two local languages, taking the time to thoroughly explain ideas using everyday language, and providing opportunities for everyone to contribute. Innovations like writing down questions can be used as an alternative to speaking up in situations where some participants are reluctant to express their opinions in public. It is important to let the participants know there is an alternative. According to a study by Martin et al. (2017), facilitators (CHVs) believed that health centre staff were not sufficiently available to support them and that they lacked the technical knowledge necessary to respond to challenging or unexpected questions. The same study found that having health professionals participate was beneficial because they were able to address participants' challenging questions.

Training and skills have been established as factors that enhance CHVs performance (Kok et al., 2017). These findings emphasise the need of different stakeholders in a

dialogue. In order to ensure inclusive representation, other factors, such as the time, days, and location or spaces to hold the dialogues, are crucial for the effective recruitment of participants. The aim of this study is to establish the influence of community health dialogues in enhancing SAc, considering the components of information sharing complain and complement mechanisms and counter feedback.

2.8 Effects of Training Community Health Volunteers on Social Accountability

Unfulfilled expectations of SAc in community health systems in Kenya are inescapable. If SAc is to be effectively integrated into Kenyan community health systems, CHVs must acquire relevant knowledge and skills to support both their own community and the health system. CHV training is one of the main components, with the goal of acquiring new information and competencies related to specific duties, as well as improving CHVs' ability to engage with and represent local people. Training is one possible method for improving community health programs and practices (Kok et al, 2017). Much of the literature on SAc training has concentrated on health professions in medical schools (Meili et al., 2011; Reddy et al., 2013). Training time constraints have been reported as a barrier to achieving SAc in graduate medical education (Reddy et al., 2013). Despite the paucity of research on training interventions for CHVs on SAc, a review of other general training interventions for CHVs was carried out to identify these interventions' key components.

There are numerous methods for training CHVs. They come in a variety of lengths, from brief courses to lengthy credential programs, depending on the technical component of the curriculum. CHVs in Kenya receive ten days of training on basic

modules that cover various aspects of health promotion (MOH, 2020). However, aspects of SAc are not covered in this training. Brazil is an example of a training duration other than Kenya. CHVs are trained for 8 weeks, with 4 weeks dedicated to field work. Thailand CHVs are trained for seven days on primary health care concepts, followed by 15 days of on-the-job training (WHO & Global Health Workers Alliance [GHWA], 2010). The content of training varies greatly, but it typically includes preventive, curative, and rehabilitation information. The training curriculum is delivered in various formats, including face-to-face, mobile learning, and distance learning, and is tailored to the educational credentials of CHWs as well as the skills required for their positions and responsibilities. Access barriers related to technology and information, communication, and technology learning have been identified as challenges in distance learning of CHVs training in many developing nations (Department of Health and Human Services USA, 2006).

Few studies focusing on training interventions have established improvement in performance of CHVs. For instance, CHWs training intervention on mental health enhance their ability to identify mental disorders (Armstrong et al., 2011). Similarly, another training CHW intervention training on diarrhoea diseases resulted in correct diagnosis and follow up children below 5 years. Even though this study established the effectiveness decreases with time, other factors other than training are also important. Factors like supervision, continues medical education, the type of CHW selected can enhance sustainability (Lopes et al., 2014). This study trained community health volunteers in social accountability. The training curriculum was localised according to the training needs. The effect of training CHVs was assessed

to establish its influence in advancing social accountability. Aside from training, other important aspects identified in the literature review, such as supervision and job aids, were taken into account.

2.9 Theories related to Social Accountability

SAC originates from accountability theories like Principal-Agent theory and long route and short routes of accountability. The strategy relies on direct or indirect participation from citizens to hold service providers accountable. For the approach to be successful a combination of capacity building on rights and entitlements, service delivery with collective action is crucial. SAC represents the demand side of accountability that allows the citizens to be on the fore-front to ask for accountability and that is the clear distinction from the supply side which represents the government side and judicial reforms among others.

2.9.1 Principal-Agent Theory

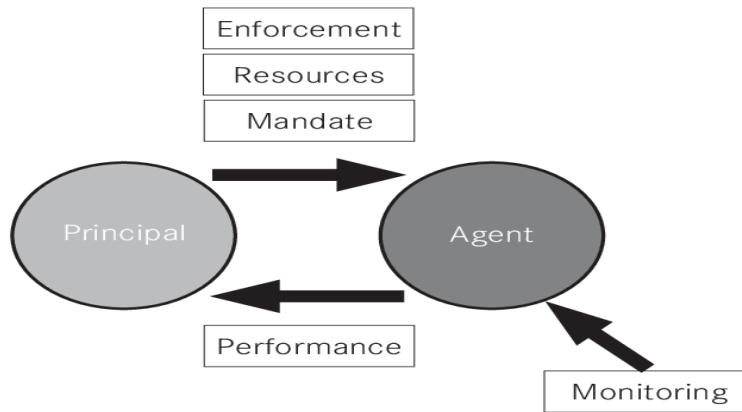
The first theory to be discussed here is the Principal-Agent theory (PA). In this theory accountability is described as the procedure between the principal and the agent. The principal here could represent the citizen and agent is the service provider. The principal evaluates the agent's performance in comparison to established benchmarks. In case of offences then sanctions follows (Camargo & Jacobs, 2011). The theory focuses on agent's responsiveness to principal objectives (Gaillard, 2014).

The state works on behalf of the people to offer a wide range of services, but people themselves are fundamentally the supreme leaders of democratic government. The World Bank's main discussions centre on five elements that must be present for accountability ties to exist in public governance. These include, but not limited to; mandate, resources, performance, information and enforceability as illustrated in figure 2.1. The five elements in the PA theory are not static. Firstly, a clear mandate stating expectation of the agents must be stated and known by both parties.

Secondly, resources for the agent to meet the expectation and mandate must be readily available. Thirdly, once the mandate and resources are in place the agent should be executing as expected. Fourthly, accountability is retained when the principal is able to follow up on the agent's actions and performance. While monitoring performance the principal should compare it against the original mandate. Additionally, in-case of unsatisfactory performance procedures of enforcing sanctions should be in place. These components are interrelated for instance; the allocation of resource must adhere to nature of mandate and the information generated during monitoring phase. This information should be communicated to team responsible for evaluating performance and enforcing sanctions (Brinkerhorff & Bossert, 2008; Cleary et al., 2013).

Figure 2.1

Principle-Agent theory Source



Source: (Camargo & Jacob 2011)

2.9.2 Long and Short Routes of Accountability

As explained earlier in section 2.2, SAc includes the formal or informal approaches that citizens or civil society can use to bring service providers and public official into account. Over time, various stakeholders have come to the conclusion that SAc is one of the methods for establishing bottom-up accountability in the governance process. Reason being is that it takes into account of the citizen interaction with the state (Malena et al., 2004). Figure 2.2 from the World Bank's 2004 Long Route and Short Route of Accountability Model clearly demonstrates the relationship between citizens and the state.

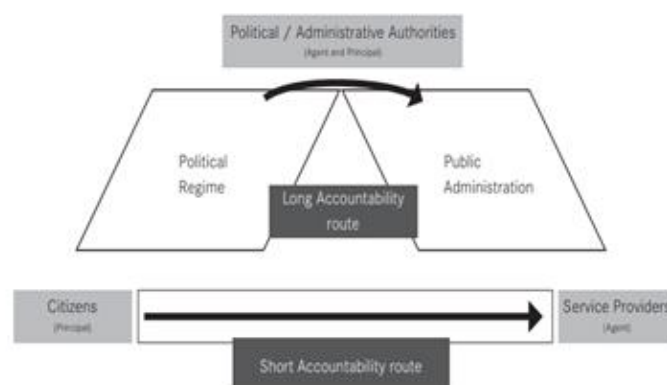
The long route of accountability according to World Bank model is the approach through which citizen hold the service providers accountable. Then the government ensures the service providers are accountable through formal mechanisms in public administration. The long route is an indirect connection between public service providers and citizens that necessitates adequate performance over a sizably sizable

institutional space. The challenge with long route is sometimes implementation and enforcement capability may be affected by resource constraints and institutional bottlenecks, which can impact achievement of responsiveness of providers (Camargo & Jacob, 2011).

The short accountability route informed this study because it offered a quicker path to accountability for the citizens. The short route of accountability offered a direct route for citizen to experience responsiveness and execute sanctions. This route can specifically target the citizen demands without having to go through the political mechanism and waiting for public administration to act. By strengthening short route of accountability via participatory mechanisms and linking it to the components of PA, it can be one of the competent approaches that citizens can experiences responsiveness.

Figure 2.2

Long route and short route of accountability



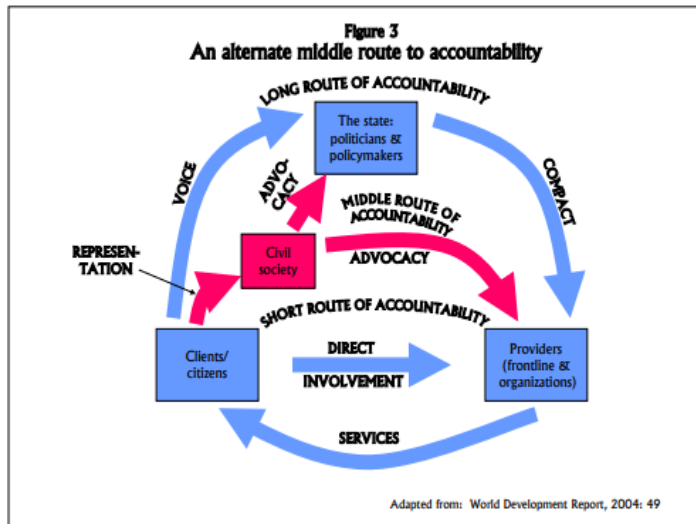
Source: Beat Camargo (2011) based on World Bank (2004)

Activate

Source: (Camargo & Jacob, 2011)

Figure 2.3

An alternate middle route to accountability



Source: (World Bank Report, 2004)

The World Bank model's main drawback is that it only encourages formal accountability systems and directive citizen behaviour. It offers a straightforward perspective on accountability but ignores contextual issues, such as the complex political and social environments in developing nations (Joshi, 2017). The main drawback of short accountability route is bringing citizens into direct engagement with state service providers. Sometimes this is not always feasible and may require adequate support from various sectors and systems for example political leaders (Blair, 2018). Considering such drawback, this study is majorly informed by the short accountability with an alternate middle route to accountability, with CHWs being the facilitators.

Additionally, SAc calls for a deeper comprehension of the contextual elements influencing the participation incentives of citizens. Considering the limitation of the above model this study was also informed by SAc model by Baez-Camargo and Jacobs (2013). SAc according to Camargo and Jacobs (2010) entails at least three fundamental components: voice, enforceability, and answerability. Voice comprises a range of formal and informal channels by which individuals communicate their interests, views and opinions and seek accountability from power holders (UNDP, 2010). Enforceability applies to a condition in which repercussions are supposed to occur and be enforced when the mandate is not properly met. An important underlying factor that influences service providers' incentives to act more or less responsively toward the communities they serve is enforceability. Accountability, according to UNDP (2010), is the responsibility to provide an account and the right to receive a response. Answerability in this thesis could be interpreted as a voice evoking a response from the service provider or relevant authority.

Combining these three ideas, SAc calls for an engaged citizenry to speak up and have their voice heard by those who can enforce laws, leading to accountability from service providers and local government. For SAc to meet the prerequisites for a significant and long-lasting impact on the delivery of public services, all three elements (voice, enforceability, and answerability) must be present to some degree (Camargo & Jacob, 2011).

One of the main implications of this model is that encouraging citizens to express their voice does not suffice if that voice does not somehow reach the state and its

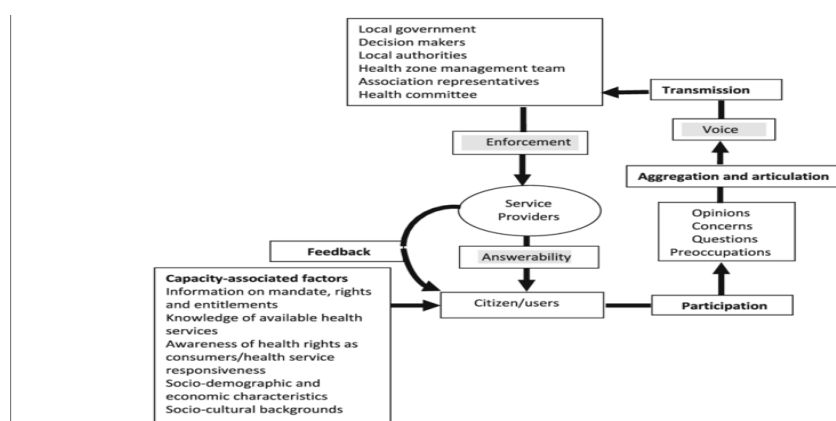
institutions because public service providers are, within contextual variations and different modalities, embedded in the institutional apparatus of the state. It is unlikely that a SAc exercise will produce noticeable results through participatory mechanisms if there is no channel available to affect service providers' incentives (i.e., raise the cost of subpar performance). Last but not least, answerability is necessary for the sustainability of direct accountability mechanisms, at the very least through feedback on how citizens' participation efforts have been handled and concerns addressed (Fox, 2015).

This framework aims to draw attention to both the elements that are crucial for fostering accountability at the local level and the significance of the interconnectedness of those elements, while acknowledging that reality is always complex and resources are limited. In order to ensure that people are aware of their rights and institutions, it is also necessary to make appropriate participatory programs available. It is essential to gather and articulate opinions into demands or statements that can be put into action. Simply asking citizens for their informed opinions is not enough. Additionally, having the right target audience and adequate transmission mechanisms are just as important as providing the conditions needed for citizens to exercise their right to voice. Therefore, even in the case of a successful participatory exercise, voice must be transmitted in a way that can have an impact on decision-makers' incentives in order for it to translate into more responsive government and service provision.

The framework presented here suggests that voice transmission should be made to those actors who have the power to directly affect the incentives that the concerned public officials or service providers face. This is not necessarily an easy question to answer. States typically involve intricate hierarchical and structural networks. As a result, it might be challenging to identify the appropriate decision-makers who are capable of acting on the information provided by SAc initiatives (Camargo & Jacobs, 2013).

Figure 2.4

Components and procedures for successful SAc initiatives



Source: (Camargo & Jacobs, 2013)

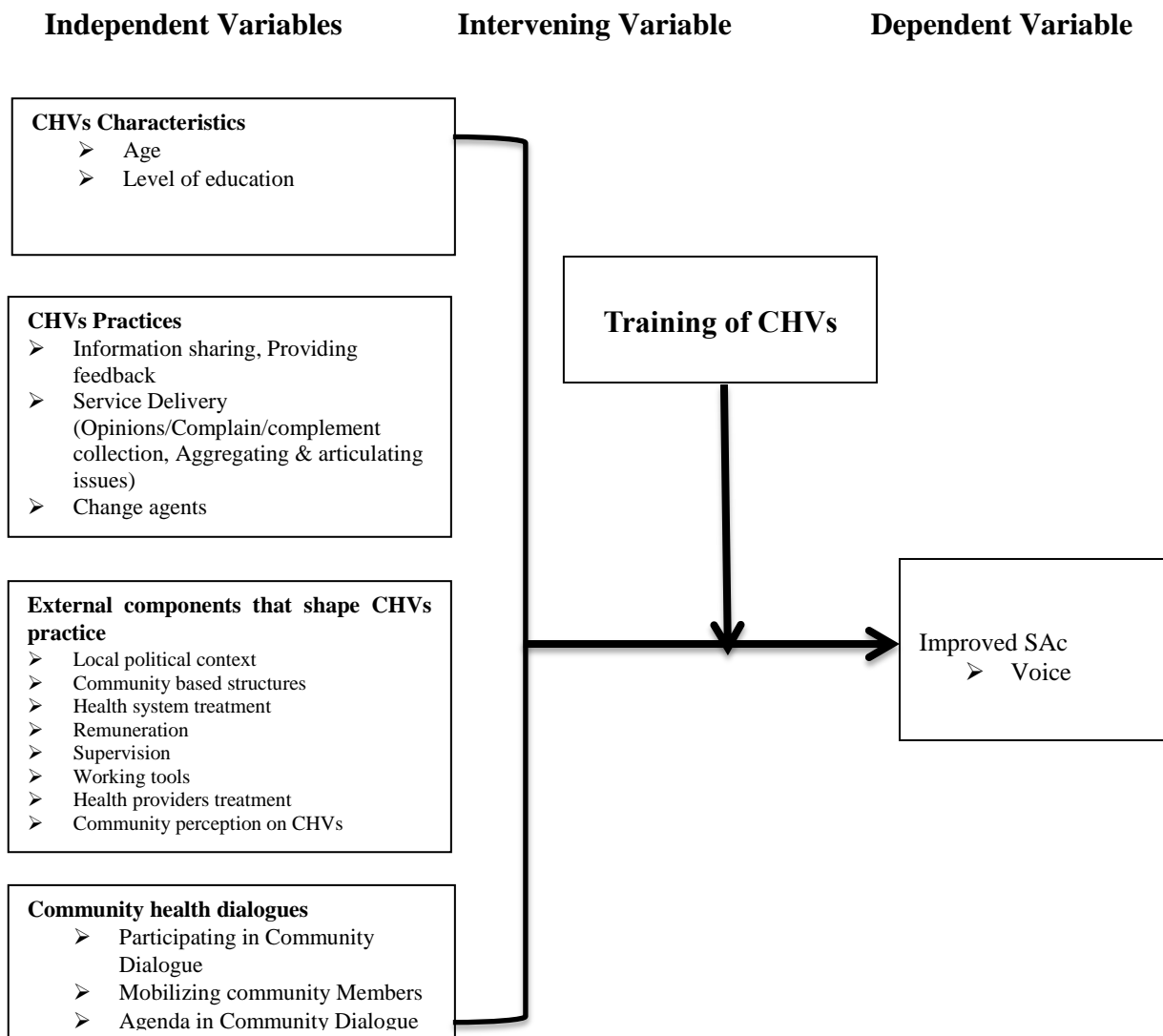
2.10 Conceptual Framework

This study was guided by a clear conceptual framework. The conceptual framework below was derived from aspects of short-route of accountability with alternate middle route of accountability where CHVs act as intermediary between the citizen/users and the health providers/ health system. The study also considered components of effective SAc which include voice, enforceability and answerability

by Camargo and Jacobs, (2013) whereby for citizen to be able to participate in SAc, they need to be capacity built on mandate, rights and entitlement.

Figure 2.5

Conceptual Framework



This study trained the CHVs on SAc with the aim that the CHVs will transfer the knowledge to the citizen/users through the existing structure and services like household visits, community dialogues and community meetings. Once the citizens are capacity built, they would be able participate by informing the CHVs on their opinions, concerns and questions. The study looked at the components that influence

CHVs practices on SAc. Literature has demonstrated how various factors, including CHVs' function in SAc, affect their performance. These factors included the local political environment, how CHVs interacted with other community-based structures, how the health system treated them, including supervision, incentives, and training, as well as how the community perceived the CHVs (Kok et al., 2017).

According to the framework by Camargo and Jacobs (2013), there have to be mechanisms of transmitting voice to the relevant authorities to initiate enforcement. These mechanisms can be through community dialogues, meetings with the relevant authorities with the aim of seeking enforceability and answerability. CHVs were expected to facilitate feedback to both the citizen/users and health system. The independent variables in this study were CHVs characteristics, CHVs practices in SAc, Contextual factors and community dialogue influence on SAc. The intervening variable was training of CHVs. The dependent variable was Social Accountability, by CHVs reporting complaints. The CHVs status of reporting complaints was assessed to measure its influence on social accountability.

2.11 Chapter Summary

SAc refers to extensive range of mechanisms and activities that citizens can engage in holding service providers accountable. The three components of SAc include voice, enforceability and answerability. For SAc to meet the requirements for a significant and long-lasting impact on the provision of services, each of the three components must be present to some degree. CHVs practices on SAc should aim in influencing these three components. The practises of CHVs include service

extenders, cultural brokers and social agents change. Local political context, interactions between CHVs and other community structures, health system treatment, including supervision, incentives, and training, as well as community perceptions of CHVs are some of the factors that influence CHV practices in SAc. Selection, support supervision, and on-going training of CHVs is crucial to their ability to perform their roles.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, ways of answering the research questions have been discussed. Reasons for the choices of these approaches have been highlighted. The section starts by presenting the study design, the study area; dependent and independent variable; the target population; the sample population; sample size determination; data collection tools and how the pre-test was conducted. Lastly, data analysis and ethical considerations of the study have been presented.

3.2 Study Design

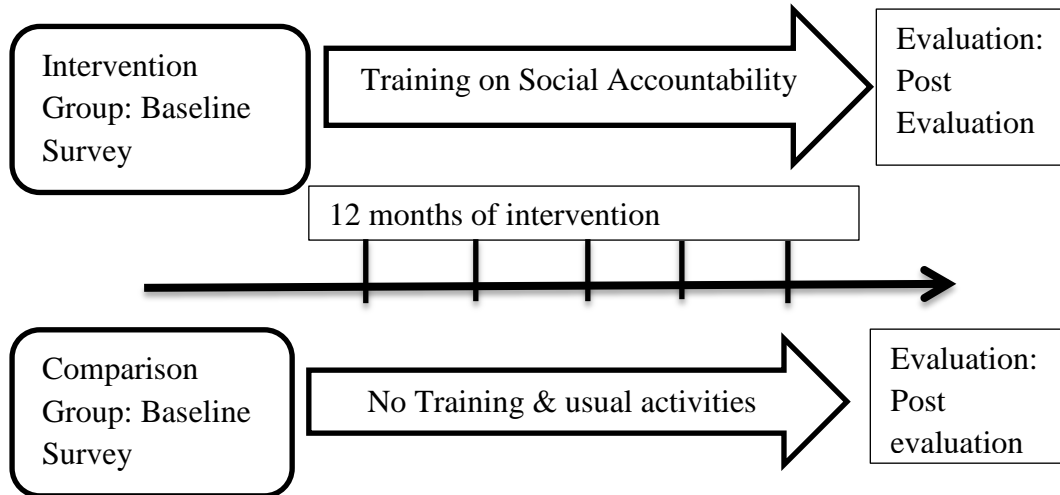
The research questions served as a guide for the study's design. This study used quasi-experimental study design. The study's design made it feasible to determine how the intervention influenced SAc. The dependent variable was measure before and after the intervention. The temporal precedence of the independent variable to the dependent variable was established by using both a pre-test and a post-test. Pre-testing was done to make sure the two groups were comparable before treatment, and post-testing allowed the researcher to evaluate the treatment's immediate effects on the outcome variable. Additionally, the researcher was able to measure between-group differences before the intervention by using a pre-test (Marczyk et al., 2005; Rodgers & Revesz, 2019).

The use of an existing participant group that received a treatment (training) and an additional participant group that served as a comparison group was a requirement for this study design. The participants were assigned to the treatment or control

conditions along with everyone else in their existing group, rather than random assignment, see (figure 3.1).

Figure 3.1

Study procedure



This study was multi-phased as described in the subsequent sections with phase 1 being needs assessment phase and phase two being the intervention. In that effect, it needed mixed method approach to assess the study objective.

3.2.1 Mixed Method Approach

Mixed method (MM) has gained popularity in recent years as a method in and of itself, with increasing applications in a variety of fields (Greene, 2008). Mixed method studies combine quantitative and qualitative research techniques into a one study (Tariq & Woodman, 2013). According to De Lisle (2011), MM is classified as either qualitative or quantitative domineering or absolute mixed approach. Mixed method approach's chosen modality has an impact on how the data is interpreted, conveyed, and ultimately integrated. In this study, data were gathered in both phases using a convergent parallel mixed method.

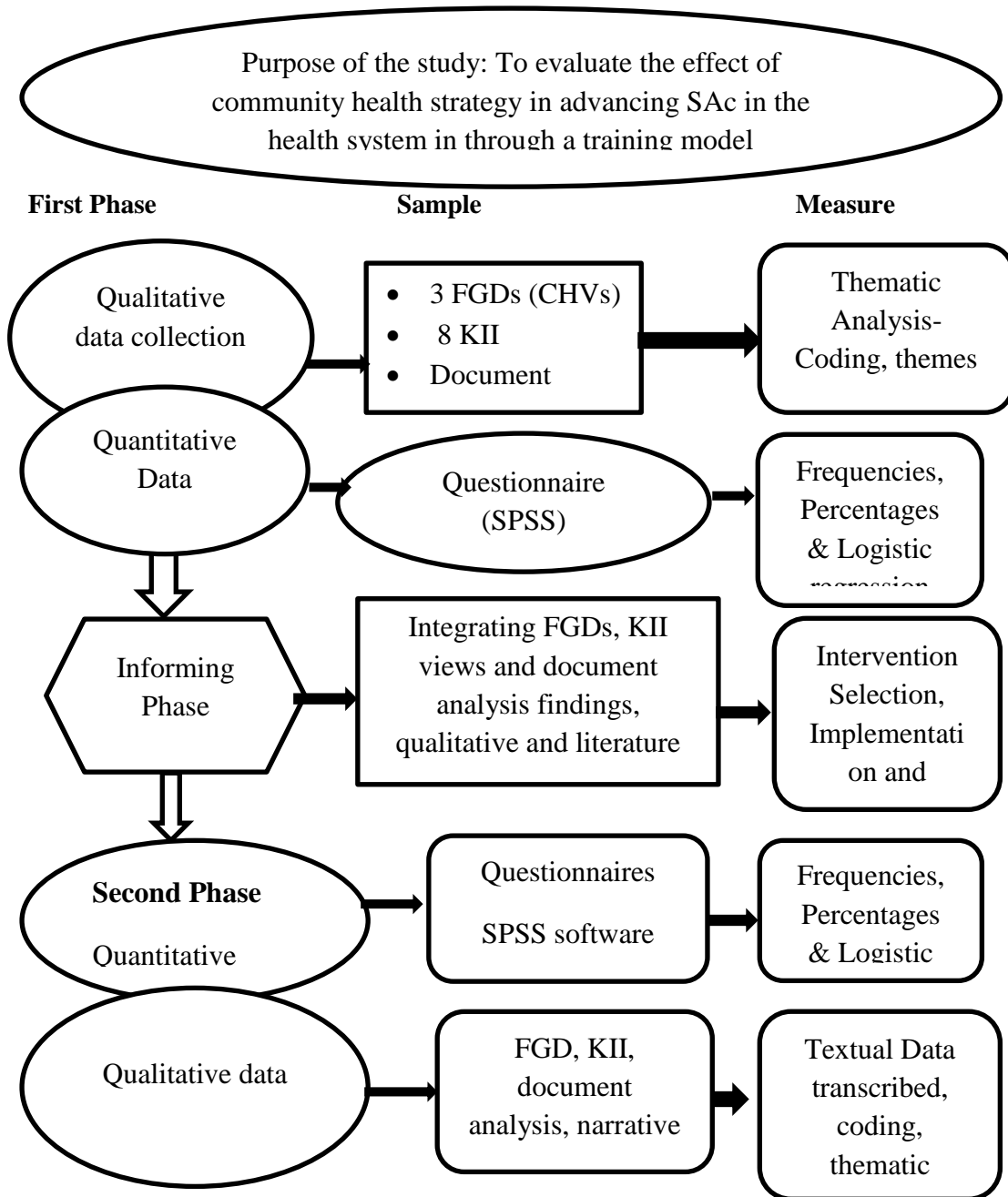
The pragmatism philosophical stance was adopted for this study. According to Creswell and Clark (2011) and Teddlie and Tashakkori (2009), pragmatism is frequently associated with mixed-method research, where the focus is on the implications of the research and the research questions rather than the methodology. As a research paradigm, pragmatism avoids addressing divisive metaphysical ideas like truth and reality. Instead, it acknowledges that there may be more than one reality, which is susceptible to empirical investigation (Creswell & Clark, 2011). According to Kaushik et al. (2019), pragmatism rejects the conventional philosophical dualism of objectivity and subjectivity and frees the researcher from the artificial dichotomies of constructivism and post-positivism (Creswell & Clark, 2011). Empirical methods are preferred in pragmatism over idealistic or rationalistic ones. Pragmatism instructs the researcher to concentrate on the two different approaches to inquiry rather than classifying post positivism and constructivism in two distinct ontological and epistemological camps (Morgan, 2014).

3.2.2 Rationale for using MMs in this Study

The collection and analysis of data using MMs in a mono research study has gained popularity (Tariq & Woodman, 2013). Due to the multiple objectives of this study, a convergence MMs framework was chosen while acknowledging theoretical inconsistency. In light of the research objectives and questions, which had intricate and chronologically related phases, and in accordance with the proof from research, a convergence mixed method approach was chosen as the most appropriate for addressing the research questions (Creswell & Plano, 2011; Tariq & Woodman, 2013; Venkatesh et al., 2013).

Figure 3.2

Mixed – Method Convergence Model design



Source: (Creswell & Plano, 2011).

In this case, both quantitative and qualitative data was collected and examined to determine the findings of the study.

3.2.4 Phase 1: Baseline Survey

Phase one of this study focused on conducting a needs assessment to gather opinions from CHVs and important community health stakeholders in Embakasi Central and North in Nairobi County. Together with the available evidence, their opinions influenced and improved the choice of training intervention. This study was participant-led to ensure that the needs and viewpoints of the population under investigation were taken into account. During this phase, data was collected both qualitatively and quantitatively as illustrated in figure 3.2. Perspective of CHVS and KII was collected during this phase. Document review was done to get more information on community dialogue and CHVs practices in advancing SAc. Views collected qualitatively and quantitatively helped in designing the training content and other aspects of the training intervention. The data collected in phase one informed the implementation of phase two.

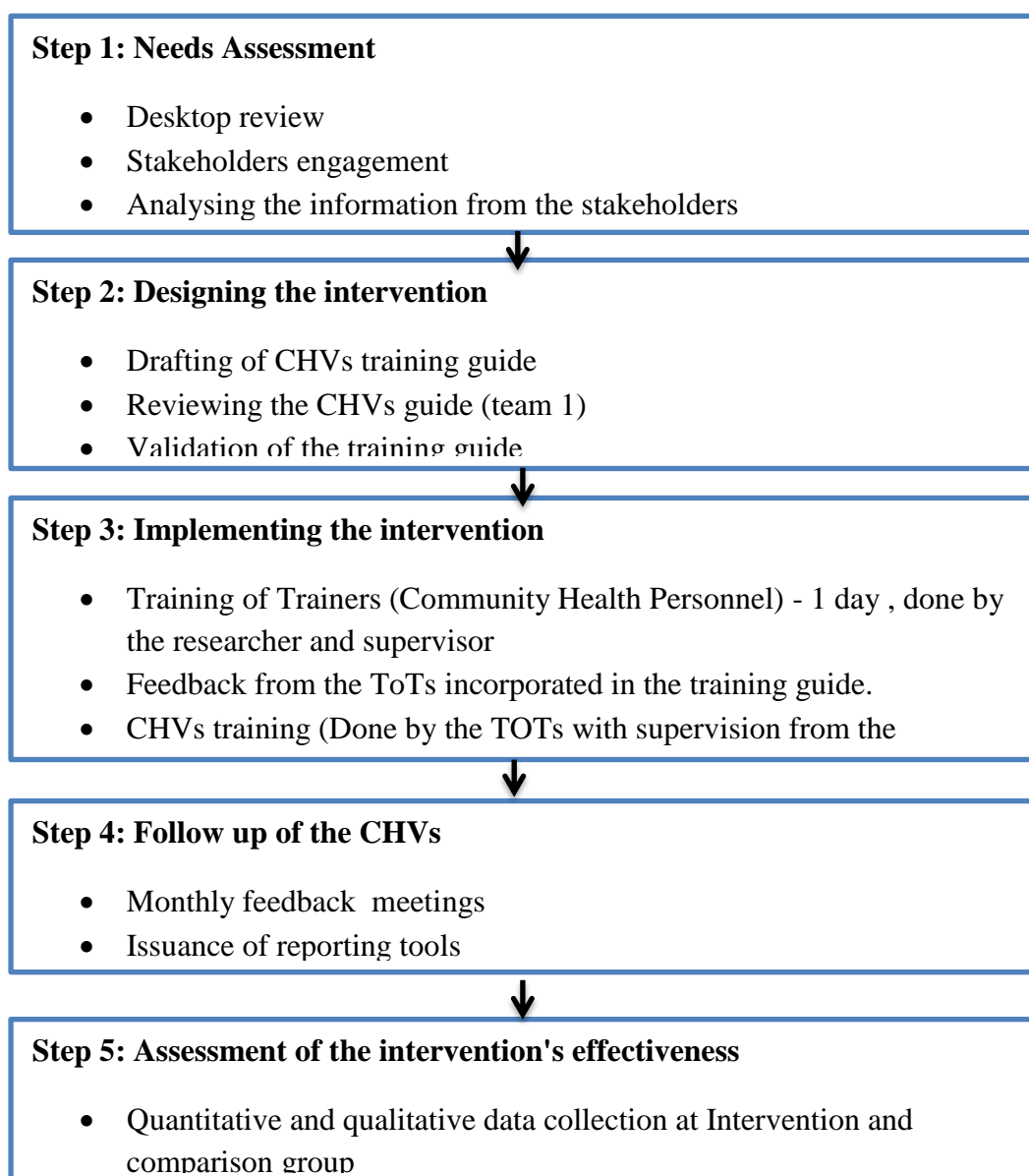
3.2.5 Phase 11: Intervention

The findings from phase one influenced the design and implementation of the intervention. The intervention was carried out in Embakasi Central over an eight-month period. The goal of the intervention phase was to introduce the training component to the intervention group. The designing and implementation of the intervention has been shown in figure 3.3. A needs assessment was conducted to identify social accountability gaps in community health systems. The study discovered a gap in CHV knowledge and practice of SAc during needs assessment. At the time of this study, further investigation revealed that there was no training manual or guide for training on social accountability to CHVs. This study focused on

the CHVs because of their linking role and frequent association with community members at the household. These findings provided an opportunity to identifying ways to strengthen the CHVs linking role. One method was to improve their knowledge of SAc, but there was no training guide to help fill this identified gap. As a result, the process of creating a training guide for CHVs in SAc was explored as shown in figure 3.3:

Figure 3.3

Steps of the Intervention



The training guide was developed in collaboration with the CHVs and key informants. In addition, stakeholders who are subject matter experts in the field were consulted and their feedback was taken into account. The SAc implementers manual and other reference materials were also used (MOH, 2015).

The training was customized to cater for the needs of the CHVs as identified during phase one. The intervention group and comparison group were used to test the internal validity for the training effect. The intervention group received SAc training and comparison group did not receive the training. The impact of training was assessed using one of SAc indicator (voice). An 8-month window was given to the CHVs to put their newfound knowledge and abilities to use. At the conclusion of the study, data were gathered in both groups using preliminary tools to determine how the intervention affected SAc advancement.

3.3 Study Area

The study was conducted in informal settlements in Nairobi County, Kenya. With a population of 4,397,073 and a land area of 703 sq. km, Nairobi represents the rapid urbanization and population explosion in sub-Saharan Africa. It had a population of 350,000 in the 1962 census, 3,375,000 in the 2009 census, and 4,350,000 in 2017 (Kigongo, 2012; Kenya National Bureau of Statistics [KNBS], 2019). There are 17 sub counties in Nairobi namely; Embakasi West, Embakasi East, Embakasi North, Embakasi Central, Embakasi South, Njiru, Ruaraka, Roysambu, Starehe, Makadara, Westlands, Kamkunji, Kasarani, Langata, Kibra, Dagoretti North and Dagoretti South. The most populated sub-counties are Embakasi (1,331,187), Kasarani

(1,043,876) and Njiru (828,034) (KNBS, 2019). This study was conducted in the CHU in Embakasi Central and Embakasi North.

In search of better living opportunities, Nairobi, Kenya's capital and largest city, has always been the main draw for various segments of the country's population from rural and urban areas. Therefore, Nairobi's rapid and uncontrollable population growth has led to the growth of informal settlements, with an estimated 58% of city residents living in slums (UN Habitat, 2010). Slums are characterized by extreme poverty, overcrowding, a lack of access to clean water, and exposure to STIs and HIV/AIDS (STIs) (Kigongo, 2012). These and other challenges experienced in informal settlements necessitate for having mechanisms that can enhance the voice of people living in slums. Empowering CHVs on strategies of raising concerns and bringing this health issues to the system can be one of the mechanisms of making the voice heard. According to a study done in a Nairobi informal settlement, female patients have been subjected to a variety of forms of mistreatment, including verbal and physical abuse, neglect, discrimination, abandonment, poor communication, and a failure by the healthcare system to uphold professional standards (Oluoch-Aridi et al., 2018).

In Nairobi County, there are reportedly 161 public, 543 private, 118 non-governmental, and 100 faith-based affiliated healthcare facilities. Only 35.2% of the inhabitants had access to the National Health Insurance Fund, and there were only 14 physicians and 53 nurses per 100,000 residents (MOH, 2015). There were 746 Community health Units, 7460 CHVs and 65 Community Health Assistants (CHA)

(Kenya Health Information System, 2020) that were spread across the informal settlement areas of the County. Epidemiological data in Nairobi County indicated only 60.4% of children were fully immunized (MOH, 2015) and informal settlement fully immunized children were 45% which fell short of the recommended 85% coverage (Kigongo, 2012). The mother-to-child transmission of HIV in Nairobi is 6.2% and compared to the whole country 8.5%. Tuberculosis TB prevalence is higher in Nairobi 405 than the country 208 per 100,000 people and incidence is 156 higher than country figures of 79 per 100,000 people (MOH, 2015). It is crucial to have monitoring mechanisms that ensure feedback from the community and health system because overpopulation can contribute to an overburdened health system. These reasons guided the selection of the area for this study, Embakasi Central and Embakasi North, Nairobi County, Kenya.

3.4 Target Population

The CHVs and Community Health Assistants (CHAs) in Nairobi County, Kenya were the focus of the study. The CHVs were selected from the community health units that were included on the study. During phase one the aim was to get inputs from key stakeholders in Community health on aspects of SAc therefore the target population was purposively selected. They included CHVs, Community health Assistants/ officers, health facility in-charges. Phase 2 of the study was informed by their opinions and contributions.

During the intervention phase, the community as recipients of healthcare services, CHVs and their supervisors were the target populations. The reason for this was that

these groups were directly involved in implementing community health mandates. The sub-county, public health facility and community health units that were included in the study were selected in consultation with the Nairobi County Health Management Team (CHMT) member. However, the CHUs that were selected were to be attached to high workload facilities according to reports in the KHIS, poor performance of some indicators like HIV adherence rate, low immunization rate, low ANC and skilled delivery coverage. The CHU where CHVs were selected from was to be functional and the CHV reporting on a monthly basis.

3.4.1 Inclusion Criteria

To ensure the study's success, the following criteria were used for inclusion because they were critical for the success of the intervention:

- 80% CHU completeness and timeliness of reporting rate
- CHVs reporting monthly and had 80% performance score in the previous reporting months, prior to commencement of the study
- CHU attached to high workload health facilities according to reports in the KHIS, poor performance of some indicators like HIV adherence rate, low immunization rate, low ANC and skilled delivery coverage and community units linked

3.4.2 Exclusion Criteria

This study used the following exclusion criteria because it was participant led, and the opinions of the health stakeholders mattered. Furthermore, as discussed in

previous chapters, women who used maternal and child health services were the most likely to share service experiences, which could affect their utilization practices:

- CHUs that the sub county health management team advised to be excluded
- CHUs attached to health facilities without maternal and child health services

3.5 Sample Population

The sample size for the CHVs at baseline was 90 per study site. The database where the sampling frame was created was accessed through the CHA. According to the community health services policy, a CHU has 10 CHVs and they each have 100 households in urban set up. A CHU consists of 1000 households of 5000 or so individuals. At baseline, eight Key Informants (KI) were interviewed and they comprised of (two CHAs, two Health Facility In-charges, one Sub-County Community Strategy Focal Person and 1 subject matter expert and one CHC member) they gave further input on the aspects of SAc. Focus group discussion that targeted CHVs of between 6-10 participants were conducted in both sites. A total of five minutes from previous dialogues meetings and 20 monthly reports from each site were reviewed.

At end of the study, the sample size for the CHVs was still 90 per study arm. Qualitative data was collected from seven key informants (two CHAs, one Health Facility In-charge, two CHVs, two-health client). One FGD was conducted at the intervention site. A total of two minutes from previous dialogues meetings were reviewed.

3.6 Sample Size Determination and Sampling Procedure

The sample size was determined using an appropriate sample formula as shown in the next section.

3.6.1 Sample Size Determination

The study sample size was calculated using the formula below, considering the formula is suitable for surveys as discussed by (Malone et al., 2016). Where:

$$n_p = \frac{1 (Z_{\alpha} + Z_{\beta})^2 s^2}{d^2} = \frac{1(1.96+0.84)^2 (50)^2}{(15)^2} = 87$$

n=sample size required from each of the two populations

1= Design effect of 1 for stratified sampling

Z_α= Standard normal deviate for level of probability (Z_{.05} is 1.96)

Z_β = Standard normal deviate for the probability of a type II error 0.842

S²=Variance of measurements (known or guessed) of 50%

d= (μ_A - μ_B) Smallest difference between means you wish to detect with probability of 1 - β

(15%)

- 3% of 87 was added to account for non-response. Total sample size 90

The sample size required from each of the two populations was 90 CHVs, which were distributed as shown in table 3.1:

Table 3.1

Distribution and Number of CHVs selected to participate in the study

Sub-County	No. of CHUs	No. of CHVs	No. of CHVs Selected
Embakasi Central	27	270	90
Embakasi North	20	200	90
Total	47	470	180

3.6.2 Sampling Procedure

The study focused on CHUs in the informal settlement in Nairobi. Two sub-counties out of 17 were selected purposively. This type of sampling directed the selection of participants who could provide the desired information because they had either the information required or they met the set criteria by the researcher (Martínez-Mesa et al., 2016). Embakasi North Sub-county was the comparison site while Embakasi Central Sub County was the intervention site. The results of the needs assessment determined the intervention and comparison groups. The sampled population for phase one consisted of CHVs, CHAs, Health Facility in charges and other professionals in community health.

Purposively sampling was significant in qualitative research. It was used to recruit individuals who knew about or had experience with the phenomenon being studied (Palinkas, 2015). The researcher used this strategy to select particular participants who were replete with the data needed to respond to the research questions. The CHVs who participated in the FGDs were selected with the help of the CHA. Key informants were selected based on rank and experience in the community health system.

The CHUs chosen to take part in the study for phase 2 were chosen using a stratified sampling technique. A process of stratification or segregation is used in stratified random sampling, after which subjects are randomly chosen from each stratum. In this study, CHUs represented the strata. In each CHUs simple random sampling was

used to select approx. 3 to 4 CHVs (intervention group) & approx. 4 to 5 CHVs (comparison group). The selected CHVs were invited to participate voluntarily.

3.7 Data Collection Instruments

In this study, both qualitative and quantitative data were collected. Given that almost all data collection methods have limitations, the use of mixed methods of data collection rendered rigor to this research.

Table 3.2

Research Instruments

No	Research Objectives	Data required	Methods
1.	To assess the influence of CHVs characteristics on SAc in the health system in Nairobi County, Kenya	Demographics (age, level of education, Marital Status, income) etc	Questionnaire (survey)
2.	To determine the influence of CHVs practices on SAc in the health system in Nairobi County, Kenya	Practices of sensitizing community, encouraging the community to talk, recording complaints, feedback from CHA and to clients, listening to complaints	Questionnaire, FGD guide, KI, Document analysis
3.	To determine the influence of contextual factor on SAc in the health system in Nairobi County, Kenya	Collaboration with chief, HFMC, Chief, Support supervision, provision of stipend, provision of reporting tools, respect from health providers & community trust	Questionnaire, FGD guide & KI
4.	To determine the influence of Community dialogues on SAc in the health system in Nairobi County, Kenya	Participating in community dialogues, mobilizing of community, documenting dialogues, stakeholders in dialogues, agenda in dialogues	Questionnaire, FGD guide, KI, Document analysis
5.	To evaluate the influence of training a model on SAc in the health system Nairobi County, Kenya	Number CHVs trained in Sac, Training gaps, CHVs reporting complaints, clients stories, correlation between training and the independent variables	Questionnaire, FGD guide & KI, field narrative (endline)

In this research data collected through questionnaires, focus group discussion, and key informant interview and document review were correlated with one another to give confidence about the goodness of data (Creswell & Clark, 2011). Data was collected using questionnaire, focus group discussion guide, key informant interview guide and document analysis checklist guided by the objective as shown in table 3.2.

3.7.1 Questionnaire

Questionnaire is the most preferred method because it can help in collecting both qualitative and quantitative data (Singh, 2006). The questionnaire was uploaded in a mobile application called Kobo collect (see appendix IV). It was interview administered through telephone interview. Due to the COVID-19 pandemic, using mobile application (kobo collect) and telephone interviews were the most appropriate methods that this research used. This helped the study adhere to the COVID- 19 measures and to continue without interruptions. The questionnaire took approximately 45 to 60 minutes to be administered. The questionnaire comprised closed ended questions with a few open ended questions to give comments on questions that were not exhaustively covered. Likert scale was the commonly used measure for response. Pretesting was done to confirm the participants understanding of the questions (Sekaran, 2003). The process of pretesting involved 30 CHVs from Makadara Sub-County.

3.7.2 Focus Group Discussion Guide

Focus group discussion guide was used see appendix 1V. Focus groups are critical in assessing the needs of targeted populations and have been influential in health and

social research (Heary & Hennessy, 2012; Leung & Savithiri, 2009; Liamputtong, 2011). In most occasions focus groups help in providing perception of people in a particular field of study, these contribute into insights why certain opinion and beliefs are held (Lobdell et al., 2005).

For a variety of reasons, FGD were used in this research. First, they were efficient and cost-effective in identifying various stakeholder perspectives (Leung & Savithiri, 2009; Onwuegbuzie et al., 2009). Second, the approach made it possible for the researcher to gather data on participants' overall perspectives as well as the meanings underlying their opinions, experiences, and fears (Tavener et al., 2016).

Specifically, focus groups were used to get views and information on practices and components that shape CHVs in advancing SAc as summarized in (table 3.2). Participants of the focus group discussion were selected purposively considering their capacity to provide the required information that is relevant to SAc. The number of participants was 6 and 10 per FGD. However, it was crucial to balance the sample size for the FGD so that it was both large enough to include a range of perspectives and intimate enough to allow for opportunities for expression (Fugard & Potts, 2015). This study conducted four FGDs targeting the CHVs.

3.7.3 Document Analysis

Document review was used to collect information on CHV practice of recording complaints/compliments and community dialogues. Review of community dialogue minutes and monthly reporting tools was done. The aim was to find out if the

community had any concerns and if they had been documented. Document review was used as a complementary data collecting procedure in support of triangulation. The document analysis process has been elaborated in appendix VII. The process involved checking the written and printed materials. To gain understanding of the information collected, the information was analysed and interpreted to gain context.

Like other qualitative study analytical methods, document analysis requires data to be analysed and interpreted in order to gain context, understanding, and the expansion of scientific knowledge (Bowen, 2009; Corbin & Strauss, 2008). Data from the KII and FGD were analysed along with data from the documents. The combination of various methods helped in reducing the possible biases that could have result in use of one method (Patton, 1990). Besides the later reason for choosing this method, reasons like time, cost and data availability were the reasons considered using this method to get more information (Bowen, 2009).

Thematic coding is used in document analysis, as it is in the analysis of focus group or interview transcripts (Bowen, 2009). Therefore, organizing a collection of quotes from printed works to support a particular thesis is not part of document analysis. Rather, it is a method of document analysis that produces empirical knowledge and advances understanding. Throughout the process, the researcher should strike a balance between objectivity and sensitivity.

3.7.4 Key Informant Interview Guide

Structured interview was used to conduct Key Informant Interviews (KII) (see appendix V). KIIs are qualitative interviews with knowledgeable individuals about a particular topic. These stakeholders include leaders of CHVs like CHAs, facility supervisors; sub-county and county level supervisors, members of groups working with communities and others. The purpose of KII was to collect information from a variety of people who had insider knowledge about the study topic (Tremblay, 2009). The experts chosen provided and offered insights on SAc gaps and gave recommendations. The goal of using of KII in this study was to obtain perceptions or experiences on CHS and its contribution in advancing SAc. The study interviewed eight key informants (KI) at baseline and seven KI at end line. The KII information was useful in co-creating the SAc training guide.

3.7.5 Field Narrative

To collect the experiences of the clients at the end of the study, the study used narrative research methodology. The aim was to explore and conceptualize the client's experiences in complaint handling. Stories were collected from two clients who had reported complaints to the CHVs so that the study could understand their experiences. Narrative research can be placed under qualitative research methodology. Narrative inquiry begins with experience as it is expressed in lived and told stories (Pinnegar & Daynes, 2007). Coding of data was used through deductive coding. Data was presented together with the effect of intervention in influencing social accountability.

3.8 Pretesting of Tools

It is crucial that the instrument used in a particular study be carefully created and tested before use. Pre-testing the data collection tools was done to make sure that any flaws were found and fixed as soon as possible (Hurst et al., 2015). This reduced the number of data errors that would have occurred during data collection. Pretesting for this study was conducted in Makadara sub-county as it was a non-participating sub-county and its neighbours Embakasi sub-counties. Pretesting involved 30 CHVs. The findings from the process were used to amend and finalize the questions. This process helped in ensuring reliability and validity in this study. In addition to pre-testing, the researcher used other more measures as explained in sections 3.8.1 and 3.8.2.

3.8.1 Reliability

The reliability of the data and findings is one of the primary requirements of any research process (Benkharafa, 2013). Reliability is the degree to which results can be repeated using a similar methodology, are accurate representations of the entire population, and are consistent over time (Golafshani, 2003). The study used a mixed approach to collect data, therefore reliability of the different methods was considered. The researcher explicitly described the various procedures and stages of the study to ensure reliability. Important study components, such as the study's purpose, design, and subjects, have been elaborated in this study.

To ensure dependability and conformability of qualitative data, audit trail and data triangulation were also used. Triangulation of data helped in ensuring reliability by collecting data from different sources. Audit trail of data collection, analysis, theme

development, and results have all been documented (Noble & Smith, 2015). This detailed information will help replicate the research and contribute to its reliability. By distributing the exact same questionnaire to the same respondents on two separate occasions, the questionnaires' reliability was evaluated. With the help of Cronbach's Alpha, the questionnaire's internal consistency was examined. Acceptable reliability scores were 0.7 and higher (Lobiondo-Wood & Haber, 2013; Shuttleworth, 2015).

3.8.2 Validity

When a research tool accurately captures the desired outcome, it is valid (Abowitz & Toole, 2010). The measurement process and the acquired data will contain systematic bias or error if an indicator is invalid. Through prolonged engagement, persistent observation, and data triangulation, validity in qualitative data was ensured. Prolonged engagement was observed when the participants were being interviewed. The researcher invested sufficient time to become familiar with the setting of CHVs work, asking follow up questions in case of misinformation and to build trust. Participants were asked to support their statement with examples and the interviewer asked follow up questions. Data triangulation was used by utilizing numerous different data collection techniques.

In this study, questionnaires, FGDs, KIIs, and document reviews were used to gather data. The variety of sources helped in confirming findings. The use of peer review was considered. Peer review entails use of individual who are not experts in the area of study to comment on research data and findings (Abowitz & Toole, 2010; Benkharafa, 2013). Persistent observation was ensured by the researcher constantly

reading and rereading the transcripts and revised the concepts appropriately. The researcher recoded and relabelled codes, concepts and core category.

Validity was also ensured by inviting research experts on the topic under study to help review the research instruments and data. Their reviews led to the revision of confusing and obscure questions as well as the rewording of challenging items. Ineffective and non-functioning questions were discarded. The researcher approached experienced experts who reviewed and commented on the questions and findings. The researcher also ensured collecting, analysing and interpreting data was done objectively as much as possible. The researcher being open-minded, critical, and consistent throughout the entire investigation accomplished this. By abiding by ethical guidelines, performing the assessment as accurately as possible, and reporting the findings honestly, the researcher made an effort to be as objective and transparent as possible throughout the research process (Abowitz & Toole, 2010; Benkharafa, 2013).

3.9 Data Analysis and Presentation

After data was collected the next step was to analyse data to extract meaningful information. The data from the questionnaires was coded and analysed using appropriate data analysis techniques used. The data collected comprised both qualitative and quantitative information therefore analysis techniques used were suitable for the respective techniques. These methods complemented each other, therefore minimizing limitations of one type of data.

3.9.1 Quantitative Analysis

Quantitative data was analysed using Statistical Package for the Social Sciences (SPSS Version 28). Data from the questionnaires was coded and cleaned before analysis. To describe the status of the dependent and independent variables for the intervention and comparison groups, descriptive statistics were generated for the baseline and end line. Descriptive statistics including percentages, frequencies, mean were used to summarize individual variable and find patterns. Chi-square test was used to show any significance difference between the groups. To the level of significance was measured by $p \leq 0.05$ (McHugh, 2013).

To help in choosing the appropriate inferential statistical method, test of normality was conducted. Shapiro-Wilk test was used and considered appropriate because of the small sample size. Shapiro-Wilk test results that were less than 0.05 were interpreted as indicating a significant deviation from the normal distribution (Ghasemi & Zahedias, 2012). For this study, the dependent variable was binary and therefore logistic regression was the most appropriate inferential statistic. To check model fitness, Nagelkerke R^2 and -2-log likelihood were used. The smaller the statistic of -2-log likelihood meant the model was better (Anisimova & Gascuel, 2006). This was used to compare the model fitness at baseline, and end line for both groups. In order to understand the impact of independent variables on the dependent variable, binary logistic regression was applied to all objectives. The following was the functional formula set:

$$P(Y_i) = \frac{1}{1 + e^{-(b_0 + b_1 X_i)}}$$

Where:

- $P(Y_i)$ is the predicted probability that Y is true for case i
- e is a mathematical constant of roughly 2.72
- b_o is a constant estimate from the data
- b_l is a b-coefficient estimated from the data
- X_i is the observed score on variable X for case i

Then, to draw conclusions about all the independent variables combined on the dependent variable, a multivariate logistic regression was conducted. The following is the functional formula:

$$P(Y_i) = \frac{1}{1 + e^{-(b_0 + b_1 X_{1i} + b_2 X_{2i} + \dots + b_k X_{ki})}}$$

Where:

- $P(Y_i)$ is the predicted probability that Y is true for case i
- e is a mathematical constant of roughly 2.72
- b_o is a constant estimate from the data
- b_1, b_2, \dots, b_k is a b-coefficient estimated from the predictor 1, 2, 3, ..., k
- $X_{1i}, X_{2i}, \dots, X_{ki}$ is the observed score on predictors X_1, X_2, \dots, X_k for case i

Odds ratios were calculated and used to draw conclusions about the impact of each independent variable on the dependent variable for both binary and multivariate logistic regressions. A p value was set at $p \leq 0.05$ because it was necessary to establish the relationships between the study variables.

3.9.2 Qualitative Data Analysis

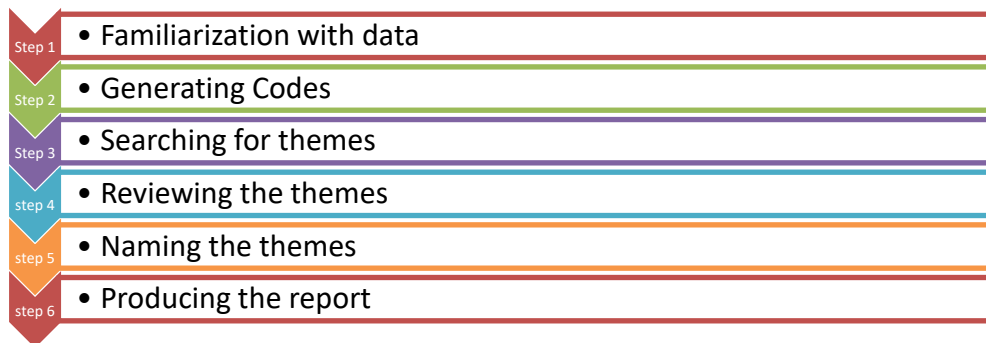
Thematic analysis was employed to analyse qualitative data. Analysing a text for themes involves finding concepts that are present. Any given dataset can be

subjected to thematic analysis to find and display meaningful categories or themes (Braun & Clarke, 2020; Butcher et al., 2001). This framework searches for relationships between categories as well as their connections to the bigger societal setting in which they either already prevail or are evolving (Onwuegbuzie et al., 2012). By arranging and describing data in detail through a predetermined series of steps, it interprets different facets of the research topic (Fugard & Potts, 2015). Thematic analysis is considered to be the most appropriate and systematic analytical strategy for any study that seeks to reveal phenomena through interpretations (Ibrahim, 2012). As a result, rather than just counting words or phrases, it concentrates on describing the identified inherent and clear and specific ideas because it places more emphasis on the content of texts than on how they were communicated (Barnett- Page & Thomas, 2009).

Qualitative data collected from FGDs, KII, document analysis and field narrative were transcribed into verbatim transcripts. Responses were coded into groups that are manageable, taking into account words with similar meanings, which forms themes. The researcher familiarized herself with the transcripts by repeatedly reading. This was a crucial stage because it enabled the researcher to read in between the lines so that the codes and patterns were located. After familiarization with the transcripts, the researcher prepared the initial codes as illustrated by figure 3 adapted from (Gibbs, 2018).

Figure 3.4

Steps of analysing qualitative data



Source: (*Gibbs, 2018*)

3.10 Ethical Considerations

The health facility and community units' ethical concerns, such as consent and information access, were taken into account. The National Commission for Science, Technology, and Innovation (NACOSTI), the Scientific Ethics and Research Committee (SERC) of Kenya Methodist University, and the Nairobi Metropolitan Health Department all granted permission before the study could begin. This made it possible for authorized access to all the data required for the research. The participants who voluntarily consented were involved. The information collected from the respondents was treated as confidential. By omitting participant names from the data collection tool and FGDs, confidentiality was ensured. The study's goal of fostering autonomy was explained to the respondents by the researcher. It was expected that once the participants accepted to join the study, they would cooperate fully in the baseline survey and intervention. The respondents were expected to be open and honest in their responses. As it is unethical to give information that is untrue (Sekaran,2003).

CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the study's baseline and end of study findings. Baseline findings were obtained at the start of the study and were used to design the second phase (intervention) of this study. Based on how they performed in social accountability aspects at the start of the study, this study chose Embakasi Central as the intervention site and Embakasi North as the comparison site. The reason for this included, but was not limited to, Embakasi Central demonstrating low social accountability knowledge and practice of providing feedback to the CHA and community in comparison to Embakasi North. The end line findings were collected from the intervention and comparison group.

As discussed in the previous chapter, the data was quantitative and qualitative at both phases. To collect data and interpret findings, a convergent mixed methods approach was used. As a result, quantitative findings were presented and integrated with qualitative findings to provide a comprehensive understanding of the findings (Creswell & Clark, 2011), which was followed by a discussion. The results are presented in the order of the study's objectives.

Quantitative data was analysed using descriptive statistics that is frequencies and percentages. The Pearson Chi-square test was used to determine the level of significance between the variables results attached in appendix (XIV– XIX). Inferential statistics were calculated using binary logistic regression, to demonstrate the effect of the independent variable on the dependent variable. To infer

relationships between the independent variables and the dependent variable, a multivariate logistic regression was used. The five-Likert scale was combined into a three-Likert scale for the purpose of inferential statistics. For example, objective two on CHV practices (always + often were combined= always, rarely + never= rarely) resulted in a three Likert scale of (Always, Sometimes and Rarely).

The transcribed data from four focus group discussions, 15 KII, field narrative, and minutes were analysed using a thematic framework, indexed by Atlas.ti 22 software. The main themes were the objectives of this study and the study yielded 23 subthemes (see appendix X). The descriptive analysis for each objective are presented and discussed first, followed by a section on inferential statistics. A summary of the results has been provided at the end of the chapter.

4.2 Response Rate and Reliability Test

4.2.1 Baseline Response Rate

Based on a sample size of 180 CHVs from Embakasi North and Embakasi Central, the baseline study had a response rate of 100%. In both groups, the use of telephone interviews contributed in a 100% response rate. In addition, there were three focus group discussions with 7 to 8 participants in each FGD resulting to 23 participants. Eight key informant interviews that comprised of three CHAs, two health facility in-charges, one SCCSC and 1 subject matter expert and one CHC member). A total of five minutes from previous dialogues meetings and 20 monthly reports from each site were reviewed.

4.2.3 End line Response Rate

The end line survey had 100% response rate, 90 CHVs from the Comparison (Embakasi North) and 90 CHVs from intervention group (Embakasi Central) based on the sample of 180 CHVs. At the end of the study, qualitative data was collected from seven key informants (two CHAs, one Health Facility In-charge, two CHVs, two-health client). One FGD of 8 participants was conducted at the intervention site.

4.2.4 Reliability Test

The findings' validity and reliability were guaranteed, as discussed in chapter three. However, the internal consistency of questionnaire items measured using a Likert scale was evaluated using Cronbach's Alpha. The Cronbach's Alpha values for each variable were all higher than 0.7, indicating internal consistency. The Cronbach's alpha results are shown in Table 4.1.

Table 4.1

Reliability Statistics

Variable	Cronbach's Alpha	No of Items
CHVs Practices	0.865	11
Contextual Factors	0.730	10
Community Dialogue	0.701	4

The data from the FGDs, KII, field narrative, and document review were transcribed and then analysed using a thematic framework, indexed by Atlas ti.22. The analysis yielded 23 sub-themes as shown in appendix X. The main themes were the objective of the study. This study adapted the convergence model of mixed method, therefore the data was analysed separately but interpreted and integrated during report writing.

4.3 Socio-demographics Characteristics of the Community Health Volunteers

The socio-demographic characteristics of the CHVs who took part in this study are presented in table 4.2. In both Embakasi Central and Embakasi North, there were 14 (15.6%) males and 76 (84.4%) females in both Embakasi Central and Embakasi North. In Embakasi Central, 36 (40%) of the CHVs were between the ages 40-49 years while 21 (23%) were between the ages of 30-39 years.

Only 7 (7.8%) were aged between 20-29 years and 8 (8.9%) were 60 years and above. In Embakasi North, 30 (33.3%) of CHVs were between the ages of 40-49 years, while 17 (18.9%) were between the ages of 30-39 years. In Embakasi Central 34 (37.8%) and Embakasi North 44 (48.9%), most CHVs highest level of education was secondary. Most of CHVs in Embakasi Central 37 (41.1%) and Embakasi North 44 (48.9%) had volunteered between 5 to 10 years. CHVs reported working 3 days per week on average, in Embakasi Central 43 (47.8 %) and Embakasi North 42 (46.7%). In the Embakasi Central and Embakasi North 66 (73.3 %) and 71 (78.9 %) of CHVs reported having a source of income, respectively. Most of CHVs 39 (59.1%) in Embakasi Central and 35 (49.3%) in Embakasi North, reported earning between ksh. 5000 and ksh. 9999.

Table 4.2*Socio-demographic Characteristics of Community Health Volunteers*

Variable	Embakasi Central		Embakasi North	
	(n=90)	(%)	(n=90)	(%)
Age				
20-29	7	7.8	8	8.9
30-39	21	23.3	17	18.9
40-49	36	40	30	33.3
50-59	18	20	29	32.2
60 and Above	8	8.9	6	6.7
Gender				
Female	76	84.4	76	84.4
Male	14	15.6	14	15.6
Level of Education				
Primary	32	35.6	31	34.4
Secondary	34	37.8	44	48.9
Tertiary Institution	24	26.7	15	16.7
Religion				
Christian	87	96.7	84	93.3
Muslim	3	3.3	6	6.7
Marital Status				
Divorced/Separated	10	11.1	8	8.9
Married/Living Together	61	67.8	64	71.1
Never Married	8	8.9	8	8.9
Widowed	11	12.2	10	11.1
Years Volunteered				
Less Than 5 Years	28	31.1	18	20
5-10 Years	37	41.1	44	48.9
More Than 10 Years	25	27.8	28	31.1
No. of Days Volunteered in a week				
1	0	0	2	2.2
2	31	34.4	32	35.6
3	43	47.8	42	46.7
4	9	10	13	14.4
5	7	7.8	1	1.1
Constant Income				
Yes	66	73.3	71	78.9
No	24	26.7	19	21.1
Monthly Income				
	(n= 66)		(n=71)	
Less than 5000	18	27.2	24	33.8
5000-9999	39	59.1	35	49.3
10000-14999	9	13.6	11	15.5
15000 and Above	0	0	1	1.4

According to the findings of this study, females outnumbered males. This was due to the nature of the work, which was voluntary and provided no or little compensation. Furthermore, men are more responsible in society for household income (Olang’o et al., 2010; Kok et al., 2016). These study's findings are consistent with those from Kenya and Ethiopia, where female CHVs outnumber males (Kok et al., 2016). In Mozambique, however, 71% of Agente Polivalente Elementar (APEs), who play similar roles as CHVs, are male. This is linked to the salary or subsidy given to APEs in Mozambique (Ndima et al., 2015).

4.4 Test of Normality

To ascertain whether the data was normally distributed or whether any assumptions were compromised, a normality test was conducted. The Shapiro-Wilk test was used because of the small sample size (Hanusz et al., 2016). Each of the five variables was subjected to the test, and p values were calculated for further interpretation. P values less than 0.05 were present for every variable, indicating that the data significantly deviated from a normal distribution. Logistic regression analysis was considered appropriate for inferential statistics (Hoffman, 2019). Table 4.3 displays these results.

Table 4.3

Normality Test

	Shapiro-Wilk		
	Statistic	df	Sig.
Y	0.373	180	<.001
X₁	0.434	180	<.001
X₂	0.395	180	<.001
X₃	0.625	180	<.001
X₄	0.451	180	<.001

Where;

Y_i is Dependent variable (Social Accountability)

X_1 is Independent variable (CHVs characteristics)

X_2 is Independent variable (CHVs Practices)

X_3 is Independent variable (Community Dialogue)

X_4 is Independent variable (Contextual Factors)

4.5 Social Accountability (Dependent Variable)

In this study, social accountability was measured by assessing the number of CHVs who reported complaints. Complaint reporting is an element of voice in social accountability. Prior to the study, 15 (16.7%) of CHVs in Embakasi North and 11 (12.2%) in Embakasi Central reported complaints. These findings showed that Embakasi North CHVs reported more complaints than Embakasi Central. However, when compared to the total number of CHVs interviewed, the number of CHVs reporting complaints was small in both groups. The reason for poor performance of CHVs as reported during FGDs and KII was associated with, but not limited to, a lack of training on SAc, unclear communication on formal channels of complaints handling and the absence of indicators in official community MOH reporting tools that target complaints.

CHVs in the intervention group (Embakasi Central) received social accountability training. At the end of the study, the number of CHVs in the intervention group reporting complaints increased to 57 (63.3 %), while only 12 (13.3 %) of CHVs in the comparison group reported complaints. Training was supplemented by supportive supervision and the distribution of reporting tools with complaint and compliment indicators.

Table 4.4*CHVs Reporting Complaints*

Variable	Embakasi North (n=90)		Embakasi Central, n=90	
	Baseline	End line	Baseline	End line
CHVs Reporting Complaints				
Yes	15 (16.7%)	12 (13.3%)	11 (12.2%)	57 (63.3%)
No	75 (83.3%)	78 (86.7%)	79 (87.8%)	33 (36.7%)

4.6 Training

Prior to the study, findings indicated none of the CHV in the intervention group had been trained on social accountability. Only 1 (1.1%) of the CHV in the comparison group reported having received social accountability training. The CHV was trained by the department of social justice. The intervention was designed to train all of the CHVs in the intervention group except those in the comparison group and the findings are shown in table 4.5.

Table 4.5*Number of CHV trained in Social Accountability*

Variable	Intervention Group		Comparison Group	
	Baseline n=90	End line n=90	Baseline n=90	End line n=90
CHV trained in SAc				
No	90 (100%)	0	90 (98.8%)	90 (98.8%)
Yes	0	90 (100%)	1 (1.1%)	1 (1.1%)

The intervention group was given pre-test and post-test to assess CHV knowledge gains and training effectiveness. Appendix viii, shows the results of the pre and post training tests, which consisted of an 18-question survey administered immediately before and after the training session. After training, overall test scores improved significantly, pretest mean score= 48.2, SD = 9.59; posttest mean score = 71.1, SD =

9.36; $p < 0.001$). Appendix IX summarizes the individual pretest and posttest scores. Since there was limited documentation of the CHVs social accountability training intervention, the study compared its findings to other CHVs training interventions to see if there was an increase in knowledge. The findings presented above are consistent with previous research on training CHVs. For instance a study on CHWs breast cancer training intervention by Rodrigues et al. (2020) found a significant increase in the test scores with a mean = 32.9, SD = 4.16 at pretest and mean = 39.7, SD = 1.45; ($p < 0.001$) at posttest. All CHVs in their study improved with at least 2 to 22 points (a mean difference of 6.8 points and SD = 4.8).

Similarly, Siongco et al. (2021) found a significant difference in CHWs attitude towards health care teams scale scores between pretest and posttest in the intervention (mean = 6.3, SD = 8.3) and comparison groups (mean = 0.7, SD = 8.2). Similarly, Gu et al. (2019) found that training CHW on mammography screening guidelines increased screening knowledge mean scores from 1.3 to 1.9 on a 2-point scale ($p = 0.01$). The findings above imply that training CHVs in specific areas of their work has the potential to increase their knowledge, which can lead to improved skills.

4.7 The Influence of Community Health Volunteers Practices on Social Accountability

Prior to the study, 46 (51.1%) of CHVs in the intervention group always sensitized the community, 27 (30%) sometimes and 17 (18.9%) rarely sensitized the community on their health rights and entitlement. The results were similar in

Embakasi North, where 46 (51.1%) of CHVs always sensitized the community, 31 (34.4%) sometimes and 13 (14.4%) rarely sensitized the community on health rights and entitlement as shown in table 4.6. Appendix XIV shows the chi-square results. The study sought to determine whether CHVs specifically inform community members about their roles in health service delivery. As shown in table 4.6, at the start of the study, a few CHVs in both intervention and comparison group reported to always 22 (24.4%) and 4 (3.3%), respectively, inform community members on their role in service delivery.

The reasons given by participants in the FGD and KII supported the finding of few CHVs reporting complaints. For example, as quoted below, a lack of adequate and correct information on rights by CHVs was cited as contributing to low practice:

“...we have not been trained in patient rights, and it is difficult to speak on something you are unsure....” (FGD, Female, Intervention group)

“...not only CHVs, but also the majority of CHAs, have received no training on Sac and health-related rights, which may affect their performance...” (KI, Male)

As shown in table 4.7, the proportion of CHVs who reported always sensitizing the community on health rights was 55 (61.1%) in the intervention group and 41 (45.6%) in the comparison group, at the end of this study. Furthermore, 78 (86.7 %) of the CHVs in the intervention group always provided the community with information on

their roles in improving service delivery, compared to 13 (14.4 %) in the comparison group. KII findings showed that capacity building on rights and entitlement made

Table 4.6

Baseline Findings of CHVs Practices in Social Accountability

Variable			
CHVs Practices	Comparison Group(n=90)	Intervention group (n=90)	P Value *
Sensitizing the community on health rights			
Rarely	13 (14.4%)	17 (18.9%)	<.001
Sometimes	31 (34.4%)	27 (30%)	
Always	46 (51.1%)	46 (51.1%)	
Inform the community on their roles in service delivery			
Rarely	52 (57.8%)	40 (44.4%)	0.04
Sometimes	34 (37.8%)	28 (31.1%)	
Always	4 (3.3%)	22 (24.4%)	
Encouraging communities to speak up			
Rarely	1 (1.1%)	2 (2.2%)	0.191
Sometimes	22 (24.4%)	28 (31.1%)	
Always	67(74.4%)	60(66.7%)	
Listening to complaints			
Rarely		2 (2.2%)	0.219
Sometimes	16 (17.8%)	11 (12.2%)	
Always	74 (82.2%)	77 (85.6%)	
Recording complaints and compliments			
Rarely	66 (73.3%)	64 (71.1%)	0.079
Sometimes	24 (26.7%)	19 (21.1%)	
Always		7 (7.8%)	
Reporting clients complaints to the CHA			
Rarely		8 (8.9%)	0.178
Sometimes	22 (24.4%)	29 (32.2%)	
Always	68 (75.6%)	53 (58.9%)	
Reporting clients complaints to the health facility in charge			
Rarely	50 (55.6%)	33 (36.7%)	

Variable			P Value *
CHVs Practices	Comparison Group(n=90)	Intervention group (n=90)	
Sometimes	40 (44.4%)	57 (63.3%)	0.008
Always	0	0	
Follow up clients concerns			
Rarely	1 (1.1%)	14 (15.6%)	0.136
Sometimes	44 (48.9%)	32 (35.6%)	
Always	45 (50%)	44 (48.9%)	
Feedback from the CHA			
Rarely	5 (5.6%)	16 (17.8%)	0.001
Sometimes	25 (27.8)	28 (31.1%)	
Always	60 (66.7%)	46 (51.1%)	
Feedback from the health facility in charge			
Rarely	50 (55.6%)	33 (36.7%)	0.008
Sometimes	40 (44.4%)	57 (63.3%)	
Always		0	
Feedback to the client			
Rarely	2 (2.2%)	17 (18.9%)	0.008
Sometimes	21 (23.3%)	26 (28.9%)	
Always	67 (74.4%)	47 (52.2%)	

*Chi-square test

CHVs in the intervention group to have confidence to educate the community as quoted below:

'... Previously, I lacked the courage to educate the community about their rights, but now that we have been trained... I always tell them about their health rights and how they can help improve service delivery....' (KI, Male)

Table 4.7

End line Results CHVs practices in Social Accountability

Variable	Comparison (n=90)	Intervention (n=90)	P Value*
CHVs Practices			
Sensitizing the community on health rights			
Rarely	12(13.3%)	7 (7.8%)	<.001
Sometimes	37(41.1%)	28(31.1%)	
Always	41(45.6%)	55 (61.1%)	
Inform the community on their roles in service delivery			
Rarely	34 (37.8%)	0	0.004
Sometimes	43 (47.8%)	12 (13.3%)	
Always	13 (14.4%)	78 (86.7%)	
Encouraging communities to speak up			
Rarely	1(1.1%)		<.001
Sometimes	30 (33.3%)	33 (36.7%)	
Always	59 (65.6%)	57 (63.3%)	
Listening to complaints			
Rarely			0.271
Sometimes	18 (20%)	7 (7.8%)	
Always	72(80%)	83(92.2%)	
Recording complaints and compliments			
Rarely	52 (57.8%)	0	<.001
Sometimes	30(33.3%)	39(43.3%)	
Always	8(8.9%)	51 (56.7%)	
Reporting clients complaints to the CHA			
Rarely	1 (1.1%)		0.196
Sometimes	29 (32.2%)	13 (14.4%)	
Always	60 (66.7%)	77(85.6%)	
Reporting clients complaints to the health facility in charge			
Rarely	41 (45.6%)	5 (5.6%)	0.124
Sometimes	42(46.7%)	46 (51.1%)	
Always	7 (7.8%)	39 (43.3%)	
Follow up clients concerns			
Rarely	5 (5.6%)	2 (2.2%)	0.935
Sometimes	46 (51.1%)	19 (21.1%)	
Always	39(43.3%)	69 (76.7%)	
Feedback from the CHA			
Rarely	37 (41.1%)	5 (5.6%)	<0.001
Sometimes	41 (45.6%)	41 (45.6%)	

Variable	Comparison (n=90)	Intervention (n=90)	P Value*
CHVs Practices			
Always	12 (13.3%)	44 (48.9%)	
Feedback from the health facility in charge			
Rarely	40 (44.4%)	5 (5.6%)	
Sometimes	43 (47.8%)	46 (51.1%)	0.614
Always	7(7.8%)	39(43.3%)	
Feedback to the client			
Rarely	1 (1.1%)		
Sometimes	24 (26.7%)	21 (23.3%)	<.001
Always	65 (54.4%)	69 (76.7%)	

*Chi-square test

Community members' understanding of their rights and obligations affects their capacity to voice their concerns (Camargo & Jacobs, 2011), which is based on interpersonal communication and sensitization carried out by actors such as CHWs (Mafuta et al., 2017). Communities are generally unaware of their health rights and entitlements, according to studies, which have been conducted (Mahmood, 2020), presenting an opportunity for CHVs to fill this knowledge gap. According to Kane et al. (2016), empowered CHVs will be better able to empower the communities they work with. Furthermore, empowering CHVs would improve their performance and allow them to realize their potential as social change agents (Schaaf et al., 2020).

CHVs' practice of sensitizing the community about health services and the importance of reporting concerns was also discovered in Nepal, the Democratic Republic of the Congo, and India (Hamal et al., 2018, 2019; Mafuta et al., 2015, 2017). In India, community empowerment on health rights contributed to increased use of services and the ability of health clients to seek help (Hamal et al., 2018). Similarly, Mafuta et al. (2015) identified CHVs' lack of awareness on rights as a

limitation to their role, resulting in information and knowledge asymmetry. This study finding, which is supported by other studies, emphasizes the importance of arming CHVs with health-related information so that they can pass it on to the community.

Initially, 60 (66.7 %) of CHVs in intervention group reported encouraging community members to always speak up about health-care concerns, compared to 67 (74.4 %) to the comparison group. The practice of CHVs listening to client complaints was also evaluated. The majority of CHVs in intervention group 77 (85.6 %) always listened to clients, compared to 74 (82.2 %) in comparison group. Moreover, discussions emphasized the importance of CHVs first learning about health rights so that they can encourage community members to speak up, as quoted below:

“...It will be easier to encourage the community to speak up if we know the rights to health...” (FGD, Female, Intervention group)

At the completion of the study, 57 (63.3%) of the CHVs in the intervention group reported encouraging community members to speak, compared to 59 (65.6%) in the comparison group. The burden of CHVs having to follow up on complaints they had reported could have contributed to the slight decrease in practice in the intervention group. During the intervention, there was a focus on CHVs following up on complaints. The intervention group participants confirmed that they actively sought feedback from health clients at the household rather than passively relying on them

to speak up, as was the case during baseline data collection, as shown in the quote below:

“..we questioned patients about their satisfaction with the care they received at the medical facility when we visited them at home. This enabled us identify the strengths and weaknesses of our facilities and those of service providers....” **(KI, Male, intervention group)**

Voice as a component of social accountability is realized when communities are able to speak up about complaints or compliments, particularly when they are aware of their rights and entitlements. Mafuta et al. (2017) study also showed that during home visits, healthcare providers gave women the chance to voice any complaints or concerns. Nandi and Schneider (2014) reported similar findings on CHWs in India who listened and mobilized the community to demand rights and entitlements. These studies support this study's findings that the use of CHVs and household visits can be appropriate and significant avenues for gathering feedback from health clients. As a result, it is critical to create data collection tools that can aid in this process. In contrast, Saprii et al. (2015) discovered that ASHAs were mostly encouraged to achieve health targets such as immunization coverage and institutional delivery when compared to their advocacy role. Over-prioritizing the role of CHVs in bridging service delivery gaps over advocacy roles may result in the voice of community concerns being overlooked.

Prior to the study, 64 (71.1%) of CHV in the intervention group reported to rarely, 19 (21.1 %) sometimes, and 7 (7.8 %) always recorded complaints. In the comparison

group 66 (73.3 %) of CHVs reported to rarely and 24 (26.7 %) sometimes recorded complaints. The practice was poor in both sub-counties. The findings were consistent with those from the document review, in which the MOH 514 and MOH 515 were checked and there was minimal evidence of any complaint or compliment documented. The results from focus groups discussions and the KII attributed low documenting of complaint and compliments to lack of designated complaint and compliment indicators in the MOH 514 and MOH 515 reporting tools, as shown below:

“Unfortunately, the Community MOH reporting tool lacks indicators for complaint and compliment collection; therefore, gathering this information cannot be accomplished simply by looking at our reporting tool.” (KI, Female, Intervention group)

These study findings prompted suggestions to modify or revise the 'MOH 514' and 'MOH 515' to include complaint and compliment indicators, which was adapted during the intervention phase, as shown below:

“We can have a column in our service logbook (MOH 514) for complaints or compliments from that household”. (FGD, Female, Intervention group)

A significant increase in the number of CHVs always recording complaints in the intervention group was observed compared to the comparison group, at the end of the study. Only 8 (8.9%) of CHVs in the comparison group reported always recording

complaints, compared to 51 (56.7%) of CHVs in the intervention group. Additional findings revealed the benefits of recording complaints as quoted below:

'....since the CHVs started recording complaints, we have been able to observe what are the common challenges in our health facilities...this has helped us work on them seriously compared to when told verbally.. It is difficult to ignore what has been recorded....' **(KI, Female, Intervention group)**

At the beginning, the CHVs practice of recording complaints and compliments was very low in both study areas. Discussions revealed that verbal reporting was commonly used to express concerns from the community. Lack of complaint and compliment indicators on the Ministry of Health community reporting tools was one of the reasons for no documentation. When health concerns are not documented, they may have an impact on accountability because health authorities will lack a reference point for information. Documenting complaints and compliments can help in tracking health concerns and how they are handled. Evidence of this study on documenting complaints corroborate with those from DRC (Mafuta et al., 2017) and Nepal (Gurung et al., 2017). Their studies established that by not having proper systems for recording and analysing complaints resulted to community concerns not being addressed. A study in India (Nandi & Schneider, 2014) established that CHWs' practice of submitting written complaints to officials for action improved how health authorities handled issues that could not be resolved through mediation.

Studies have proposed the need for instruments that allow for more systematic data collection and documentation after identifying gaps with HFC collecting complaints and getting lost due to documentation (Lodeistein et al., 2017). A good documentation system that enables systematic methods of collecting, analyzing and responding to complaints and compliments is required for effective use of this data. Complaints must be documented in order to understand the frequency and nature of complaints (Gal & Doron, 2007; Ha BTT et al., 2015), increasing the community's voice in health-care management significantly. Documentation will also demonstrate which mechanisms are more suitable and effective (Gurung et al., 2017).

At the beginning of this study, the practice of CHVs reporting complaints and compliments for action was evaluated. In the intervention group, 53 (58.9%) of CHVs always reported clients concerns to the CHA, 29 (32.2 %) sometimes and 8% rarely report clients concerns to the CHA. In the comparison group, most of the CHVs 68 (75.6%) always and 22 (24.4%) sometimes reported clients concerns to the CHA. From the findings, comparison group CHVs were doing better in this practice compared to intervention group. This could have been because of the relationship between the CHA and the CHVs. Better relations could encourage CHVs to be free and report issues to their supervisor.

Further comparison on who the CHVs reported complaints to, baseline findings revealed that the CHVs preferred to report complaints to the CHA than the facility in charges as summarized in table 4.6. These results were attributed to the direct supervisory role by CHA's. The CHVs cited a lack of awareness on the *formal*

complaint handling channel' and *'fear'* of conveying complaints as the reason of inadequate reporting of complaints and compliments, resulting in some of them *'keeping quiet,'* as stated below:

"...you just keep quiet...You can't face that man (health care provider)..."

(FGD, female, Intervention group)

"...I'd say we're not aware of any productive channels for reporting complaints..." **(FGD, male, Comparison group)**

At the end of the study, 77 (85.6 %) of CHVs in the intervention group revealed to always report complaints to the CHA compared to 60 (66.7 %) in the comparison group. The findings of the focus groups at the intervention site demonstrated that CHVs understood why they should report complaints. They agreed that being aware of complaints but failing to report them for action could contribute to services that are ineffective in meeting the needs of clients, as well as affecting the voice and enforceability of complaints and compliments. As stated below, CHVs demonstrated efforts to ensure that all complaints and compliments were forwarded:

"...since we agreed to channel community concerns to the CHA, it became easier for me to collect community concerns..." **(FGD, Male, Intervention group)**

These study findings showed inconsistency in CHVs practice of reporting complaints and compliments to the CHA or facility in- charge for action. The reasons could have been lack of awareness on formal channels of complaint handling and fear by the CHVs. Communicating to CHVs on formal channel of complaint and compliment handling mechanisms in the community health system, would help in ensuring there is a standardized and systematic way of handling community concerns of the health system. It was noted in DRC a lack of formal systems at local health centre's or a representative of the populace who could bring up complaints or concerns to healthcare professionals (Mafuta et al., 2017). Additionally, their study revealed that community groups lacked the skills and capacity to voice their objections or put pressure on government officials or healthcare professionals.

According to Gurung et al. (2017), power disparities were a frequent justification for not filing a complaint, and the general public saw service providers as well-paid, respected members of society. Prior to the study, 67 (74.4%) of CHVs in comparison group reported to always provide feedback to clients on issues reported compared to 47 (52.2%), in the intervention group as illustrated in table 4.6a. CHVs stated that feedback was only possible if the CHA or facility in charge was willing to share information about the action taken after a complaint or compliment was submitted:

"...we respond to client complaint if the CHA or facility in charge informs us of the action they have taken to resolve the issue....." **(FGD, Female, Intervention group)**

Another issue that CHVs faced when dealing with complaints was ' *fear of discrimination,*' because some complaints involved health providers. CHVs were afraid of being excluded from activities that provided a token. This was exemplified by the following quote:

"...the fear that CHVs have is that if they speak up, they will be discriminated in activities that have a monetary reward, such as a stipend..." **(KI, Male, Intervention group)**

At the end of this study, 69 (76.7%) of CHVs in intervention group reported to always provide feedback to the clients compared to 65 (54.4%) in the comparison group. The intervention group findings collaborated with KI findings where they acknowledged giving positive feedback to the clients resulted to them opening up. This increased their power to collect concerns as illustrated below:

"...for the past few months we have been happy because the concerns we raise are looked into and we have positive feedback to give to clients..." **(FGD, Female, Intervention group)**

"...we are not scared of collecting more complaints because the facility in charge is willing to address them..." **(FGD, Female, Intervention group)**

Findings from this study showed that not all CHVs provided feedback to clients after they had raised a complaint. The decision to provide clients with feedback was

dependent on if the CHVs were informed on action taken after the complaint was raised. The findings demonstrated lack of formal complaint handling mechanisms with clearly defined feedback loops in the community and facility systems. Feedback is an important component of social accountability because it could increase customer satisfaction (Lodeinstein et al., 2018) and enhance enforceability and answerability (Camargo & Jacobs, 2011). Communication of citizen feedback to relevant actors or decision-makers who can act on the information or who might incur costs as a result of the information is necessary (Camargo & Jacobs, 2011; Pieterse, 2019). To ensure that reported issues are taken into account and that action is taken to address them as they arise, well-functioning feedback loops require a response capacity (which can be improved through social accountability). Ideally, relevant higher authorities should regularly communicate with frontline service providers about resolution plans and timelines (Pieterse, 2019).

Feedback to the health system and clients can promote transparency, performance, fairness and respect especially by the health providers (Ho et al., 2015). Positive feedback provided directly by the clients or indirectly through intermediaries to the health providers can elicit feelings of happiness and accomplishment. However, negative feedback, on the other hand, elicits feelings of incompetence and demotivation (Lodeinstein et al., 2018). Whichever the outcome, the benefits outweigh the risks; therefore, social accountability mechanisms should strengthen the feedback component. Social accountability strategies can enhance the responsiveness of service providers to the needs of service users and their comprehension of the difficulties they face, promote better government-citizen relations, and offer

insightful feedback on the state of basic service delivery in a particular nation (Fox, 2015).

As shown in table 4.8, participants made suggestions of improving complaint and compliment handling mechanisms. Other findings in this study not directly related to the research objectives but were considered important by the researcher were the functionality of suggestion boxes. Suggestion boxes provide anonymity and can help to prevent victimization therefore can be an alternative mechanism for clients to air their concerns.

However, participants acknowledged that most suggestion boxes are inoperable due to a lack of essentials such as *"paper and pen,"* and that some community members in informal settlements are unable to *"write."* In addition, some health care facilities do not have suggestion boxes. As seen in the following quotations, some participants were unsure whether those suggestion boxes were opened, concerns addressed and clients given feedback:

"...I've worked and lived in this community for over 20 years, and most people, especially women, are unable to write, making it difficult to use a suggestion box..." (FGD, Female, comparison group)

Table 4.8*Suggestion of improving complaints and compliments handling*

Suggestion	Quote
Training on social accountability	<i>“Capacity for social accountability is not up to standard; we need training on how to handle complaints in order to avoid side conversations that do not produce results”.</i> (FGD, Female, Comparison group)
Create a section in MOH 514 for capturing complains from the community	<i>“I’ll mention that in our service logbook or monthly reporting tool, where we normally have some data and indicators of what have been happening throughout the month, we can have a column for complaints or compliments from that household, which will indicate monthly”.</i> (FGD, Male, Intervention group)
Establish Community complaint desk	<i>“So I was thinking about having a community complaint desk where people who are capable of handling community concerns can be reported to so that they can be documented and, say, after a certain period of time, they can be reviewed so that we can move forward”.</i> (FGD, Male, Intervention group)
Include agenda of complains and compliments in Community Work Improvement teams forums and community health unit monthly review meeting	<i>“We should include complaints and compliments on the agenda of the community work improvement team, and that team should assist us in identifying areas of weakness”.</i> (FGD, Female, Comparison group) <i>“During the monthly reviews is when we can bring up those issues”.</i> (FGD, Female, Intervention group)

Key informants acknowledged that using suggestion boxes has been impractical and that most of them are not entirely functional, leaving potential for other interventions that can help the community voice be included in service delivery.

“...the weakness of suggestion boxes is a lack of ownership at the health facility. Who ensures that pens and paper are available?” (KI, Male, Comparison group)

“...client feedback can be difficult to obtain from suggestion boxes, so we should try interpersonal options such as CHVs who can collect suggestions, complaints and compliments from households and even provide feedback to clients....” (KI, Female, Intervention group)

The results regarding suggestion boxes are comparable to those of Gurung et al. (2017) who found that few users reported complaints in suggestion boxes due to lack of awareness, lack of knowledge regarding how to file complaints, or belief that it would take an eternity to receive a response from service users.

A pilot study in Kenya found that the use of suggestion boxes was inactive and that verbal communication was preferred over written communication (Wangui, 2015). Suggestion boxes are a component of formal complaint mechanisms, whose functionality has been identified as a challenge as evidenced by the above findings. This opens the door to investigating other types of complaint mechanisms, such as the use of intermediaries like CHVs.

4.8 Contextual Factors that influence Social Accountability

The study investigated contextual factors that influence social accountability. Prior to the study, 57 (63.3 %) of CHVs in intervention group reported that they always

collaborated with local administrators such as the chief compared to 61 (62.9 %) of CHVs in the comparison group. At the end of the study, 58 (64.4 %) of the intervention group's CHVs reported always collaborating with local administrators like chiefs, compared to 73 (81.1 %) of the comparison group's CHVs. Higher results at the comparison site could have been influenced by the frequency of chief barazas in the sub-county, which discussed more security issues, as well as strong relationships developed over time.

The study looked at the CHC's support to the CHVs in addition to assessing collaboration with the chief. At baseline, 43 (47.8%) of CHVs in the intervention group reported to always receiving support from the CHC compared to 45 (50%) of CHVs in intervention group. At the end of the intervention, 48 (53.3%) in the intervention group reported to always receive support from the CHC compared to 55 (61.1%) in the comparison group. The strong community-based structures that have been built over time may have contributed to the results in the comparison group. However, as shown in table 4.10, there was a slight improvement after intervening in the intervention group. The study's results showed that CHVs collaborated and received support from other community-based structures. Networking and collaboration influence the success of social accountability mechanisms (Boydell et al., 2020). Community-based organizations and leaders play an important role in informing authorities about population concerns (Falisse et al., 2012). A community Chief, for example, is critical in ensuring that residents receive the services they expect.

Table 4.9*Baseline Results of Contextual Factors that influence Social Accountability*

Variable	Comparison Group (n=90)	Intervention group (n=90)	P Value*
Collaboration with the chief			
Rarely	1 (1.1%)	2 (2.2%)	<.001
Sometimes	27 (30.0%)	31 (34.4%)	
Always	61 (62.9%)	57(63.3%)	
Support from the HFCM			
Rarely	52 (57.8%)	49 (54.4%)	0.466
Sometimes	26 (28.9%)	34 (37.8%)	
Always	12 (13.3%)	7 (7.8%)	
Support from elected official			
Rarely	72 (80%)	65 (72.2%)	0.064
Sometimes	18 (20.0%)	21 (23.3%)	
Always	0	4 (4.4%)	
Support from Nyumba Kumi			
Rarely	11 (12.2%)	8 (8.9%)	0.353
Sometimes	50 (55.6%)	67 (74.4%)	
Always	29 (32.2%)	15 (16.7%)	
Support from CHC			
Rarely	8 (8.9%)	8 (8.9%)	<.001
Sometimes	37 (41.1%)	39 (43.3%)	
Always	45 (50.0%)	43 (47.8%)	
Provision of Stipend			
Rarely	44 (48.9%)	61 (67.8%)	<.001
Sometimes	38 (42.2%)	18 (20.0%)	
Always	8 (8.9%)	11 (12.2%)	
Support Supervision			
Rarely	17 (18.9%)	10 (11.1%)	0.089
Sometimes	24 (26.7%)	22 (24.4%)	
Always	49 (54.4%)	58 (64.4%)	
Provision of reporting tools			
Rarely	69 (76.7%)	78 (86.7%)	0.096
Sometimes	21 (23.3%)	12 (13.3%)	
CHV selection Criteria			
Rarely	0	2 (2.2%)	0.325
Sometimes	6 (6.7%)	8 (8.9%)	
Always	84 (93.3%)	80 (88.9%)	

*Chi square

Table 4.10*End line Results Contextual Factors that influence Social Accountability*

Variable	Comparison (n=90)	Intervention (n=90)	P Value*
Collaboration with the chief			
Rarely	1 (1.1%)	2 (2.2%)	
Sometimes	16 (17.8%)	30 (33.3%)	<.001
Always	73 (81.1%)	58 (64.4%)	
Support from the HFCM			
Rarely	27 (30%)	23 (25.6%)	
Sometimes	48 (53.3%)	51 (56.7%)	0.007
Always	15 (16.7%)	16 (17.8%)	
Support from elected official			
Rarely	52 (57.8%)	38 (42.2%)	
Sometimes	37(41.1%)	48 (53.3%)	0.289
Always	1 (1.1%)	4 (4.4%)	
Support from Nyumba Kumi			
Rarely	6 (6.7%)		
Sometimes	42 (46.7%)	34 (37.8%)	0.944
Always	42 (46.7%)	42 (62.2%)	
Support from CHC			
Rarely	6 (6.7%)	5 (5.6%)	
Sometimes	29 (32.2%)	37 (41.1%)	0.002
Always	55 (61.1%)	48 (53.3%)	
Provision of Stipend			
Rarely	28 (31.1%)	55 (61.1%)	
Sometimes	45 (50%)	22 (24.4%)	0.496
Always	17 (18.9%)	13 (14.4%)	
Support Supervision			
Rarely	2 (2.2%)		
Sometimes	13 (14.4%)	24 (26.7%)	<0.001
Always	75 (83.3%)	66 (73.3%)	
Provision of reporting tools			
Rarely	31 (34.4%)	2 (2.2%)	
Sometimes	48 (53.3%)	49 (54.4%)	0.004
Always	11 (12.2%)	39 (43.3%)	
CHV selection Criteria			
Rarely	1 (1.1%)	1 (1.1%)	
Sometimes	10 (11.1%)	38 (42.2%)	0.401
Always	79 (87.8%)	51 (56.7%)	

*Chi square

Similar, to these study findings, health clients, particularly women, approached community leaders such as a village chief if they had concerns about a health facility (Mafuta et al., 2015). The reason for this is that community members believe that issues raised by community leaders, such as administrative chiefs, have a greater impact on health providers' performance and response to concerns than issues reported by them (Mafuta et al., 2015).

Feruglio and Nisbett (2018), on the other hand, looked into the effectiveness of four important categories of community-based approaches: Mothers committees, Jaanch committees, Village Health and Sanitation Committees, and Self-Help Groups. They established a very low level of community participation, with committees controlled by the health care providers who were to be held accountable. Of the four mechanisms, self-help groups demonstrated the most autonomy and collective power. These organizations were successful in advocating for better service delivery and the more general needs of their members on a level not seen in institutional committees like HFMC, despite the absence of a formal accountability role.

Prior to the study, 49 (54.4%) of CHVs in intervention group reported to rarely receive support from the HFMC compared to 52 (57.8%) of CHVs reported in the comparison group as shown in table 4.9. At the end of the study, 23 (25.6%) of interventions groups CHVs reported to rarely receive support from the HFMC compared to 27 (30%) in the comparison group. The results at both the intervention and comparison group showed that CHVs and HFMC collaboration was not strong. However, there was improvement in the intervention group on the CHVs who

reported to sometimes receiving support from the CHC compared to the comparison group.

The findings of this study indicated no strong collaboration of HFMC and CHVs. The role of HFMC in SAc is individualised and non-systematic, and their success is dependent on leadership and synergy with other community structures (Lodenstein et al., 2017). In addition, HFMC have been found to be ineffective especially when they focus on supporting medical staff rather than representing the population (Berlan & Shiffman 2011; Falisse et al., 2012) and serving as the extension arms of frontline workers, carrying out duties and taking on roles that service providers are unable to carry out because of time constraints (Feruglio & Nisbett 2018).

Where, HFMC promote SAc, there have been positive reports. For instance, HFMC were found to lead changes in service quality that resulted to improved health worker presence and replacement of poorly functioning health workers among others (Lodenstein et al., 2017). This demonstrates that fostering a collaborative environment for CHVs and HFMCs can aid in the realization of social accountability. More research can be conducted to determine how the roles of CHVs and HFCs can complement each other, particularly in ensuring that community concerns are incorporated in improving health facility services.

Prior to the study, 61 (67.8%) of CHVs in the intervention group reported to rarely receiving stipend compared to 44 (48.9%) of CHVs in the comparison group. Further

discussion among participants revealed that remuneration serves as "motivation" to performing better:

"...If we would be receiving something small every end of the month just to be appreciated that would really motivate us..." **(FGD, Female, Comparison group)**

"...CHVs do an excellent job, and there is evidence that they improve health indicators. If they can receive a monthly stipend, I believe they will be able to accomplish much more..." **(KI, Male, Intervention group)**

At end of the study, 55 (61.1%) of CHVs in the intervention group reported to rarely receive stipend, 22 (24.4%) sometimes and 13 (14.4%) always compared to 45 (50%) sometimes, 28 (31.1%) rarely and 17 (18.9%) in the comparison group. Qualitative data from the intervention group showed that CHVs perception on allowances were not very important compared to reporting complaints so that the community can receive responsive services, as highlighted in the quote below:

"...after being trained and participated in this initiative for the past months, I get more satisfaction-seeing client's issues resolved. Stipend is no greater than service..." **(KI, Male, Intervention group)**

"...If I see something, that need to be reported I will still do even if am not paid..." **(KI, Female, Intervention group)**

It is important to note that most CHVs in Nairobi County were not receiving government stipends at the time of this study, with the exception of a few linked to donor-funded projects. Besides stipend, the study found out that CHVs felt provision of airtime and National Health Insurance Fund cover could motivate their performance.

“...sometimes we follow up a client using our phones and so airtime can be a motivation for us...” (FGD, Female, Comparison Group)

The findings of this study indicated that stipend serves as motivation to the CHVs but they can play their SAc role even when they are not paid. Previous studies have also identified remuneration as an important motivator for CHVs (Campbell & Scott 2011; Kok et al., 2015; Scott et al., 2018). According to Greenspan et al. (2013), CHVs enjoyed giving back to their communities, but they frequently mentioned how difficult it was to get adequate pay. George et al. (2017) established that poor remuneration demotivated ASHAs to continue working. Even those who stated that they were satisfied with the nature of their work felt that the pay they received was inadequate for the type of work that they were expected to perform. Nandi and Schneider (2014), research reported CHWs that did not receive regular payment from the government made them to retain their autonomy. Once the government starts paying stipend, it would be vital to conduct further research on CHVs payment of stipends and their autonomy in SAc.

At the commencement of the study, 58 (64.4%) of CHVs in intervention group reported to always being supervised while 10 (11.1%) reported to rarely being supervised by the CHA. In the comparison group 49 (54.4%) of CHVs reported to always and 17 (18.9%) to rarely being supervised by the CHA. The high numbers of CHVs reported to rarely being supervised was attributed to the CHA: CHU ratio. According to the study findings, most CHAs were responsible for more than ten CHUs, which contradicts what Kenya community health policy advocates for, as illustrated by the quote below:

“...we have inadequate CHAs...I currently serve 110 CHUs. It can take me some time to do one on one supervision to all my CHVs...” **(KI, Male, Intervention Group)**

Following the intervention, 66 (73.3%) of the CHVs in the intervention group reported to always receiving supervision compared to 75 (83.3%) of CHVs in the comparison group. There was a significant increase in supervision practice in the comparison group because of the on-going quality improvement project during the research period. However, no CHV in the intervention group reported to be supervised rarely as shown in table 4.8a. The CHVs in the intervention group felt supportive supervision had strengthened how they serve the community as highlighted below:

“...supervision from my CHA has helped me understand my role better...”
(FGD, Female, Intervention Group)

The positive feedback from the intervention groups CHVs was attributed to the group and one-on-one supervision methods adapted during the intervention phase. Without fear of discrimination, supervision enabled CHVs to speak freely about community concerns. These study findings indicated that supervision had a significant impact on CHV performance. However, the enormous burden of having one CHA responsible for many CHUs could influence supervision effectiveness and quality (Ndima et al., 2015). Besides supportive supervision being an important factor in CHVs program, it has been demonstrated as the weakest link (Kok et al., 2016; Scott et al., 2018; WHO, 2010). When supportive supervision is ineffective, it can contribute to low morale and not a motivator (Greenspan et al., 2013; Ndima et al., 2015).

Training the supervisors in technical abilities, people management, and the implications of CHVs' intermediate position for relationship building with communities can increase the effectiveness of supervision (Hill et al., 2014; Kok et al., 2018). In addition, the relationship between the supervisor and supervisee needs to be enhanced through events such as team building (Robertson et al., 2015). These results are in line with those of Vernon et al. (1994) who found that established group supportive supervision can assist the supervisor in covering a large geographic area at a lower cost. In their study, group supervision used by the intervention group resulted in 86% coverage of supervision, compared to 60% in the control group (Vernon et al., 1994).

At beginning of the study, 78 (86.7%) of the CHVs in the intervention group

reported to rarely receive reporting tools compared to 69 (76.7%) of CHVs in the comparison group as shown in table 4.9. Inconsistent supply of reporting tools by the government led to the CHVs using *"own money to photocopy"* reporting tools. This was found to be undesirable by the majority of the participants as shown in the quote below:

"...sometimes we use our money to photocopy the reporting tool because the CHA says there are no reporting tools and we must report..." (FGD, **Female, comparison group**)

KI agreed with these sentiments as quoted below:

"...for a long time, we have been having challenges with reporting tools, the supply is erratic..." (KI, **Male, Intervention group**)

Findings at the end of the study showed an improvement in the intervention group with 39 (43.3%) of CHVs in the intervention group reported to always receiving reporting tools compared to 11 (12.2%) in the comparison group. The findings in the intervention group were associated with the provision of reporting tools during the intervention phase, but there were concerns about their sustainability, as quoted below:

'...am grateful for receiving the reporting tools that I had been missing for a long time, which has motivated me to report... I'm hoping to get a replacement when it's full..." (KI, **Male, intervention group**)

The availability of reporting tools may improve documentation of complaints and compliments, while its absence may impede follow-up and feedback on issues presented. To address the inconsistent supply of reporting tools, proposals were made to use digital platforms such as mobile reporting.

“...nowadays things are digital. If you have a phone, you can do a lot especially in data collection...” (FGD, Female, Comparison group)

The study's findings revealed an inconsistent supply of reporting tools, which affected CHV reporting complaints practices. The provision of reporting tools with complaint and compliment indicators during the intervention phase contributed to the positive outcome of this study. The provision of CHV reporting tools is critical to the program's effectiveness, as well as their value and respect in society (Scott et al., 2018; Sunguya et al., 2017).

In line with the findings of this study, other researchers have emphasized the provision of working tools to CHVs as a factor in improving their performance. According to a Ugandan study, inconsistent commodities and restocking issues hampered CHVs' ability to complete their tasks (Brunie et al., 2014). Similarly, Nandi and Schneider (2014) discovered that CHVs influenced service providers and members of village councils to acknowledge community rights and carry out their responsibilities by using training modules and resource materials as a source of authoritative information.

In Malawi, CHVs reported that their participation in the SMS network led to recognition and improved status among their clients and communities. CHVs used Short Message Service (SMS) to ask questions about medical conditions, drug side effects, and dosage amounts (Lemay et al., 2012). Rowe et al. (2007) study on the impact of job aid use by CHVs working in child health in Kenya discovered a positive correlation between the use of a treatment card and better overall guideline adherence. Studies have also linked a lack of supplies, such as education materials and job aid, to lower CHV motivation. For instance Furth and Crigler (2012) and Kalyango et al. (2012) established that a lack of supplies prevented CHWs from performing their duties. Studies imply that provision of working tools, which include reporting tools are critical in enhancing the performance of CHVs.

The perception of CHVs by health providers and the community was assessed. At baseline, 34 (37.8%) of CHVs in the intervention group reported feeling very much respected by health providers compared to 32 (35.6%) of CHVs in the comparison group. In the intervention group 45 (50%) of the CHVs felt not respected at all by the health providers compared to 36 (40%) in the comparison group. Table 4.11 summarizes these findings.

Respect from health providers made the CHVs feel ‘*valued*’ and ‘*assured*’ that their opinions matter as quoted below:

“If am respected by the health provider, am assured that opinions from the community will be taken seriously.” (FGD, Female, Comparison group)

Table 4.11

Baseline and End line Findings of CHVs treatment by the health provider and community

Baseline Findings			End line Findings			
Variable	Intervention (n=90)	Comparison (n=90)	P Value*	Intervention (n=90)	Comparison (n=90)	P Value*
Respect from Health providers						
Very Much	34(37.8%)	32 (35.6%)	0.003	48 (53.3%)	33 (36.7%)	<0.001
Somewhat	11 (12.2)	22 (24.4%)		32 (35.6%)	30 (33.3%)	
Not at all	45 (50%)	36 (40%)		10 (11.1%)	27(30%)	
Community Trust						
Very Much	34 (37.8%)	17 (18.9%)	0.002	50 (55.6%)	55 (61.1%)	<0.001
Somewhat	13 (14.4%)	16 (17.8%)		30 (33.3%)	24 (26.7%)	
Not at all	43 (47.8%)	57 (63.3%)		10 (11.1%)	11 (12.2%)	
Community Respect						
Very Much	65 (72.2%)	56 (62.2%)	0.728	53 (58.9%)	54 (60%)	0.819
Somewhat	0%	8 (8.9%)		29 (32.2%)	15 (16.7%)	
Not at all	25(27.8%)	26 (28.9%)		8 (8.9%)	21 (23.3%)	

*chi-square

However, majority of the CHVs felt being ‘*discriminated*’ by the health service providers and perceived as ‘*unlearned*’ and ‘*not licenced*’ as illustrated below:

“They say that we are not learned like them which make us feel discriminated”. (FGD, Female, Comparison group)

“CHVs are viewed as not learned and them (health provider) they have learnt and even have a license and so it becomes hard to deal with someone who has read and has their licence and you are fighting for the rights of someone else who has also not gone to school like you”. (FGD, Female, Intervention group)

CHVs perception on how the health providers sees them, have an impact on their confidence to speak up and following up on community concerns. CHVs felt that having a good relationship with health-care providers would strengthen their role in social accountability, as illustrated below:

“If we have good relationship with the health facility staff it will be easy for us to report complains and compliments without fear of being discriminated”. (FGD, female, Comparison, group)

Suggestions to improve the relationship between the CHVs and health workers included team building, periodic sensitization of new staff on the role of CHVs, publishing success stories of CHVs, and holding joint facility meetings. Social accountability requires a continuous feedback mechanism between service providers and community representatives or clients, which can only be accomplished if both parties have a mutual connection.

“...team building can help us bond...” (FGD, Male, intervention group)

“...There should be meetings with CHVs, CHAs, health facility in-charge so that we talk on issues of service delivery that affect our community...” (FGD, female, comparison group)

At the end of the study, 48 (53.3%) of CHVs reported feeling very respected by health providers, compared to 33 (36.7%) of CHVs in the comparison group.

Furthermore, 10 (11.1%) of the CHVs in the intervention group reported that they were not respected at all, compared to 27 (30%) in the comparison group. The meetings organized with the facility in-charges where they acknowledged the concerns CHVs brought from the community were attributed to the reduction in CHVs who reported to not feeling respected in the intervention group. This made CHVs believe that their opinions mattered as quoted below:

“...having monthly meetings with the facility in charge has helped us feel community concerns are valued...when she sits with us we feel respected and valued...” (FGD, Female, Intervention group)

“...The greatest respect and achievement in the past few months is to sit with the facility in charge and quality improvement person to brainstorm on solutions to concerns affecting our facility...” (K1, Male, Intervention group)

As per the findings of this study, CHVs believed that health providers did not respect them because of their education level and certification. These study findings indicated that team building events, holding monthly meeting with the facility staff and sensitizing health staff particularly new ones on the role of CHVs were ways of enhancing CHVs respect. Other studies in Malawi, India and Bolivia have also established CHVs feeling unappreciated and treated with disrespect by other health care providers (Bartos et al., 2009; Brunie et al., 2014; Callaghan-Koru et al., 2012; 2013; George et al., 2017). This kind of treatment affected their performance (Callaghan-Koru et al., 2012; 2013) and made CHVs feel inferior and inadequate

(Bartos et al., 2009). Misconceptions about the role and nature of CHVs' work, as well as a lack of formal communication channels, led to health providers viewing them as competitors rather than partners (Brunie et al., 2014; George et al., 2017).

As a result, studies have recommended urgent need to educate health-system personnel about the role and importance of community health workers, as well as to regard them as valuable allies and joint problem solving (Chang et al., 2011; George et al., 2017). According to other research, Ghanaian community-based surveillance volunteers were motivated to continue their work because they felt respected and recognized for their efforts by the locals, the elders, and the district health staff (Dil et al., 2012). Additionally, despite the fact that organizational traits like managerial support had no impact on their performance, care facilitators in Zimbabwe were motivated by them (Osawa et al., 2010). Respect from health care providers is critical in SAc, as successful intervention will necessitate taking community concerns raised by CHVs seriously. This will be feasible health workers value and respect CHVs.

At the commencement of the study, 34 (37.8%) of the CHVs in the intervention group reported feeling very much trusted by the community, while 43 (47.8%) did not. In the comparison group, 17 (18.9%) of CHVs felt very trusted, whereas 57 (63.3%) did not. Most CHVs in both groups felt untrusted because the government had broken promises to the community or because the health facility lacked essential services. This affected CHVs because they were the ones who conducted community

mobilization for health activities and when promises were broken, they were the first to blame, as shown by the quotes below:

“...Sometimes we collect names and bring them and when there is no response, community accuse us for taking whatever benefits they thought they would be getting...” **(FGD, Female, Comparison group)**

“...You send a client to the facility then they don't get services or even medicine, they come back to you complaining that you sent them knowing they won't get those services. Next time they will not accept your referrals...”
(FGD, Male, Intervention group)

Community trust in SAc is critical because the community expects that the issues raised through the CHVs will be reported, resolved and feedback provided to them. The community will voice their issues if they trust the CHVs to share the feedback with health authorities as highlighted in the following quote:

“...Social accountability will be possible if the community trust CHVs. They need assurance that their concerns will reach the in-charge and also receive feedback...” **(KI, Male, Intervention group)**

“...Clients will be comfortable to bring complains to me if they trust action will be taken...” **(FGD, Female, comparison group)**

At the conclusion of the study, 50 (55.6%) of the CHVs in the intervention group felt very much trusted by the community, compared to 55 (61.1%) of the CHVs in the comparison group. At the end of the study, there was a significant improvement in both groups attributed to the government paying NHIF to indigents registered by the CHVs.

The study findings revealed that the unfulfilled promises and a lack of essential commodities in the health facilities to which they refer clients influenced community's trust in CHVs. Community trust serve as a non-financial motivator for the CHVs (Hamal et al., 2019). Greenspan et al. (2013) documented CHVs being insulted by community members because they were not compensated for the work they did. In Bolivia, it has been reported that sometimes CHVs, or "*manzanas*," are afraid to make home visits because neighbourhood residents unjustly spread rumours about them eating the food rather than giving it to the young children (Bartos et al., 2009). In South Africa, lay health workers working on farms were criticized because they got along with the farmer (their employer) and nurses better than locals did (Dick et al., 2007). These studies demonstrate that community trust on CHVs is an issue that its cause needs to be established. In social accountability, community trust is significant as it would enable the community be willing to share their concerns with the CHVs.

4.9 Influence of Community Dialogue on Social Accountability

The aim of this objective was to assess how Community dialogues influence social accountability. At the start of the study, 85 (94.4%) of CHVs in the intervention

group always participated in community dialogue, compared to 84 (93.3%) in the comparison group. According to these findings, the majority of CHVs in both groups attended community dialogues. At the time of collecting baseline data, community dialogues were frequently used to spread information about the dialogues, compared to 70 (77.8 %) in the comparison group as shown in table 4.8. There was a decrease in practice in both groups, which was attributed to a decrease in COVID-19 cases in the country and CHVs not holding frequent sensitization forums. Aside from CHVs attending community dialogues, the study looked at who else attended these community dialogues.

Table 4.12

Baseline and End line Findings of Community Dialogue

Variable	Baseline Findings			End line Findings		
	Comparison Group (n-90)	Intervention Group (n-90)	P Value*	Comparison Group (n-90)	Intervention Group (n-90)	P Value*
Participating in community health dialogues						
Sometimes	6 (6.7%)	5 (5.6%)	0.007	20(22.2%)	35 (38.9%)	<.001
Always	84 (93.3%)	85 (94.4%)		70(77.8%)	55 (61.1%)	
Mobilizing the community						
Sometimes	11 (12.2%)	25 (27.8%)	0.599	8(8.9%)	10 (11.1%)	0.02
Always	79 (87.8%)	65 (46.7%)		82 (91.1%)	80(88.9%)	

*Chi-square

The study findings indicated that during dialogue meetings, various stakeholders attended. According to the research participants, the chief, ward administrator, community members, and religious leaders attended community dialogues. However,

a review of the dialogue minutes revealed that only the chief, CHVs and the CHA attended most of the dialogue meetings. There was lack of evidence of other health facility staff and sub-county health management team participating in community dialogues. The study findings showed that, health facility staff and sub-county health management team hardly attended these dialogues because of *'high workload'* and *'insufficient logistic'* support as shown by the following quotes:

"...we are unable to attend community dialogues due to our high workload, but we are usually willing..." **(KI, Female, Comparison group)**

"...we do not attend community dialogues because of a lack of logistical support, especially if they are held far away from the facility..." **(KI, Male, intervention group)**

Participants noted that due to the diverse and complex issues in the community, inclusion of different stakeholders is important. As illustrated by the quote below, the diverse attendance allows the community to hold joint solutions to their problems:

"...today we are having so many issues in the communities so we need to think outside the box and involve this opinion leaders like pastors, the nyumba kumi initiative because there are things we cannot do without them so we need to work together..." **(FGD, male, intervention group)**

The findings revealed that there was insufficient feedback to community concerns because the health authorities responsible for service delivery did not participate. As highlighted in the following quote, the participants (CHVs) felt the situation should change and other health providers, in addition to CHA, should be present to respond to issues beyond their scope of practice.

“...The CHA is in charge of community health, but a doctor or health facility in charge should be present so that they can answer questions about the facility because the CHA will only answer questions that are directed at them, and so many times when we finish the dialogues, there is no follow up...” (FGD, Female, Intervention group)

CHVs recalled how successful previous dialogues were due to the participation of health facility leadership, particularly the facility in-charge and the sub-county health management team. These health authorities could respond to community concerns and build community trust in health facilities, as quoted below:

“...When we first started in 2012, the sister in charge would come to the dialogues and talk to the community.” This inspired the community and demonstrated to them that their health-care providers genuinely cared about them.... (FGD, Female, intervention group)

“...a doctor who had never visited the community before came to encourage the mothers to allow their children to be vaccinated. The community told him

they did not know him, and it was not until they saw a familiar nurse who had previously attended community dialogues that they agreed to the vaccine...’’

(FGD, Female, Intervention group)

The CHVs shared success stories on previous CD that resulted in a shift of community perception in one of the sites as highlighted below:

*“...there was a sister who got transferred to ****she used to come to community health dialogues and pregnant women used to say that at least when they visit the facility they will find her there in case they experience any challenges. During her time our maternity was performing very well compared to now...’’* **(FGD, Female)**

The participants agreed that, over time, community dialogues had been left to only CHVs and, on occasion, the CHA:

“...Most times it is only the CHA who attends our community dialogues...’’
(FGD, male, comparison group)

Finding showed that the lack of feedback caused community members to be disinterested in attending dialogues because they did not achieve the goal of sharing experiences, clarity, and joint solutions. As a result, CHVs sometimes held dialogues with no or very few community members who were not a representative of their community.

“...Sometimes you call on members of the community to come, and they ask you... What new information will you be telling us?” (FGD, Female, Comparison group)

Participants brainstormed ideas for making dialogues more inclusive and serving the purpose of participation. The proposed solutions included prior planning, sending invitations to all stakeholders on time (posters, fliers), observing the time and days that community members are available, and ensuring the attendance of key stakeholders in the health system. They also suggested incorporating outreach services into community dialogues to provide a reason for the community to attend. These were all good ideas, but due to time constraints in this study, we were unable to incorporate and test their efficacy. Future research should look into how all of these suggestions can be combined to improve the performance of community dialogues.

The intervention included the health facility in charge and other health providers attending community dialogues, and there was positive feedback at the end of the study, as quoted below:

“...I was pleased to be a part of the last dialogue meeting, which provided me with more information about our facility than I had previously known...”
(KI, Female, intervention site)

According to the findings, when health facility staff attended dialogues, CHVs were motivated and eager to hold more dialogue meetings because communities received immediate feedback on their concerns:

“...We are happy that the facility in charge and her deputy attend our dialogues....we are motivated to hold future meetings...” (**KI, Female, intervention site**)

The experience of the health facility in charge in attending the dialogues prompted them to promise to allocate additional funds to support community dialogues during the annual work plan. They experienced the importance of community dialogues in improving service delivery. Furthermore, in an era when NHIF reimbursement accounts for the majority of health facility finances, the health facility in charges committed to soliciting client opinions, working on them, in the hope that it will pay off by having many mothers deliver in their facility, which is associated with high revenue.

“...I will ensure that adequate funds are allocated for dialogues because they can help us improve NHIF enrolment and quality services...” (**KI, Female, Intervention**)

The findings of this study revealed that providing meaningful feedback in community dialogues was difficult because health officials did not attend. When health personnel were involved in community dialogues, findings revealed that

CHVs were motivated to hold more dialogues because they provided immediate feedback. Feedback is an essential component of effective social accountability activities (Lodeinstein et al., 2017). Munakampe et al. (2020) reported 70% attendance in their community dialogue that aimed to discuss the quality of family planning. Similarly, Crankshaw et al. (2019) reported good attendance with representation and participation among the stakeholders. Mahmood (2020), observational data from meetings indicated lower participation and voice from some specific groups of member women and adolescents and when present they were not vocal.

To achieve a successful community dialogue, the studies recommended a more balanced representation of stakeholders in community dialogues, including adolescents (Mahmood, 2020; Munakampe et al., 2020) and consideration of issues of power differentials related to age, profession, and gender (Crankshaw et al., 2019). In addition, meaningful community dialogue forums require use of powerful tools such as community scorecards, citizen report cards, and chalkboards (MOH, 2014; Mahmood, 2020; Munakampe et al., 2020). However, this study lacked evidence on the use of such tools in the study sites.

These study findings on health personnel attending dialogues resulting to immediate feedback are similar to those of (Butler et al., 2020; Gullo et al., 2018; Muhwezi et al., 2019; Pieterse, 2019). Success of social accountability is dependent on collective action of different players in the community. For instance, Pieterse (2019) reported that the District Health Management Team (DHMT) staff's attendance at dialogue

meetings supported village health committees and strengthened the links between them, which significantly improved health worker behaviour. However, little improved when no DHMT members attended the dialogue sessions. As a result, the intervention made sure the DHMT got a clear report on how well primary healthcare is delivered in their region. For three years of implementation, the average scores and quality of care at the winning clinics improved year on year and the health providers improves their responsiveness (Pieterse, 2019).

Prior to the study, 65 (46.7%) of CHVs in the intervention group reported to always mobilize the community to attend dialogues compared to 79 (87.8%) of the CHVs in the comparison group. At the completion of the study, 80 (88.9%) of CHVs in the intervention group reported to always mobilize the community compared to 82 (91.1%) in the comparison group.

The results regarding community mobilization are comparable to those from South Africa, where CHVs mobilized the neighbourhood to carry out a number of roles in health and social care that were thought to have a significant impact on primary care (Ramukumba, 2020). However, only 20.9% of CHVs in Uganda took part in mobilization activities due to a lack of information, inadequate training, and a poor perception in the community (Musoke et al., 2021). Mobilization is an all-encompassing strategy that involves participation from the necessary social groups (Murphy, 2012). In order to engage the community in beneficial health interventions like social accountability, CHVs are crucial. Collective community action is necessary for social accountability interventions to succeed. To get a comprehensive

picture of dialogues, additional qualitative findings have been discussed in subsequent sections.

Understanding Community Dialogue

Prior to the study, the participants interpreted community dialogues as meetings that engage the community and health system stakeholders. They were used to educate the community on health issues, as quoted below:

“...Community dialogue is a meeting where we educate the community members on health matters...” (KI, Female, Intervention group)

Community dialogues were also used to inform citizens on various health interventions. Participants' responses gave the impression that community dialogues were a one-sided (health system) activity rather than a collaborative effort as envisioned by the Ministry of Health, as illustrated by the following quote:

“...When we want to educate the community on good health practices, we invite them to dialogues...” (FGD, female, comparison group)

The KII findings collaborated with those of document review, where most information captured in the minutes were of educating the community on hand washing, breastfeeding among other practices as illustrated by the following excerpt:

“...The CHA sensitized them on the importance of breastfeeding...” (Minute 8, intervention site)

Minutes were taken in a way that showed what the CHV or CHA did or said during the dialogue, with little information on what the community thought or said. This made capturing community voice or participation in community dialogues difficult. This was attributed to either a lack of skills in writing the minutes or a lack of opportunity for the community to express their opinions.

After the intervention, the CHVs and KI in the intervention site reported to have a clear understanding on the main purpose of community dialogues. They reported to ensure the community was given an opportunity to share their experiences and seek clarity as quoted below:

“...Nowadays, we schedule time for the community to speak, and even if they are shy to speak, we select them and ask them to say anything... This practice has increased community participation ... ” (KI, Male, Intervention group)

“...I now understand that dialogues should be collaborative rather than simply a means of informing the community about what they should do... They also have good opinions ” (FGD, female, Intervention group)

Scholars and Kenyan community health strategy policy define community dialogue as a forum that brings community members from all walks of life together, including

health providers, to share ideas in face-to-face moderated sessions, experiences, clarify viewpoints, and propose health-related solutions (Freire, 2005; MOH, 2020; Muhwezi et al., 2019). Previous research has shown that community dialogues are more successful when everyone participates (Kiracho et al. 2020; Martin et al., 2021). Kiracho et al. (2020) used community scorecards and dialogues to enable community leaders and communities to collaborate and identify innovative solutions to health care delivery and utilization challenges. Local leaders in their study created safe spaces for dialogues where performance and utilization issues could be identified and collaborative solutions implemented.

Martin et al. (2021) in Mozambique discovered that using participatory communication techniques allowed for the correction of misinformation through consensus building in their study. These findings showed that community dialogues are more effective when all stakeholders participate in identifying issues and jointly proposing solutions. According to the findings of this study, community dialogues were held quarterly in both locations. This was consistent with the MOH 515 reporting tools and the community health policy. However, they could hold more dialogue days in a quarter, but only on demand, as illustrated by the quote below:

“We hold community dialogues on quarterly basis according to the guidelines”. **(KI, Male, Intervention group)**

The practice of holding quarterly dialogues was in line with Kenya Community Health Strategy Policy 2020-2025. Butler et al. (2020) reported similar findings on

the successful implementation of Community Bwalos (forums) in Malawi, which were held either monthly or quarterly, allowing citizens to voice concerns and receive information from duty bearers. A feature of community dialogue was collaborative problem identification and analysis that led to a preferred future. Each community dialogue was participatory and empowering because it allowed members of the community to analyze, share and utilize information. Unlike debates, community dialogues emphasized listening to deepen understanding, the development of common goals, and the expression of participants' opinions on courses of action (Muhwezi et al., 2019).

Agenda Discussed in Dialogues

Prior study findings showed that the agenda of most dialogues were on healthy practices, behaviour change, and debunking myths and misconceptions. Commonly discussed were on water hygiene and sanitation, proper hand washing practices, family planning and immunization. As quoted below, there was no mention of empowering communities to play a role in improving health services or health rights and entitlements:

“If it's about family planning for example so many mothers will come even fathers will come to know more about family planning and they will have so many questions so at the end of the day that dialogue will be so active.”

(FGD, Female, comparison group)

These findings collaborated with those from minutes review. According to the minutes, the majority of the agenda was devoted to educating the community on health practices and security issues if the chief attended. During the intervention, the CHA and CHVs from the intervention site were given information about community health rights and entitlements. They were also guided through the process of actively seeking the opinions of community members especially in dialogue forums.

At the end of the study, a review of two community dialogue minutes from the intervention site revealed an improvement in documentation of clients' concerns. According to the minutes, community health concerns included lack of drugs, lack of laboratory testing services such as ANC profiling, not receiving some services as after 2 pm, informal fee payment, and even being sold medicines in clinician rooms among others. There was also a response from health providers, particularly on issues beyond their control, such as a lack of drugs. There was also documentation on how the community and the health provider proposed collaborative solutions, such as posting warning signs about free services in clinician rooms where clients could see them. They also agreed to post the facility's phone number on the wall, which the community could call if they were dissatisfied. This information was missing prior to the intervention.

The study findings on community members being able to demand for their rights after being sensitized are similar to a study conducted in Uganda by Muhwezi et al. (2019). In their study, community members demanded for responses from the district leaders on emerging health issues after sensitization on health rights. Participants

proposed and implemented actions during their dialogues, which disproved the belief that community dialogue is "*a lot of talk*" that never achieves significant action (Muhwezi et al., 2019). Similarly, Hamal et al. (2018), study found that through the process of information and dialogues, women were empowered to make collective demands of the health system. Ultimately, joint meetings improved trust and collaboration between women and the health system, as well as elicited appropriate responses from the health system. Björkman and Svensson (2009) study experienced 20% increase in utilization of public health services and 33% reduction of child mortality after conducting community dialogues.

Gullo et al. (2018) discovered that community participation affected by mistrust in health workers because of unfulfilled promises made by DHMT during dialogue meetings. To avoid mistrust, the study recommended that health officials share the constraints of local governments with the community, engage in higher-level advocacy, and set realistic expectations so that failure to meet all goals does not harm relationships (Gullo et al., 2018). Communities can master the courage to speak up about their concerns if they have a strong foundation in health rights issues and complaint and compliment mechanisms.

Documentation of Community Concerns

The review of minutes revealed that capturing key issues discussed in dialogues was difficult. In most cases, evidence on where the minutes were captured was lacking, despite the CHVs verbally acknowledging holding community dialogues as shown in the quote below:

“...We record community issues in our minute book...”. (FGD, Female, Intervention group)

Except for two documented minutes out of nine, issues raised from the community could not be established by review of minutes. The majority of the dialogue minutes were written by the CHVs, who most likely lacked adequate writing skills. Instead of sharing the minutes in the event of a complaint directed at the health facility, the CHA would only report verbally to the health facility in charge.

“...I hardly look at the dialogue minutes but the CHA tells me the issue that the community raised during dialogue...” (KI, Female, Intervention)

At the end of the study, there was improvement on documentation of complaints and compliments at dialogue forums in the intervention site as quoted below:

“...We decided to give the mandate of writing minutes to those who had the skills and not just anybody...” (FGD, male, intervention group)

The CHVs could also testify, seeing the benefits of proper documentation as quoted below:

“...We have realized when we write our minutes well, we can review with the community what we discussed in the last meeting and see if we achieved our action plan...” (FGD, female, intervention group)

Documentation is a process in complaint handling mechanism as it helps in following the process of how issues are handled and can serve as future reference (MOH, 2015). These findings are consistent with previous research where they have documented preference of verbal reporting of complaints to formal writing (Gal & Doron, 2007; Gurung et al., 2017). Other suggestions from participants included using suggestion/opinion boxes during dialogues so that community members who are unable to speak up in such meetings can write and express their concerns.

“...I would also like to add that when we have dialogues we could have suggestion boxes so that those who don’t want to ask a question in front of everyone can then write down and put it in the box ...”(FGD, Female, Intervention group)

In some communities, power dynamics exist (Chuang et al., 2013; Crankshaw et al., 2019), which may prevent less empowered community members, the marginalized, and the vulnerable from participating. As a result, suggestions such as having boxes to collect issues raised may be a noble idea. More research can be done to determine its feasibility and effectiveness. These study results made it clear that community dialogues offered a chance for the public to engage with healthcare professionals and enhance health outcomes.

4.10 Inferential Statistics

This section will present the inferential statistics of the five objectives. As the data was not normally distributed and dependent variable was binary, logistic regression

was preferred.

Adopted Logistic Regression Equation:

$$P (Y_i) = \frac{1}{1+e^{-(b_0+b_1X_i)}}$$

Where:

- P (Y_i) is the predicted probability that Y is true for case *i*
- *e* is a mathematical constant of roughly 2.72
- *b₀* is a constant estimate from the data
- *b₁* is a b-coefficient estimated from the data
- *X_i* is the observed score on variable *X* for case *i*

Inferential Statistics Analysis of CHVs Characteristics and Social Accountability

To identify variables associated with social accountability, logistic regression model was used. Joint impact of all predictor variables on the dependent variables was determined using the Nagelkerke R² concept, which is shown in the model summary below (table 4.13).

Table 4.13

Model Summary

Model Summary (Baseline)			
	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Intervention	108.987a	0.159	0.212
Comparison	100.005b	0.241	0.321
Model Summary (Endline)			
	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Intervention	24.037a	0.2	0.516
Comparison	52.876b	0.269	0.453

According to the model, the amount of variance in the dependent variable (social accountability) that could be explained by the independent variable (age, level of education and years worked) was 51.6% at end line compared to 45.3% for the intervention and comparison group respectively. This indicated that the logistic regression model performed better with intervention than without. Binary logistic regression analysis done between CHVs characteristics (age, level of education and years worked) and social accountability, showed a positive impact. The results are summarized in Table 4.14 and 4.15.

The findings from this study indicated that age did not have an influence on social accountability for both intervention and comparison group. The findings could have been associated with most participants' age being between 30-49 years and probably not having a very large sample to experience the difference. However, Chung et al. (2017) study reported age influenced CHVs general performance. Their study reported volunteers aged 35–44 years outperformed those aged 45 and up by 4.93 times. Crispin et al. (2021) study also reported a significant relationship of age with good recordkeeping. Mafuta et al. (2015) discovered that women's voicing of issues was related based on age differences. For example, women were embarrassed to report incidents because they were younger than the health providers. Due to social-cultural issues, younger women are not expected to complain about an older person in most Congolese customs.

Table 4.14

Baseline Results of Logistic Regression Analysis between CHV Characteristics and Social Accountability

Variable	Comparison Group				Odds Ratio	Variable	Intervention Group			
	B	S.E.	Sig.	Odds Ratio			B	S.E.	Sig.	Odds Ratio
Age						Age				
20-29 Years (RC)	-	-	-	1		20-29 Years (RC)	-	-	-	1
30-39 years	0.00 5	0.33 2	0.43 5	1.005		30-39 years	0.65 6	0.37 3	0.63 3	1.928
40-49 years	0.12 9	0.36 5	0.02 2	1.138		40-49 years	0.46 6	0.32 4	0.72 4	1.593
50-59 years	0.28 6	0.40 8	0.10 4	1.331		50-59 years	0.56 1	0.42 5	0.49 8	1.752
60 and above years	0.17 1	0.58 3	0.07	1.186		60 and above years	0.06 5	0.56 3	0.30 1	1.067
Level of Education						Level of Education				
Primary (RC)	-	-	-	1		Primary (RC)	-	-	-	1
Secondary	0.15 5	0.58 4	0.03 2	1.168		Secondary	0.13 2	0.61 8	0.02 8	1.141
Tertiary	0.25 8	0.82 3	0.23 5	1.294		Tertiary	0.20 9	0.71 2	0.02 4	1.232
Years Worked						Years Worked				
< 5years (RC)	-	-	-	1		<5years (RC)	-	-	-	1
5-10 years	0.30 2	0.33 4	0.01 7	1.353		5-10 years	0.01 5	0.20 2	0.01 2	1.015
More than 10 years	0.34 4	0.39 7	0.54 6	1.411		More than 10 years	0.03 9	0.23 1	0.02 1	1.04

At the end of the study, intervention group CHVs with tertiary education were 2.188 times more likely to improve social accountability than the comparison group, which was 1.269 times more likely. In addition, those with secondary education in the intervention group were 1.996 times more likely to be socially accountable than those with only a primary education compared to the comparison group that was 1.229 times more likely.

Table 4.15

End line Results of Logistic Regression Analysis between CHV Characteristics and Social Accountability

Variable	Comparison Group				Odds Ratio	Variable	Intervention Group			
	B	S.E.	Sig.	Odds Ratio			B	S.E.	Sig.	Odds Ratio
Age					Age					
20-29 Years (RC)	-	-	-	1	20-29 Years (RC)	-	-	-	1	
30-39 years	0.19 7	0.47 5	0.41 7	1.218	30-39 years	0.40 9	0.50 1	0.78 5	1.505	
40-49 years	0.66 9	0.35 9	0.62 3	1.952	40-49 years	0.45 6	0.40 5	0.74 5	1.578	
50-59 years	0.12 7	0.45 6	0.93 1	1.135	50-59 years	0.83 1	0.56 4	0.59 5	2.296	
60 and above years	0.52 5	0.82 8	0.77 4	1.69	60 and above years	0.69 1	0.69 8	0.31 9	1.996	
Level of Education					Level of Education					
Primary (RC)	-	-	-	1	Primary (RC)	-	-	-	1	
Secondary	0.20 6	0.13 2	0.23 2	1.229	Secondary	0.68 2	0.81 1	<.00 1	1.978	
Tertiary	0.23 9	0.22 8	0.00 8	1.269	Tertiary	0.78 3	0.88 1	<.00 1	2.188	
Years Worked					Years Worked					
<5years (RC)	-	-	-	1	<5years (RC)	-	-	-	1	
5-10 years	0.18 1	0.21 6	0.88 2	1.199	5-10 years	0.43 1	0.87 7	0.01	1.539	
More than 10 years	0.20 9	0.34 6	0.87 6	1.233	More than 10 years	0.71 5	0.30 1	0.02	2.044	

According to these study findings, education level is a determinant factor in advancing social accountability. Crispin et al. (2012) found that higher levels of education of CHVs influenced good record keeping (OR 0.30, p=0.0001) and correct use of job aids. According to Chung et al. (2017), CHVs with tertiary education performed 4.292 times better compared to those with primary education. Similarly, to Acharya et al. (2016), documented FCHVs with a secondary education level or higher were more likely to have good knowledge AOR 5.2 times more likely and satisfactory performance AOR 8.9 times more likely on maternal and child health than those who were only literate or had a primary level of education.

On the contrary, Alma et al. (2012) reported that while more years of education may result in better performance, it may also result in a higher dropout rate. In their research, they discovered that CHWs in Bangladesh who dropped out of the program had a higher level of education. According to Kok et al. (2015), while higher levels of formal education made CHWs more effective, highly educated CHWs were more likely to drop out after deployment. In Iran, there was no difference in job satisfaction based on the education level of CHWs (Kebriaei & Moteghedhi, 2009).

Kok et al. (2015) suggested that a specific level of education be one of the criteria used in CHV selection as they concurred that CHVs' educational status, including literacy level, was important in maintaining their high performance. In order to meet the needs of underserved communities located far from health centers, a WHO review suggests that primary school education should be the minimum educational requirement for CHV training (WHO, 2010). According to these results, a higher education background is a benefit that helps CHVs perform and carry out their duties more effectively. A high level of education will also assist CHVs in learning more about health information and how to document and submit their monthly reports as required by their jobs.

Effective social accountability practice necessitates CHVs educating or empowering communities about their rights and entitlements, as well as collecting, documenting, and presenting community concerns to health system actors. As a result, it is critical that the CHVs who serve as the community's intermediary meet the minimum educational requirements. Their education level will give them the confidence to

approach the relevant duty bearer. According to studies, a community's level of education sometimes prevents them from voicing their concerns because they perceive the health providers to be more educated and sophisticated than them (Mafuta et al., 2015).

These study findings revealed that years volunteered by a CHV had a positive impact on social accountability for the intervention group. After the intervention, CHVs who had worked for more than ten years were 2.044 times more likely to be socially accountable in the intervention group compared to comparison group who were 1.233 times more likely. Furthermore, those who had worked for 5-10 years were 1.539 times more likely to be socially accountable than those who had worked for less than five years in the intervention group versus 1.199 times more likely in the comparison group. The findings revealed an improvement in the intervention group compared to the comparison group, which was associated with the intervention's positive impact. In addition, positive association was linked to the experience gained from working in a specific role for an extended period. CHVs that had received SAc training and had worked for a longer period of time could easily identify subpar services. They could also easily follow the reporting structures for complaints because of their familiarization with the health system.

Years of experience have been associated with appropriate use of job aid, client satisfaction and client enablement Crispin et al. (2021). However, Acharya et al. (2016) and Kawakatsu et al. (2015) reported no relationship between the number of years CHVs worked with performance. According to Alamo et al. (2012),

community treatment supporters who had worked for more than 6 years lost more clients for follow-up than those who had worked for less than 6 years. These studies confirm that the number of years volunteered alone does not guarantee better performance; other factors, such as improving CHV skills, must be considered.

Inferential Statistics for CHVs practices on Social Accountability

A binary logistic regression model with CHV practices as the independent variable and social accountability as the dependent variable revealed an end line variance of 86 % for the intervention group versus 71.1 % for the comparison group. Meaning, the model performed better with the intervention than without it table 4.16:

Table 4.16

Model summary for CHVs practices and Social Accountability

	Model Summary (Baseline)		
	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Intervention	98.697 ^a	0.251	0.335
Comparison	104.279 ^b	0.121	0.167
	Model Summary (End line)		
	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Intervention	26.694 ^a	0.636	0.860
Comparison	30.147 ^b	0.387	0.711

The results of the logistic regression analysis of social accountability and CHV practices revealed that the independent variables had a favourable influence on the dependent variable. These findings are summarized in Table 4.17 and 4.18.

Sensitizing the community results showed that the intervention group had a 2.248 times higher likelihood of advancing SAc than the comparison group, which had a 1.597 times higher likelihood. These findings concur with research done in India, Nepal, and the DRC (Mafuta et al., 2015, 2017; Hamal et al., 2018, 2019). According to these studies, CHVs and FCHVs informed the public about health services and stressed the value of sharing any concerns they had. The FCHVs in India used home visits and group discussions to inform the locals about government benefits and programs. In this study, FCHVs assisted women in obtaining their entitlements (Hamal et al., 2018). During dialogue meetings and health committee meetings, CHVs in the DRC raised community concerns with healthcare providers (Mafuta et al., 2017).

As per the end line study findings, CHVs in the intervention group who reported receiving feedback from the CHA on community concerns were 2.878 times more likely to improve social accountability than CHVs in the comparison group who were 1.600 times more likely. Client feedback on concerns raised was 2.032 times more likely in the intervention group when compared to 1.112 times more likely in the comparison group. The study findings revealed that the intervention group's OR improved after the training, which was attributed to increased awareness of the importance of feedback in complaint handling. These findings are comparable to those obtained by (Boydell et al., 2020; Hamal et al., 2018; Kiracho et al., 2021). CHVs/FCHVs, village chiefs, and other community leaders were used in the study to collect community concerns and present them to the health system.

Table 4:17*Baseline of Logistic Regression between CHVs Practices and Social Accountability*

Variable	Comparison Group				Odds Ratio	Variable	Intervention Group			
	B	S. E.	Sig .				B	S. E.	Sig .	Odds Ratio
Sensitizing the Community					Sensitizing the Community					
Rarely (RC)	-	-	-	1.000	Rarely (RC)	-	-	-	1.000	
sometimes	0.2 70	0.3 19	0.1 62	1.309	Sometimes	0.0 21	0.2 76	0.6 42	1.021	
Always	0.3 44	0.7 80	0.2 02	1.411	Always	0.5 93	0.1 24	0.3 63	1.810	
Encouraging Community to Speak up					Encouraging Community to Speak up					
Rarely (RC)	-	-	-	1.000	Rarely (RC)	-	-	-	1.000	
sometimes	0.2 01	0.9 99	0.3 01	1.226	Sometimes	0.3 17	0.0 17	0.4 22	1.373	
Always	0.2 53	0.9 99	0.0 82	1.288	Always	0.1 26	0.0 22	0.0 37	1.134	
Recording complaints & compliments					Recording complaints & compliments					
Rarely (RC)	-	-	-	1.000	Rarely (RC)	-	-	-	1.000	
sometimes	0.4 73	0.4 46	0.0 60	1.604	Sometimes	0.0 46	0.0 13	0.3 50	1.047	
					Always	0.1 51	0.5 00	0.0 02	1.163	
Feedback from CHA					Feedback from CHA					
Rarely (RC)	-	-	-	1.000	Rarely (RC)	-	-	-	1.000	
sometimes	0.1 40	0.7 87	0.4 35	1.150	Sometimes	0.2 33	0.5 34	0.0 15	1.249	
Always	0.3 94	0.4 71	0.0 11	1.483	Always	0.1 22	0.7 20	<.0 01	1.129	
Feedback to Client					Feedback to Client					
Rarely (RC)	-	-	-	1.000	Rarely (RC)	-	-	-	1.000	
sometimes	0.1 88	0.3 52	0.4 47	1.207	Sometimes	0.0 59	0.4 96	0.5 22	1.061	
Always	0.2 64	0.7 07	0.6 11	1.302	Always	0.4 7	0.4 76	0.0 94	1.599	

Table 4:18*End line of Logistic Regression between CHVs Practices and Social Accountability*

Comparison Group				Intervention Group					
Variable	B	S.E.	Si.g.	Odds Ratio	Variable	B	S.E.	Si.g.	Odds Ratio
Sensitizing the Community					Sensitizing the Community				
Rarely (RC)	-	-	-	1.000	Rarely (RC)	-	-	-	1.000
sometimes	0.3 14	0.6 75	0.7 34	1.369	Sometimes	0.4 23	0.3 56	0.0 08	1.527
Always	0.4 68	0.8 21	0.0 04	1.597	Always	0.8 10	0.3 51	0.0 02	2.248
Encouraging Community to Speak up					Encouraging Community to Speak up				
Rarely (RC)	-	-	-	1.000	Rarely (RC)	-	-	-	1.000
sometimes	0.0 15	0.0 02	0.0 8	1.015	Sometimes	0.1 00	0.3 43	0.6 69	1.106
Always	0.0 50	0.0 02	0.2 54	1.051	Always	0.7 02	0.4 14	0.5 34	2.018
Recording complaints & compliments					Recording complaints & compliments				
Rarely (RC)	-	-	-	1.000					
sometimes	0.2 67	0.2	0.6 46	1.306	Sometimes (RC)	-	-	-	1.000
Always	0.0 10	0.4 52	0.5 06	1.010	Always	0.5 54	0.3 89	0.0 11	1.740
Feedback from CHA					Feedback from CHA				
Rarely (RC)	-	-	-	1.000	Rarely (RC)	-	-	-	1.000
sometimes	0.3 08	0.4 97	0.2 02	1.361	Sometimes	0.5 99	0.7 2	0.0 02	1.821
Always	0.4 70	0.1 02	0.0 78	1.600	Always	1.0 57	0.9 21	< 00 1	2.878
Feedback to Client					Feedback to Client				
Rarely (RC)	-	-	-	1.000	Rarely (RC)	-	-	-	1.000
sometimes	0.0 17	0.9 91	0.0 2	1.017	Sometimes (RC)	-	-	-	1.000
Always	0.1 06	0.9 91	0.0 5	1.112	Always	0.7 09	0.5 34	0.0 06	2.032

They also held village meetings where members of the community could express their concerns and a representative from the health system could respond. In a study carried out in Malawi by Lodeinstein et al. (2019), HFCs directly engaged health workers through individual feedback to address poor performance. In a study carried out in Malawi by Lodeinstein et al. (2019), HFCs directly engaged health workers through

individual feedback to address poor performance. Changes in service quality because of this feedback procedure included an increase in the number of health workers present, the availability of night shifts, the display of drug prices, and the replacement of underperforming health personnel. However, the difficulty with feedback was that it was individualized and not systematic (Lodeinstein et al., 2019). For social accountability to work, feedback mechanisms must be improved.

Inferential Statistics between Contextual factors and Social Accountability

The model synopsis at the conclusion of the research, Nagelkerke R2 results showed that the intervention group accounted for 97% of the variation in the dependent variable (social accountability) and the comparison group accounted for 65.9 %. This meant that with the intervention, the logistic regression model performed better than without.

Table: 4.19

Model Summary

Model Summary (Baseline)			
Group	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Intervention	89.698a	0.281	0.382
Comparison	57.582b	0.281	0.452
Model Summary (End line)			
Group	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Intervention	7.638a	0.727	0.97
Comparison	63.389b	0.494	0.659

Following the intervention, CHVs in the intervention group who reported receiving supportive supervision were 3.448 times more likely to advance social accountability than those in the comparison group, who were 1.458 times more likely. Feedback

from supervising CHVs has been found to help them in improving how they provide services to the community, especially when conducted by community leaders (Chung et al., 2017). However, supervision yields results when the supervisor supports the supervisee. For instance, in Ghana, supervisee who did not feel supported by the supervisors were not productive than those not supervised, but those supervised by supportive supervisors were 2.37 times more likely to be productive.

Supervision improves how services are provided, for instance in Benin, care provided to children improved by 27% percentage point difference in the intervention group compared to the comparison group after implementing supervision for three years (Rowe et al., 2010). In India, supervision improved performance of health workers performance in immunization by 36% (Ramsey et al., 2013). These findings show that supervision can improve CHV performance, particularly when they are supported by the supervisor. Furthermore, while the frequency of supervision is important, the quality of supervision is equally significant (Hill et al., 2014).

CHVs in the intervention group who reported receiving reporting tools on a consistent basis by the end of the intervention were 2.627 times more likely to improve social accountability than CHVs in the comparison group, who were 1.377 times more likely. Furth and Crigler's (2012) study in Zambia found a positive correlation between CHVs' provision of equipment and supplies and performance at baseline 0.350 and end line 0.470 ($p=0.001$).

Table 4.20

Baseline and End line Results of Logistic Regression between Contextual Factors and Social Accountability

Comparison Group Baseline Results					Intervention Group Baseline Results				
Variable	B	S.E.	Sig.	OR	Variable	B	S.E.	Sig.	OR
Support Supervision					Supportive Supervision				
Rarely (RC)	-	-	-	1.000	Rarely (RC)	-	-	-	1.000
Sometimes	0.116	0.325	0.035	1.123	Sometime	0.063	0.980	0.044	1.063
Always	0.179	0.818	0.008	1.196	Always	0.238	0.760	0.004	1.269
Reporting Tools					Reporting Tools				
Rarely	-	-	-	1.000	Rarely (RC)	-	-	-	1.000
Sometimes	0.301	0.181	0.07	1.351	Sometimes	0.302	0.74	0.079	1.353
Provision of Stipend					Provision of Stipend				
Rarely (RC)	-	-	-	1.000	Rarely (RC)	-	-	-	1.000
Sometimes	0.510	0.498	0.060	1.665	Sometimes	0.018	0.687	0.182	1.018
Always	0.260	0.788	0.003	1.298	Always	0.203	0.916	0.824	1.226
Support from CHC					Support from CHC				
Rarely (RC)	-	-	-	1.000	Rarely (RC)	-	-	-	1.000
sometimes	0.430	0.236	0.247	1.537	Sometimes	0.371	0.034	0.081	1.449
Always	0.496	0.149	0.193	1.642	Always	0.471	0.016	0.022	1.602
Comparison Group End line Results					Intervention Group End line Results				
Variable	B	S.E.	Sig.	OR	Variable	B	S.E.	Sig.	OR
Support Supervision					Supportive Supervision				
Rarely (RC)	-	-	-	1.000					
Sometimes	0.293	0.424	0.623	1.340	Sometime (RC)	-	-	-	1.000
Always	0.377	0.459	0.998	1.458	Always	1.238	0.71	<.001	3.448
Reporting Tools					Reporting Tools				
Rarely (RC)	-	-	-	1.000					
Sometimes	0.411	0.551	0.354	1.508	Sometimes (RC)	-	-	-	1.000
Always	0.32	0.968	0.217	1.377	Always	0.966	0.517	0.002	2.627
Provision of Stipend					Provision of Stipend				
Rarely (RC)	-	-	-	1.000	Rarely	-	-	-	1.000
Sometimes	0.041	0.774	0.958	1.042	Sometimes (RC)	0.038	0.514	0.941	1.039
Always	0.238	0.781	0.004	1.268	Always	0.199	0.714	0.263	1.220
Support from CHC					Support from CHC				
Rarely (RC)	-	-	-	1.000	Rarely	-	-	-	1.000
Sometimes	0.015	1.147	0.079	1.015	Sometimes (RC)	0.417	0.879	0.096	1.517
Always	0.163	1.113	0.094	0.177	Always	0.662	0.872	0.189	1.938

The provision of working tools increases CHVs productivity and community respect, and vice versa (Chung et al., 2017; George et al., 2017; Scott et al., 2018). For example, providing job aids to CHVs helped them perform 8.65 times better than those who did not (Chung et al., 2017). This could be why the CHVs in this study went so far as to use their own resources to ensure they had reporting tools. The provision of working tools was critical to the intervention's success.

Table 4.21

Baseline and End line Results of Logistic Regression Health provider and Community Treatment

Comparison Group Baseline Results					Intervention Group Baseline Results				
Variable	B	S.E.	Sig.	OR	Variable	B	S.E.	Sig.	OR
Respect from Providers					Respect from Providers				
Not at All (RC)	-	-	-	1.000	Not at All (RC)	-	-	-	1.000
Very Much	0.593	0.635	<.001	1.809	Very Much	0.544	0.969	<.001	1.722
Somewhat	0.361	0.632	0.031	1.435	Somewhat	0.327	0.934	0.015	1.387
Community Trust					Community Trust				
Not at All (RC)	-	-	-	1.000	Not at All (RC)	-	-	-	1.000
Very Much	0.218	0.668	0.068	1.244	Very Much	0.433	0.862	0.014	1.542
Somewhat	0.209	0.733	0.02	1.232	Somewhat	0.382	0.219	0.07	1.465
Comparison Group End line Results					Intervention Group End line Results				
Variable	B	S.E.	Sig.	OR	Variable	B	S.E.	Sig.	OR
Respect from Providers					Respect from Providers				
Not at All (RC)	-	-	-	1.000	Not at All (RC)	-	-	-	1.000
Very Much	0.474	0.11	0.03	1.606	Very Much	0.787	0.7	<.001	2.197
Somewhat	0.454	0.9	0.61	1.575	Somewhat	0.813	0.95	0.01	1.846
Community Trust					Community Trust				
Not at All (RC)	-	-	-	1.000	Not at All (RC)	-	-	-	1.000
Very Much	0.163	0.17	0.072	1.177	Very Much	0.924	0.32	0.004	2.519
Somewhat	0.144	0.895	0.024	1.154	Somewhat	0.107	0.8	0.002	1.835

At the end of the study, CHVs in the intervention group who reported being highly respected by health providers were 2.197 times more likely to improve social

accountability compared to CHVs in the comparison group who reported being 1.606 times more likely as shown in table 4.21.

Following the intervention, CHVs in the intervention group who reported to be trusted very much by the community were 2.519 times more likely to enhance social accountability compared the 1.177 in comparison group. As per the findings of this study, CHVs being respected by the health providers and trusted by the community were more likely to enhance social accountability. Other studies have established that CHVs who receive community respect and trust are motivated to perform OR = 2.76 Chung et al., (2017) and follow guidelines (Rowe et al., 2007). Community trust enhanced social prestige and CHVs retention 3 times more in a study by (Alamo et al., 2012b). HIV home-based care facilitators in Zimbabwe, for example, discovered that the greater the community acceptance, appreciation, and support for their activities, the more motivated they were to perform (Osawa et al., 2010). CHVs that are respected by health care providers are more likely to file complaints without fear of discrimination. When community members trust CHVs, they are free to share their concerns with them, knowing that the same information will reach the health facility.

Inferential Statistics of Community Dialogue on Social Accountability

According to the Nagelkerke R^2 results, 45% of the variation observed in the dependent variable (social accountability) at the end line was due to the independent variable (participation in community dialogue, mobilizing the community) for the intervention group. This meant that the logistic regression model performed better with the intervention than without as shown in table 4.22:

Table 4.22*Model Summary*

Model Summary _Baseline			
	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Intervention	111.024a	0.14	0.187
Comparison	117.366b	0.079	0.105
Model Summary _End line			
	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Intervention	82.082a	0.077	0.45
Comparison	85.383b	0.02	0.23

CHVs in the intervention group who said they always participated in community dialogues were 2.219 times more likely to improve social accountability at the end of the study than CHVs in the comparison group who were 1.281 times more likely. These findings were linked to social accountability training that emphasized meaningful community dialogues.

Table 4.23*Baseline and End line Results of Logistic regression of community dialogues and Social Accountability*

Intervention Group Baseline Results					Comparison Group Baseline Results				
Variable	B	S.E.	Sig.	OR	Variable	B	S.E.	Sig.	OR
Participating in Dialogue					Participating in Dialogue				
Sometimes (rc)	-	-	-	1	Sometimes (rc)	-	-	-	1
Always	0.375	0.871	0.032	1.455	Always	0.129	0.741	0.028	1.138
Mobilizing the Community					Mobilizing the Community				
sometimes (RC)	-	-	-	1	sometimes (rc)	-	-	-	1
Always	0.012	0.518	0.012	1.012	Always	0.184	0.564	0.017	1.202
Intervention Group End line Results					Comparison Group End line Results				
Variable	B	S.E.	Sig.	OR	Variable	B	S.E.	Sig.	OR
Participating in Dialogue					Participating in Dialogue				
Sometimes (rc)	-	-	-	1	Sometimes (rc)	-	-	-	1
Always	0.797	0.727	0.003	2.219	Always	0.248	0.112	0.022	1.281
Mobilizing the Community					Mobilizing the Community				
sometimes (RC)	-	-	-	1	sometimes (rc)	-	-	-	1
Always	0.445	0.892	0.257	1.56	Always	0.148	0.943	0.223	0.16

These findings showed that CHV attendance improved CHV practice in voicing issues. In line with these findings, Ndagije et al. (2019) discovered that dialogues had the potential to increase community awareness levels by 20% overall. This study is in agreement with those of Martin et al. (2019) that reported regular CD caused the formation of new habits in seeking timely care for sick children. Furthermore, participatory CD increased disease prevention knowledge and triggered communal action (Martin et al., 2021). This study's and other studies' findings confirm that effective community dialogues can result in significant changes in health outcomes and responsive health care.

4.11 Effect of CHVs Training in Improving Social Accountability

At the end of the intervention, the number of CHVs reporting complaints was 63.3% in the intervention group compared to 13.3 % in the comparison group as shown in table 4.4. Social accountability improved by 47.7% percentage point difference in the intervention group compared to the comparison group. The intervention demonstrated that training on SAc can help CHVs improve their practice of raising concerns. In addition to training, the intervention included aspects of supportive supervision and the provision of working tools, all of which contributed to the intervention's success.

According to the findings, other supportive factors for CHVs reporting complaints and compliments included sensitizing the community on health rights so that they were empowered to recognize when services fell short of expectations. Feedback was also important at the household and during community dialogues. This prompted the

CHVs to file complaints. Furthermore, improving the relationship between the health providers and the CHVs during monthly meetings created an environment in which the CHVs could freely air community concerns and receive feedback.

The results of the multivariate logistic regression model demonstrated that the model performed better with the intervention than without. The -2-log likelihood value for the intervention was (29.584^a) compared to (55.235^b) in the control group. In addition, the Nagelkerke R² results showed a variation of 76.2% in the dependent variable in the intervention group compared to 69.4% in the comparison group.

Table 4.24

Model Summary for Multivariate Logistic Regression

Model Summary, Baseline			
	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Intervention	32.773 ^a	0.742	0.390
Comparison	58.145 ^b	0.694	0.260
Model Summary, Endline			
	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Intervention	29.584 ^a	0.473	0.762
Comparison	55.235 ^b	0.509	0.694

The dependent variable was positively influenced by all of the independent variables, according to the results of multivariate logistic regression, as shown in table 4.25.

Multivariate Logistic Regression Equation:

$$P(Y_i) = \frac{1}{1 + e^{-(b_0 + b_1X_{1i} + b_2X_{2i} + \dots + b_kX_{ki})}}$$

Where:

- $P(Y_i)$ is the predicted probability that Y is true for case i
- e is a mathematical constant of roughly 2.72
- b_0 is a constant estimate from the data
- b_1, b_2, \dots, b_k is a b-coefficient estimated from the predictor 1, 2, 3, ..., k
- $X_{1i}, X_{2i}, \dots, X_{ki}$ is the observed score on predictors X_1, X_2, \dots, X_k for case i

When all the independent variables were analysed against the dependent variable, the findings showed that: CHVs in the intervention group with a tertiary education level were 2.188 times more likely to implement SAc than those in the comparison group, who were 1.244 times more likely, table 4.26. Receiving feedback from the CHA, enhanced SAc by 1.879 times more compared to 1.644 in the comparison group. CHVs that received supportive supervision and reporting tools had 1.908 and 1.831 chances of improving social accountability in the intervention group compared to 1.296 and 1.428 in the comparison group, respectively.

Table 4.25

Multivariate Logistic Regression Results at Baseline

Comparison Group					Intervention Group				
Variable	B	S.E.	Sig.	OR	Variable	B	S.E.	Sig.	OR
Level of Education					Level of Education				
Primary (RC)	-	-	-	1	Primary (RC)	-	-	-	1
Secondary	0.35	0.01	0.34	1.4	Secondary	0.211	0.2	0.66	1.2
	7	4	6	29			13	6	35
Tertiary	0.31	0.52	0.46	1.3	Tertiary	0.316	0.3	0.02	1.3
	3	4	5	68			69	1	72
Age					Age				
20-29 Years (RC)	-	-	-	1	20-29 Years (RC)	-	-	-	1
30-39 years	0.29	0.13	0.00	1.3	30-39 years	0.046	0.8	0.02	1.0
	6	5	8	44			68	5	47
40-49 years	0.48	0.11	<.0	1.6	40-49 years	0.374	0.8	0.03	1.4
	9	2	01	31			54	8	54
50-59 years	0.37	0.12	0.01	1.4	50-59 years	0.223	0.9	0.04	1.2
	7	7	7	58			09	5	5
60 and above years	0.46	0.34	0.01	1.5	60 and above years	0.405	0.1	0.12	1.4
	6	6	0.01	94			21	8	99
Years Worked					Years Worked				
>5years (RC)	-	-	-	1	>5years (RC)	-	-	-	1
5-10 years	0.05	0.08	0.00	1.0	5-10 years	0.215	0.8	0.00	1.2
	8	7	3	6			09	2	4
More than 10 years	0.19	0.08	0.01	1.2	More than 10 years	0.454	0.8	0.01	1.5
	6	9	3	17			43	1	75
Sensitizing the Community					Sensitizing the Community				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
sometimes	0.35	0.62	0.16	1.4	sometimes	0.249	0.5	0.00	1.2
	7	7	7	29			48	5	83
Always	0.50	0.57	0.00	1.6	Always	0.437	0.6	<.0	1.5
	9	2	4	64			96	01	48
Recording complaints & compliments					Recording complaints & compliments				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
sometimes	0.02	0.67	<.0	1.0	sometimes	0.301	0.5	<.0	1.3
	5	3	01	25			82	01	51
Always	0.28	0.84	0.00	1.3	Always	0.057	0.8	<.0	1.0
	2	3	4	26			12	01	59
Feedback from CHA					Feedback from CHA				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
sometimes	0.42	0.60	0.01	1.5	sometimes	0.106	0.1	0.00	1.1
	7	8	9	33			19	2	12
Always	0.32	0.60	<.0	1.3	Always	0.384	0.1	<.0	1.4
	6	2	01	85			23	01	68
Feedback to Client					Feedback to Client				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
sometimes	0.28	0.48	0.84	1.3	sometimes	0.367	0.6	0.29	1.4
	8	1	6	34			33	2	43
Always	0.09	0.43	0.95	1.0	Always	0.543	0.5	0.80	1.7
		5	94				74	3	21
Supportive					Supportive Supervision				

Variable	Comparison Group				Variable	Intervention Group			
	B	S.E.	Sig.	OR		B	S.E.	Sig.	OR
Supervision					Supervision				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
Sometime	0.03	0.02	0.07	1.0	Sometime	0.374	0.2	0.03	1.4
	3	7	7	34			39	1	54
Always	0.00	0.60	0.09	1.0	Always	0.478	0.0	<.0	1.6
	6	1	6	06			77	01	13
Reporting Tools					Reporting Tools				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
Sometimes	0.33	0.51	0.21	1.3	Sometimes	0.299	0.6	0.16	1.3
	1		6	92			53	9	49
Provision of Stipend					Provision of Stipend				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
Sometimes	0.20	0.74	0.78	1.2	Sometimes	0.195	0.8	0.63	1.2
	4	8	5	27			43	9	15
Always	0.34	0.94	0.63	1.4	Always	0.165	0.9	0.46	1.1
	6	9	8	13			18	9	79
Support from CHC					Support from CHC				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
Sometimes	0.01	0.14	0.07	1.0	Sometimes	0.262	0.8	0.09	1.3
	5	7	9	15			79	6	
Always	0.16	0.11	0.09	1.1	Always	0.345	0.8	0.18	1.4
	3	3	4	77			72	9	12
Respect from Providers					Respect from Providers				
Not at All (RC)	-	-	-	1	Not at All (RC)	-	-	-	1
Very Much	0.39	0.18	0.04	1.4	Very Much	0.262	0.9	0.01	1.3
	4	2		83			01	2	
Somewhat	0.43	0.24	<.0	1.5	Somewhat	0.481	0.9	<.0	1.6
	8	5	01	5			41	01	18
Community Trust					Community Trust				
Not at All (RC)	-	-	-	1	Not at All (RC)	-	-	-	1
Very Much	0.19	0.58	0.04	1.2	Very Much	0.127	0.6	0.21	1.1
	2	2		12			68	6	35
Somewhat	0.23	0.56	<.0	1.2	Somewhat	0.21	0.4	0.50	1.2
	8		01	69			63	3	34
Participating in Dialogue					Participating in Dialogue				
Sometimes (RC)	-	-	-	1	sometimes	-	-	-	1
Always	0.11	0.73	0.12	1.1	Always	0.379	0.8	0.01	1.4
	8	3	7	25			35	3	61

Table 4.26

Multivariate Logistic Regression Results at End line

Comparison Group					Intervention Group				
Variable	B	S.E.	Sig.	OR	Variable	B	S.E.	Sig.	OR
Level of Education					Level of Education				
Primary (RC)	-	-	-	1	Primary (RC)	-	-	-	1
Secondary	0.38	0.06	0.05	1.47	Secondary	0.388	0.62	0.02	1.47
	8	5	2	4			4	5	4
Tertiary	0.93	0.48	0.01	1.24	Tertiary	0.702	0.13	0.00	2.01
	8	3	8	4			2	3	8
Age					Age				
20-29 Years (RC)	-	-	-	1	20-29 Years (RC)	-	-	-	1
30-39 years	0.21	0.84	0.23	1.23	30-39 years	0.382	0.76	0.08	1.46
	2	7		6			1		5
40-49 years	0.52	0.33	0.65	1.69	40-49 years	0.476	0.98	0.21	1.61
	6		4	2			8	4	
50-59 years	0.36	0.62	0.32	1.43	50-59 years	0.583	0.77	0.07	1.79
	3	6	1	8			4		1
60 and above years	0.40	0.90	0.12	1.50	60 and above years	0.614	0.99	0.06	1.84
	6	1	5	1			6	1	8
Years Worked					Years Worked				
>5years (RC)	-	-	-	1	>5years (RC)	-	-	-	1
5-10 years	0.03	0.66	0.88	1.03	5-10 years	0.301	0.50	0.00	1.35
	5	4	8	6			4	4	1
More than 10 years	0.24	0.40	0.82	1.28	More than 10 years	0.88	0.21	0.01	2.41
	7	3	7				4	8	1
Sensitizing the Community					Sensitizing the Community				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
sometimes	0.36	0.33	0.45	1.39	sometimes	0.538	0.71	0.02	1.71
	9	4	8	9			3	7	3
Always	0.42	0.66	0.04	1.52	Always	0.804	0.97	0.00	2.23
	1	4	6	3			3	2	4
Recording complaints & compliments					Recording complaints & compliments				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
sometimes	0.09	0.16	0.24	1.27	sometimes	-	-	-	1
	7	2	1	3					
Always	0.18	0.77	0.30	1.35	Always	0.618	0.65	0.01	1.85
	2	6	6	8			9	4	5
Feedback from CHA					Feedback from CHA				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
sometimes	0.42	0.54	0.21	1.52	sometimes	0.456	0.52	0.02	1.57
	3	4	3	7			8	3	8
Always	0.49	0.66	0.08	1.64	Always	0.631	0.65	0.04	1.87
	7	1	8	4			3		9
Feedback to Client					Feedback to Client				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
sometimes	0.02	0.72	0.04	1.02	sometimes	0.527	0.24	0.01	1.69
	4	6		4			7	6	4

Comparison Group					Intervention Group				
Variable	B	S.E.	Sig.	OR	Variable	B	S.E.	Sig.	OR
Always	0.15 7	0.50 2	0.07	1.17	Always	0.791	0.43 2	0.03 1	2.20 6
Supportive Supervision					Supportive Supervision				
Rarely (rc)	-	-	-	1					
Sometime	0.02 6	0.82 1	0.08 1	1.02 6	Sometimes	-	-	-	1
Always	0.25 9	0.24 5	0.29 8	1.29 6	Always	0.646	0.82 6	0.04 1	1.90 8
Reporting Tools					Reporting Tools				
Rarely (rc)	-	-	-	1	Rarely	-	-	-	1
Sometimes	0.22 5	0.53 4	0.08	1.25 2	Sometimes (RC)	0.523	0.31 2	0.00 8	1.68 7
Always	0.35 6	0.43	0.05 1	1.42 8	Always	0.605	0.23 4	0.00 6	1.83 1
Provision of Stipend					Provision of Stipend				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
Sometimes	0.10 6	0.02 2	0.00 2	1.11 2	Sometimes	0.269	0.7	0.12 4	1.30 9
Always	0.30 4	0.39 8	0.00 1	1.35 5	Always	0.236	0.95	0.32 1	1.26 6
Support from CHC					Support from CHC				
Rarely (RC)	-	-	-	1	Rarely (RC)	-	-	-	1
Sometimes	0.06 3	0.61 8	0.72 5	1.06 5	Sometimes	0.377	0.29 1	0.08 7	1.45 8
Always	0.17 2	0.34 3	0.32 1	1.18 8	Always	0.533	0.42 7	0.52 4	1.70 4
Respect from Providers					Respect from Providers				
Not at All (RC)	-	-	-	1	Not at All (RC)	-	-	-	1
Very Much	0.38 1	0.34 3	0.51 2	1.46 4	Very Much	0.814	0.60 8	0.00 9	2.25 7
Somewhat	0.43 4	0.05 5	0.08 5	1.54 3	Somewhat	0.267	0.13	0.01 2	1.30 6
Community Trust					Community Trust				
Not at All (RC)	-	-	-	1	Not at All (RC)	-	-	-	1
Very Much	0.21 5	0.12 4	0.07 2	1.24	Very Much	0.389	0.17 5	0.00 2	1.47 6
Somewhat	0.19 4	0.50 6	0.02 4	1.21 4	Somewhat	0.19	0.09 4	0.00 5	1.20 9
Participating in Dialogue					Participating in Dialogue				
Rarely (RC)	-	-	-	1	sometimes	-	-	-	1
Always	0.22 8	0.56	0.02 2	1.25 6	Always	0.946	0.09 3	0.01 7	2.57 5

The findings presented on level of education and combined with support supervision influenced performance of CHVs is similar to those obtained by other researchers

(Kok et al., 2015). For instance, only two of five multivariate analyses that looked at the relationship between supervision frequency and health worker (Osterholt et al., 2009) or CHV performance in low-income countries found a positive relationship (Osterholt et al., 2009; Rowe et al., 2007). On the other hand, a study in the Philippines found no correlation between midwife performance scores and supervision frequency, but there was a dose response with improved supervision, indicating that increased frequency improves performance only when quality supervision is in place (Loevinsohn et al., 1995).

Mafuta et al. (2015) study proposed solutions for CHVs to implement social accountability. In their study, factors that would enhance CHVs practice in SAC were: training CHWs on how to collect and transmit community concerns, document the population's complaints and concerns using a formal system of records and sensitizing the population to report their concerns. Their study emphasized the importance of gathering population complaints, questions, and concerns via home visits and bringing them to the attention of healthcare workers during dialogue sessions and health committee meetings. This study is similar to theirs in that various aspects had to be combined to improve social accountability.

This study sought to understand the experiences of clients who had reported concerns to CHVs in addition to assessing the intervention's effect on social accountability. As a result, the study employed field narrative methodology to solicit the perspectives of the chosen clients. The study wanted to establish the effect of training CHVs on social accountability, but from the client's perspective. Field stories from some of the

clients who benefited from the intervention were collected. According to the findings, the clients were visited by the CHVs and shared their concerns with them, as illustrated by the quote below:

“...Mama (CHV) came to see me. She was interested on how I was doing and whether I was satisfied with the services I had received from...facility.” (KI, Female Client)

“...Immediately after my wife delivered, a CHV who is our neighbour came two days later and wanted to know our experience with the services we had received from the facility... ” (KI, Male Client)

Further interaction with the clients revealed that when the CHVs asked if they had any concerns about the services, the clients actually had questions that needed to be answered. The first client had asked the CHVs if they were supposed to buy a mother and child booklet, and the second client was concerned that they had been charged sh.500 during delivery for medication to induce labor, as shown by the following quotes:

“...as I had previously told Mama..(CHV), I was pleased with the services I received at the clinic. The only question I had was whether we were supposed to buy the clinic book (mother and child booklet). When I arrived at the clinic that day, a woman and a man at the gate asked what services I had come for. I stated that this was my first visit to the ANC. They inquired as to whether I had a clinic book. When I said no, they told me I had to buy one for Sh.200. I

bought it because I thought it was necessary, but after reading it, I realized it was not for sale. That bothered me.....” (KI, Female Client)

“... I told the CHV that I was relieved that my wife had delivered safely. The only concern I had was that the doctor who assisted my wife to give birth demanded money from us. He informed me that my wife required medication to induce labor, which would cost Sh.500.... "Because my wife was in pain, I just paid, despite the fact that we had a Linda Mama card and were not supposed to pay... ” (KI, Male Client)

The experiences from the clients showed that the clients concerns were solved and they received feedback from the CHVs. The CHVs reported the concerns to the health actors, and clients were satisfied with the action taken as quoted below:

“... I was impressed when the CHV apologized for a mistake that she did not make. She also told me that she would report to the facility's manager so that they could look into it further and prevent future clients from falling into the same trap... ” (KI, Female Client)

“... I was happy when my complaint was taken seriously. The CHV informed the facility's manager. After a day, the CHV, accompanied by two health workers, came to see me. One of them introduced herself as the facility's manager. They apologized and gave me the sh.500 back. I declined; telling them that what matters is that my wife and baby are healthy. They insisted

that I accept the money, claiming that charging fees at their facility is against government policy. They said they will ensure it will never happen again ... ”

(KI, Male Client)

The findings showed that the clients would continue to visit the health facility as highlighted below:

“...I will continue with ANC clinic because I now know what to do if I have a concern ... ” **(KI, Female Client)**

“...we will keep taking our baby to the clinic there because that hospital listened to our complaint...” **(KI, Male Client)**

These study findings indicated that community members must be encouraged to express their concerns. Clients may also prefer to use intermediaries to express their complaints. Another lesson learned from this intervention was that responsive leadership improves client satisfaction, which may lead to increased service utilization. Lodeinstein et al. (2018) study reported that women never complained directly to the health worker about the care they received but used intermediaries, especially when they had complaints than compliments. According to the respondents in their study, using intermediaries to complain helped the women overcome their fear of speaking directly to the health workers.

The findings on feedback to the clients promotes their ability to voice issues is in line

with those of Pieterse (2019). Pieterse (2019) showed that a well-functioning feedback loop improves social accountability. This is achieved by making sure that issues reported are noted and that the proper action is taken. Study participants reported empowering experiences in which the power dynamics between service users, health authorities, and service providers were changed. The study also found that effective social accountability interventions can result in better service outcomes.

4.12 Summary of Findings

Overall findings indicated that CHVs ability to enhance social accountability improved in the intervention group compared to the comparison group. Social accountability improved by 47.7% percentage point difference in the intervention group compared to the comparison group. These findings demonstrated that, when the skills of CHVs are enhanced, they can influence health system responsiveness to clients' needs and expectations.

The model worked better with the intervention than without as shown by the R^2 analysis. This meant that even if the CHVs did some form of SAc prior to the study, after the training there was significant improvement on how they practiced social accountability. This was supported by the findings of the intervention group compared to the comparison group.

Further analysis showed that level of education and years volunteered by the CHVs influenced social accountability. For instance, intervention group CHVs with tertiary education had 2.188 chances of improving SAc compared to 1.269 in the comparison

group. These findings implied that a higher education background is a positive factor that enables CHVs to do their jobs and perform better. Years volunteered by the CHV had a positive effect to improving social accountability. For example, CHVs in the intervention group that had volunteered for more than 10 years had 2.044 chances of enhancing SAc compared to 1.233 in the comparison group. The positive association was linked to the experience gained from long-term volunteer in a specific role. CHVs that had been on the job for a long time could easily spot poor and good service.

These findings demonstrated that CHVs can record complaints if they have the necessary tools. The findings at end of the study showed the practice of CHVs recording complaints improved significantly for the intervention group 51 (56.7 %) compared to the comparison group 8 (8.9%). The findings were linked to the availability of reporting tools with complaint indicators. According to the study's findings, fear and discrimination influenced how complaints were filed. However, improved relationship between service providers and the CHVs improved the practice of reporting complaints to the CHA for the intervention group 69 (76.7%) compared to the comparison group 65 (54.4%). The findings of logistic regression for CHV practices and social accountability revealed a positive influence. In the intervention group, for example, CHVs that reported to always provide feedback to the clients had OR of $b=.709$, $p=.006$, $OR=2.032$ compared to OR of $b=.106$, $p=.05$, $OR=1.112$ in the comparison group.

Findings of supervision, provision of reporting tools, respect from the health providers and community trust were found to be strongly associated with improved social accountability. CHVs in the intervention group that reported to always being supervised had 3.448 chances of improving SAc compared to 1.458 in the comparison group. The adoption of combined group and one-on-one supervision methods was associated with significant results in the intervention group. The qualitative findings revealed that the CHVs felt supportive supervision had strengthened their ability to serve the community by allowing them to receive feedback on their work. The study findings demonstrated that provision of reporting tools could enhance the practice of SAc. Receiving reporting tools had 2.627 chance of improving social accountability in the intervention group compared to 1.377 in the comparison group. The availability of reporting tools could improve documentation of complaints and compliments, whereas a lack of it could impede follow-up and feedback on issues raised.

The findings from this study showed that most CHVs felt being '*discriminated*' by the health service providers and perceived as '*unlearned*' and '*not licenced*'. This affected how they related with the health providers. At the end of the study, 48 (53.3%) of the CHVs in the intervention group felt very much respected by health providers compared to 33 (36.7%) in the comparison group. Respect from the health providers had 2.197 chances of improving SAc compared to 1.606 in the comparison group. In both groups, respect from the health providers had a great impact on social accountability.

According to the findings, community dialogues had a positive impact on social accountability. Logistic regression findings showed that CHVs in the intervention group who said they always participated in community dialogues had 2.219 chances to improve social accountability compared to 1.455 in the comparison group. The findings revealed that meaningful community dialogues were associated with planning, involvement of all community members, including the vulnerable and marginalized, and holding the meeting at the appropriate time and day.

The training intervention incorporated with other components like supportive supervision, provision of working tools saw a significant improvement in social accountability. Pre and post score from the training at the intervention site showed an increase in social accountability knowledge levels (mean pre-test score = 48.2, SD = 9.59; mean post-test score = 71.1, SD = 9.36; $p < 0.001$). The intervention significantly improved CHVs practices in sensitizing the community on health rights and entitlement, recording complaints and receiving feedback and providing feedback to clients. Additional qualitative findings from the clients at the intervention site reported being satisfied with how the complaints were resolved and they were going to continue utilizing services. Multivariate logistic regression findings showed all the independent variables had positive impact on the dependent variable. For instance, in the intervention group CHVs receiving feedback from the CHA and providing feedback to clients had chances of improving social accountability by 1.879 and 2.206, respectively.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter contains a summary of the study, conclusions and recommendations on the study, as well as recommendations for future research.

5.2 Summary of the Study

The objective of this study was to evaluate the effect of community health strategy on advancing social accountability in Nairobi County, Kenya. The study used five research questions to answer this broad objective. The specific study objectives included the influence of CHVs characteristics, CHVs practices, contextual factors, community dialogue and effect of training CHVs on influencing SAc in the health system in Nairobi County, Kenya. The study limitation included social desirability bias. However, to reduce chances of bias, there was use of mixed method approach to collect data.

A conceptual framework guided this study. The independent variables included CHVs characteristics, CHVs practices in SAc, Contextual factors and community dialogue. The moderating variable was training of CHVs. The dependent was improved social accountability in terms of the number of CHVs who reported complaints.

This was a quasi-experimental design that had an intervention and comparison group. Data from both groups was collected at baseline. The intervention group received

treatment (training) after the baseline data collection but the comparison group did not. At the conclusion of the study, data was collected from both groups. This research was carried out in two phases. Phase one was termed as baseline. The baseline phase entailed conducting a needs analysis and soliciting feedback from CHVs and key stakeholders. As this was a participant-led study, the findings and perspectives from this phase were used to co-create the intervention. Phase two was the intervention phase, where the co-created intervention was implemented to the intervention group. At the end of the study, data was collected to measure the effect of community health strategy on improving social accountability.

The study was conducted in Embakasi North (comparison) and Embakasi Central (Intervention) in Nairobi County. The target population were the CHVs and they were selected using an inclusion criteria. The sample size was calculated and it was 90 CHVs for each of the study areas. Stratified sampling was used to select the CHVs in the study. The participants for the FGDs, KII and field narrative were selected based on their role, experience and their willingness to share experiences. They included CHVs, CHCs, CHAs, health facility in charges and health clients. Review of documents that included minutes and monthly reports was done.

Mixed method data collection tools were used at baseline and end line. Quantitative data was collected through questionnaire that was uploaded in a mobile application known as kobo collect. Qualitative data was collected through FGDs, KII, field narrative and document review. To improve reliability of data collection instruments,

pretesting was done in Makadara sub-county. The feedback from the pre-test was used to make amendments to the tools.

Internal reliability of quantitative data was calculated using Cronbach's Alpha. The reliability of qualitative data was maintained by keeping an audit trail of how data was collected, analyzed, and how different themes were derived and results were obtained. Validity of the data was ensured by inviting experts on this topic who helped review the research instruments and data. Their views helped in revising the questions and ineffective questions were discarded. Triangulation in collecting data and interpreting data was used to enhance validity. Peer examination was also employed to ensure that the data instruments measured what was intended.

Quantitative data was analysed using SPSS version 28. Descriptive and inferential statistics were done. Data was interpreted using frequencies, percentages and means. Chi-square was used to measure how significant the difference between the groups. Association between the variables was measured using simple and multiple logistic regression. Qualitative data from was transcribed into verbatim transcripts. The transcripts were all uploaded in the qualitative data analysis software, Atlas.ti 22 software. Coding scheme was informed by social accountability concepts. Thematic analysis was used and was guided by the research objectives. Ethical approval for this research was obtained from KEMU (SERC), NACOSTI and Nairobi Metropolitan Research Review Committee. Informed consent was obtained from all the participants.

Embakasi Central was selected to be the intervention site and Embakasi North as the comparison group site based on the baseline findings. At baseline findings showed Embakasi North was performing better in SAc compared to Embakasi North. The intervention was training of CHVs on SAc particularly those in the intervention group. The baseline findings revealed CHVs practices on social accountability were low. Equally, there was no CHV in the intervention group who was trained in social accountability while only one in the comparison group was trained by social justice department. Additional qualitative findings showed that CHVs knowledge levels on social accountability were low and therefore the study targeted to increase the knowledge through training. However, there was no training guide therefore this was co-created through findings from baseline in consultation with experts from that field. After the training guide was validated, the CHAs and facility in charges were taken through the training guide by the researcher and supervisor. The CHAs and Supervisors served as the TOTs. After their training, the CHAs trained their respective CHVs with the help of the supervisors. At the end of the study, data was collected and was used to evaluate the effect of training CHVs on SAc.

Logistic results showed that independent variables had a positive impact on social accountability. For instance, in intervention group CHVs that always provide feedback to the clients had OR of $b=.709$, $p= .006$, $OR=2.032$ compared to OR of $b=.106$, $p= .05$, $OR=1.112$ in the comparison group. CHVs in the intervention group that were supervised had 3.448 chances of improving SAc compared to 1.458 in the comparison group. Receiving reporting tools had 2.627 chance of improving social accountability in the intervention group compared to 1.377 in the comparison group.

These concluded that training CHVs influences their performance in social accountability.

5.3 Conclusions

The study provides a deeper understanding of social accountability interventions for CHVs. It highlights which factors are perceived as important as well as difficult, and which must be taken into account by stakeholders when implementing interventions in similar settings. The findings will help researchers, policymakers, and stakeholders involved in social accountability interventions in community health systems. The findings suggest that incorporating various components into social accountability interventions can have a significant impact. For instance, this intervention integrated training with support supervision, provision of working tools and improved health providers and CHVs relationship.

Findings indicated that effective social accountability practice requires CHVs to educate or empower communities about their rights and entitlements, as well as collect, document, and present community concerns to health system actors. In addition, a high level of education can help CHVs understand more about health knowledge, as well as how to write and submit their monthly reports as part of their roles as CHVs. CHVs who had worked for more than ten years were more likely to improve social accountability compared to those who had worked less than 5 years. The positive association was linked to the experience gained from working in a specific role for an extended period. CHVs that had been on the job for a long time could easily identify subpar services.

CHV practices contribute significantly to improving social accountability. Empowering CHVs on health rights and entitlement gives them confidence to empower the community. This study revealed that community members' ability to voice their concerns is influenced by their knowledge of rights and entitlement; therefore CHVs as their intermediaries need to be knowledgeable. The practice of encouraging community members to speak is key for the enhancement of social accountability. Findings from this study showed that when CHVs proactively seek community opinion, that is when they raise their concerns. Discussions showed that power and knowledge asymmetries between the health providers and community members contribute to them not expressing their concerns. This justifies why the CHVs should be proactive than wait for the community members to bring concerns to them. In addition, the findings revealed that it is feasible for the CHVs to record complaints especially when provided with tools and trained on the complaint indicators. The study showed that that a good documenting system that facilitates systematic ways to collect, analyses, and respond to complaints and compliments is required for effective utilization of complaints and compliments data.

Contextual factors that promote social accountability include collaboration with CHC, supportive supervision, provision of working tools, relationship between the CHVs and the health providers and community trust. Based on the findings, CHVs who were supervised were more likely to improve social accountability. Group supervision can also be adapted to address the infrequency of supervision reported by CHVs from both groups while maintaining supervision quality. Provision of working tools strengthens the performance of CHVs and it is important for all stakeholders

implementing community strategy look for ways to ensure this is sustainable.

Community dialogues provide a good forum for the community to engage with the health providers. Findings revealed that feedback in the dialogues was not sufficient and made them to be labeled as forums for ‘just talking’. One of the ways that came from this study that can make them meaningful is by health providers and SCHMT attending the forums so that they can respond to issues that are beyond the CHA and CHVs. In addition, besides dialogues being forums for educating the community, they should be used to collect community concerns on service provision as this was one of the weak links. Training of CHVs has a great influence in improving social accountability.

5.4 Recommendations

This section contains suggestions for additional research as well as recommendations based on the research findings.

5.4.1 Recommendations on Research Findings

This study had recommendations based of the findings. CHVs play an important role in improving health services, and the study makes the following recommendations to improve their role in influencing health system priorities based on community needs:

1. Adaptation of the CHVs Social Accountability training guide by the Ministry of Health, community health department and be cascaded to other counties with similar set up

2. The Ministry of Health would be required to certify CHVs. It will make CHVs feel more authentic and prevent them from feeling inferior.
3. The study suggests that the community health department educate mainstream health workers about the role and qualities of CHVs. For example, one of the reasons health workers in Nairobi County look down on CHVs is their level of education.
4. Group supervision should be strengthened, and a guide should be provided to CHAs in cases where one-on-one supervision is not possible.
5. To prevent community mistrust, which has an impact on social accountability, clear communication from the government and implementing partners, particularly on activities, should be reinforced.
6. Dialogues need to be strengthened by ensuring the health providers and SCHMT attend to respond community meetings. Documentation on dialogue meetings should be improved because the information can be used to reference community issues.

5.4.2 Recommendations for Further Research

Future research will need to look into the effect of complaints collection by the CHVs in utilization of services. It will be important to know the extent to which the CHVs intermediary role impacts health system responsiveness. The study was unable to determine the extent to which CHVs can influence enforcement of health provider non-performance. It is therefore vital to conduct a study on the feasibility of CHVs influencing sanctions on health-care system failures.

REFERENCES

- Abimbola, S., Molemodile, S. K., Okonkwo, O. A., Negin, J., Jan, S., & Martiniuk, A. L. (2016). 'The government cannot do it all alone': Realist analysis of the minutes of community health committee meetings in Nigeria. *Health Policy and Planning, 31*(3), 332–345. <https://doi.org/10.1093/heapol/czv066>
- Abowitz, D., & Toole, T. (2010). Mixed Method Research: Fundamental Issues of Design, Validity, and Reliability in Construction Research. *Journal of Construction Engineering and Management-Asce - J CONSTR ENG MANAG-ASCE, 136* (1), 109-116. [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0000026](https://doi.org/10.1061/(ASCE)CO.1943-7862.0000026)
- Abuya, T., Ndwiga, C., Ritter, J., Kanya, L., Bellows, B., Binkin, N., & Warren, C. E. (2015). The effect of a multi-component intervention on disrespect and abuse during childbirth in Kenya. *BMC Pregnancy and Childbirth, 15*(1), 224. <https://doi.org/10.1186/s12884-015-0645-6>
- Acharya, D., Singh, J. K., Adhikari, S., & Jain, V. (2016). Association between sociodemographic characteristics of female community health volunteers and their knowledge and performance on maternal and child health services in rural Nepal. *Journal of Multidisciplinary Healthcare, 9* (2), 111–120. <https://doi.org/10.2147/JMDH.S98700>
- Afulani, P. A., Phillips, B., Aborigo, R. A., & Moyer, C. A. (2019). Person-centred maternity care in low-income and middle-income countries: Analysis of data from Kenya, Ghana, and India. *The Lancet Global Health, 7*(1), e96–e109. [https://doi.org/10.1016/S2214-109X\(18\)30403-0](https://doi.org/10.1016/S2214-109X(18)30403-0)
- Alamo, S., Wabwire-Mangen, F., Kenneth, E., Sunday, P., Laga, M., & Colebunders, R. L. (2012). Task-Shifting to Community Health Workers: Evaluation of the Performance of a Peer-Led Model in an Antiretroviral Program in Uganda. *AIDS Patient Care and STDs, 26*(2), 101–107. <https://doi.org/10.1089/apc.2011.0279>
- Ande, O., Oladepo, O., & Brieger, W. R. (2004). Comparison of knowledge on diarrheal disease management between two types of community-based distributors in Oyo State, Nigeria. *Health Education Research, 19*(1), 110–113. <https://doi.org/10.1093/her/cyg004>
- Andersson, K., & Van Laerhoven, F. (2007). From Local Strongman to Facilitator. *Comparative Political Studies - COMP POLIT STUD, 40*(9), 1085–1111. <https://doi.org/10.1177/0010414006288977>
- Anisimova, M., & Gascuel, O. (2006). Approximate Likelihood-Ratio Test for Branches: A Fast, Accurate, and Powerful Alternative. *Systematic Biology, 55*(4), 539–552. <https://doi.org/10.1080/10635150600755453>

- Armstrong, G., Kermode, M., Raja, S., Suja, S., Chandra, P., & Jorm, A. F. (2011). A mental health training program for community health workers in India: Impact on knowledge and attitudes. *International Journal of Mental Health Systems*, 5(1), 17. <https://doi.org/10.1186/1752-4458-5-17>
- Aseyo, R., Mumma, J., Scott, K., Nelima, D., Davis, E., Baker, K., Cumming, O., & Dreibelbis, R. (2018). Realities and experiences of community health volunteers as agents for behaviour change: Evidence from an informal urban settlement in Kisumu, Kenya. *Human Resources for Health*, 16, 53. <https://doi.org/10.1186/s12960-018-0318-4>
- Atela, M., Bakibinga, P., Ettarh, R., Kyobutungi, C., & Cohn, S. (2015a). Strengthening health system governance using health facility service charters: A mixed methods assessment of community experiences and perceptions in a district in Kenya. *BMC Health Services Research*, 15(1), 539. <https://doi.org/10.1186/s12913-015-1204-6>
- Barnett-Page, E., & Thomas, J. (2009). Methods for the synthesis of qualitative research: A critical review. *BMC Medical Research Methodology*, 9(59), 59. <https://doi.org/10.1186/1471-2288-9-59>
- Benkharafa, M. (2013). The Present Situation of the Arabic Language and the Arab World Commitment to Arabization. *Theory and Practice in Language Studies*, 3(2), 201–208. <https://doi.org/10.4304/tpls.3.2.201-208>
- Berlan, D., & Shiffman, J. (2012). Holding health providers in developing countries accountable to consumers: A synthesis of relevant scholarship. *Health Policy and Planning*, 27(4), 271–280. <https://doi.org/10.1093/heapol/czr036>
- Bhutta, Z., Lassi, Z., Pariyo, G., & Huicho, L. (2010). *Global Experience of Community Health Workers for Delivery of Health Related Millennium Development Goals: A Systematic Review, Country Case Studies, and Recommendations for Integration into National Health Systems World Health Organization Global Health Workforce Alliance (GHWA) Geneva: World Health Organization*. <https://chwcentral.org/wp-content/uploads/2013/07/Global-Experience-of-Community-Health-Workers-for-Delivery-of-Health-Related-Millennium-Development-Goals.pdf>
- Blair, H. (2018). Citizen Participation and Political Accountability for Public Service Delivery in India. *Journal of South Asian Development*, 13(1), 54-81. DOI: [10.1177/0973174118760942](https://doi.org/10.1177/0973174118760942)
- Blake, C., Annorbah-Sarpei, N. A., Bailey, C., Ismaila, Y., Deganus, S., Bosomprah, S., Galli, F., & Clark, S. (2016). Scorecards and social accountability for improved maternal and newborn health services: A pilot in the Ashanti and Volta regions of Ghana. *International Journal of Gynecology & Obstetrics*, 135(3), 372–379. <https://doi.org/10.1016/j.ijgo.2016.10.004>

- Bovens, M. (2007). Analysing and Assessing Accountability: A Conceptual Framework *European Law Journal* 13 (4) 447-468
<https://doi.org/10.1111/j.1468-0386.2007.00378>.
- Bowen, G. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9 (2), 27–40. <https://doi.org/10.3316/QRJ0902027>
- Boydell, V., McMullen, H., Cordero, J., Steyn, P., & Kiare, J. (2019). Studying social accountability in the context of health system strengthening: Innovations and considerations for future work. *Health Research Policy and Systems*, 17(1), 34. <https://doi.org/10.1186/s12961-019-0438-x>
- Boydell, V., Neema, S., Wright, K., & Hardee, K. (2018). Closing the Gap between People and Programs: Lessons from Implementation of Social Accountability for Family Planning and Reproductive Health in Uganda. *African Journal of Reproductive Health*, 22(1), 73–84. <https://doi.org/10.29063/ajrh2018/v22i1.7>
- Boydell, V., Nulu, N., Hardee, K., & Gay, J. (2020a). Implementing social accountability for contraceptive services: Lessons from Uganda. *BMC Women's Health*, 20(1), 228. <https://doi.org/10.1186/s12905-020-01072-9>
- Boydell, V., Steyn, P. S., Cordero, J. P., Habib, N., Nguyen, M. H., Nai, D., & Shamba, D. (2020). Adaptation and validation of social accountability measures in the context of contraceptive services in Ghana and Tanzania. *International Journal for Equity in Health*, 19(1), 183. <https://doi.org/10.1186/s12939-020-01286-1>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brinkerhoff, D. W. (2004). Accountability and health systems: Toward conceptual clarity and policy relevance. *Health Policy and Planning*, 19(6), 371–379. <https://doi.org/10.1093/heapol/czh052>
- Brinkerhoff, D. W., & Bossert, T. J. (2014). Health governance: Principal-agent linkages and health system strengthening. *Health Policy and Planning*, 29(6), 685–693. <https://doi.org/10.1093/heapol/czs132>
- Brinkerhoff, D. W., & Wetterberg, A. (2016). Gauging the Effects of Social Accountability on Services, Governance, and Citizen Empowerment. *Public Administration Review*, 76(2), 274–286. <https://doi.org/10.1111/puar.12399>
- Brown, A., Ramsay, N., Milo, M., Moore, M., & Hossain, R. (2018). How research-based theatre is a solution for community engagement and advocacy at regional medical campuses: The Health and Equity through Advocacy, Research, and

- Theatre (HEART) program. *Canadian Medical Education Journal*, 9(1), e6–e13. <https://doi.org/https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6104337/>
- Brunie, A., Wamala-Mucheri, P., Otterness, C., Akol, A., Chen, M., Bufumbo, L., & Weaver, M. (2014). Keeping community health workers in Uganda motivated: Key challenges, facilitators, and preferred program inputs. *Global Health, Science and Practice*, 2(1), 103–116. <https://doi.org/10.9745/GHSP-D-13-00140>
- Butcher, H. K., Holkup, P. A., Park, M., & Maas, M. (2001). Thematic analysis of the experience of making a decision to place a family member with Alzheimer's disease in a special care unit. *Research in Nursing & Health*, 24(6), 470–480. <https://doi.org/10.1002/nur.10005>
- Butler, N., Johnson, G., Chiweza, A., Aung, K. M., Quinley, J., Rogers, K., & Bedford, J. (2020). A strategic approach to social accountability: Bwalo forums within the reproductive maternal and child health accountability ecosystem in Malawi. *BMC Health Services Research*, 20(1) 1-16, 568. <https://doi.org/10.1186/s12913-020-05394-0>
- Baez Camargo, C., & Jacobs, E. (2013). Social accountability and its conceptual challenges: An analytical framework. 1-24 Basel institute on governance [10.5451/unibas-ep66317](https://doi.org/10.5451/unibas-ep66317)
- Baez-Camargo, C., & Stahl, F. (2016). Social accountability: A practitioner's handbook. Basel Institute on Governance
- Campbell, C., & Scott, K. (2011). Retreat from Alma Ata? The WHO's report on *Task Shifting* to community health workers for AIDS care in poor countries. *Global Public Health*, 6(2), 125–138. <https://doi.org/10.1080/17441690903334232>
- Carmichael, S. L., Mehta, K., Raheel, H., Srikantiah, S., Chaudhuri, I., Trehan, S., Mohanty, S., Borkum, E., Mahapatra, T., Weng, Y., Kaimal, R., Sivasankaran, A., Sridharan, S., Rotz, D., Tarigopula, U. K., Bhattacharya, D., Atmavilas, Y., Munar, W., Rangarajan, A., & Darmstadt, G. L. (2019). Effects of team-based goals and non-monetary incentives on front-line health worker performance and maternal health behaviours: A cluster randomised controlled trial in Bihar, India. *BMJ Global Health*, 4(4), e001146. <https://doi.org/10.1136/bmjgh-2018-001146>
- Callaghan-Koru, J. A., Hyder, A. A., George, A., Gilroy, K. E., Nsona, H., Mtimuni, A., & Bryce, J. (2012). Health Workers' and Managers' Perceptions of the Integrated Community Case Management Program for Childhood Illness in Malawi: The Importance of Expanding Access to Child Health Services. *The American Journal of Tropical Medicine and Hygiene*, 87(5), 61–68. <https://doi.org/10.4269/ajtmh.2012.11-0665>

- Chang, L., Chen, B.-B., & Ji, L. Q. (2011). Attributions and Attitudes of Mothers and Fathers in China. *Parenting, 11*(2–3), 102–115. <https://doi.org/10.1080/15295192.2011.585553>
- Cherrington, A., Wallston, K. A., & Rothman, R. L. (2010). Exploring the relationship between diabetes self-efficacy, depressive symptoms, and glycaemic control among men and women with type 2 diabetes. *Journal of Behavioural Medicine, 33*(1), 81–89. <https://doi.org/10.1007/s10865-009-9233-4>
- Chung, M. H. L., Hazmi, H., & Cheah, W. L. (2017). Role Performance of Community Health Volunteers and Its Associated Factors in Kuching District, Sarawak. *Journal of Environmental and Public Health, 2017*(9610928), 1–9. <https://doi.org/10.1155/2017/9610928>
- Cleary, S. M., Molyneux, S., & Gilson, L. (2013). Resources, attitudes and culture: An understanding of the factors that influence the functioning of accountability mechanisms in primary health care settings. *BMC Health Services Research, 13*(1), 320. <https://doi.org/10.1186/1472-6963-13-320>
- Closser, S., & Jooma, R. (2013). Why We Must Provide Better Support for Pakistan’s Female Frontline Health Workers. *PLOS Medicine, 10*(10), e1001528. <https://doi.org/10.1371/journal.pmed.1001528>
- Crankshaw, T. L., Kriel, Y., Milford, C., Cordero, J. P., Mosery, N., Steyn, P. S., & Smit, J. (2019). “As we have gathered with a common problem, so we seek a solution”: Exploring the dynamics of a community dialogue process to encourage community participation in family planning/contraceptive programmes. *BMC Health Services Research, 19*(1), 710. <https://doi.org/10.1186/s12913-019-4490-6>
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. SAGE Publications. <https://us.sagepub.com/en-us/nam/designing-and-conducting-mixed-methods-research/book241842>
- Crewson, P. (2011.). *Applied Statistics Handbook*. 12. https://www.researchgate.net/publication/307593202_Applied_Statistics_iBook
- Crispin, N., Wamae, A., Ndirangu, M., Wamalwa, D., Wangalwa, G., Watako, P., & Mbiti, E. (2012). Effects of Selected Socio-Demographic Characteristics of Community Health Workers on Performance of Home Visits during Pregnancy: A Cross-Sectional Study in Busia District, Kenya. *Global Journal of Health Science, 4*(5), 78–90. <https://doi.org/10.5539/gjhs.v4n5p78>
- De Lisle, J. (2011). The benefits and challenges of mixing methods and methodologies: Lessons learnt from implementing qualitatively led mixed methods research designs in Trinidad and Tobago. *Caribbean Curriculum, 18*, 87–120.

- Dick, J., M., H., & K. (2007). Primary health care nurses implement and evaluate a community outreach approach to health care in the South African agricultural sector: Original Article. *International Nursing Review*, 54, 383–390. <https://doi.org/10.1111/j.1466-7657.2007.00566.x>
- Dil, Y., Strachan, D., Cairncross, S., Korkor, A. S., & Hill, Z. (2012). Motivations and challenges of community-based surveillance volunteers in the northern region of Ghana. *Journal of Community Health*, 37(6), 1192–1198. <https://doi.org/10.1007/s10900-012-9569-5>
- Ellis, M., Kisling, E., & Hackworth, R. G. (2014). Teaching Soft Skills Employers Need. *Community College Journal of Research and Practice*, 38(5), 433–453. <https://doi.org/10.1080/10668926.2011.567143>
- Falisse, J.-B., Meessen, B., Ndayishimiye, J., & Bossuyt, M. (2012). Community participation and voice mechanisms under performance-based financing schemes in Burundi. *Tropical Medicine & International Health*, 17(5), 674–682. <https://doi.org/10.1111/j.1365-3156.2012.02973.x>
- Feruglio, F., & Nisbett, N. (2018). The challenges of institutionalizing community-level social accountability mechanisms for health and nutrition: A qualitative study in Odisha, India. *BMC Health Services Research*, 18(1), 788. <https://doi.org/10.1186/s12913-018-3600-1>
- Figueroa, M. E., Poppe, P., Carrasco, M., Pinho, M. D., Massingue, F., Tanque, M., & Kwizera, A. (2016). Effectiveness of Community Dialogue in Changing Gender and Sexual Norms for HIV Prevention: Evaluation of the Tchova Tchova Program in Mozambique. *Journal of Health Communication*, 21(5), 554–563. <https://doi.org/10.1080/10810730.2015.1114050>
- Flores, W. (2015). Community Defenders of the Right to Health in Guatemala – from <https://copasah.wordpress.com/2015/04/24/community-defenders-of-the-right-to-health-in-guatemala-walter-flores/>
- Fox, J. (2015). Social Accountability: What Does the Evidence Really Say? *World Development*. <https://doi.org/10.1016/j.worlddev.2015.03.011>
- Francetic, I., Fink, G., & Tediosi, F. (2021). Impact of social accountability monitoring on health facility performance: Evidence from Tanzania. *Health Economics*, 30(4), 766–785. <https://doi.org/10.1002/hec.4219>
- Friis-Hansen, E., Cold-Ravnkilde, S. M., Research & Communication on Foreign Aid (forskningsprogram), & Dansk Institut for Internationale Studier. (2013). *Social accountability mechanisms and access to public service delivery in rural Africa*. Danish Institute for International Studies.

- Fugard, A. J. B., & Potts, H. W. W. (2015). Supporting thinking on sample sizes for thematic analyses: A quantitative tool. *International Journal of Social Research Methodology*, 18(6), 669–684. <https://doi.org/10.1080/13645579.2015.1005453>
- Furth, R., & Crigler, L. (2012). Improving CHW program functionality, performance, and engagement: Operations research results from Zambia. *Research and Evaluation Report. USAID Health Care Improvement Project*. https://chwcentral.org/wp-content/uploads/2013/09/Zambia_Operations-research-on-improving-CHW-programs_June-12_0.pdf
- Gailmard, S. (2014, May 1). *Accountability and Principal–Agent Theory*. The Oxford Handbook of Public Accountability. <https://doi.org/10.1093/oxfordhb/9780199641253.013.0016>
- Gal, I., & Doron, I. (2007). Informal complaints on health services: Hidden patterns, hidden potentials. *International Journal for Quality in Health Care: Journal of the International Society for Quality in Health Care*, 19(3), 158–163. <https://doi.org/10.1093/intqhc/mzm006>
- Garg, S., & Pande, S. (2018). *Learning to Sustain Change: Mitanin Community Health Workers Promote Public Accountability in India*. Accountability Research Center. <https://accountabilityresearch.org/publication/learning-to-sustain-change-mitanin-community-health-workers-promote-public-accountability-in-india/>
- George, A. S., Mehra, V., Scott, K., & Sriram, V. (2015). Community Participation in Health Systems Research: A Systematic Review Assessing the State of Research, the Nature of Interventions Involved and the Features of Engagement with Communities. *PLoS ONE*, 10(10), e0141091. <https://doi.org/10.1371/journal.pone.0141091>
- George, M., & Joshi, S. (2012). Healthcare through Community Participation: Role of ASHAs. *Economic and Political Weekly*, 47, 70–76. https://www.researchgate.net/publication/279192831_Healthcare_through_Community_Participation_Role_of_ASHAs
- George, M. S., Pant, S., Devasenapathy, N., Ghosh-Jerath, S., & Zodpey, S. P. (2017). Motivating and demotivating factors for community health workers: A qualitative study in urban slums of Delhi, India. *WHO South-East Asia journal of public health*, 6(1), 82–89. <https://doi.org/10.4103/2224-3151.206170>
- Ghasemi, A., & Zahediasl, S. (2012). Normality Tests for Statistical Analysis: A Guide for Non-Statisticians. *International Journal of Endocrinology and Metabolism*, 10(2), 486–489. <https://doi.org/10.5812/ijem.3505>
- Gibbs, G. R. (2018). *Analyzing Qualitative Data*. SAGE Publications Ltd. <https://doi.org/10.4135/9781526441867>

- Gilbert, D. U., & Rasche, A. (2007). Discourse Ethics and Social Accountability: The Ethics of SA 8000. *Business Ethics Quarterly*, 17(2), 187–216. <https://doi.org/10.5840/beq200717230>
- Gilmore, B., & McAuliffe, E. (2013). Effectiveness of community health workers delivering preventive interventions for maternal and child health in low- and middle-income countries: A systematic review. *BMC Public Health*, 13(1), 847. <https://doi.org/10.1186/1471-2458-13-847>
- Gilson, L., Walt, G., Heggenhougen, K., Owuor-Omondi, L., Perera, M., Ross, D., & Salazar, L. (1989). National Community Health Worker Programs: How Can They Be Strengthened? *Journal of Public Health Policy*, 10(4), 518–532. <https://doi.org/10.2307/3342522>
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report*, 8(4), 597-607. <http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf>
- Gopalan, S. S., & Varatharajan, D. (2012). Addressing maternal healthcare through demand side financial incentives: Experience of Janani Suraksha Yojana program in India. *BMC Health Services Research*, 12, 319. <https://doi.org/10.1186/1472-6963-12-319>
- Government of Kenya. (2010). *Constitution of Kenya*. Retrieved 12 June 2022, from <http://kenyalaw.org/lex/actview.xql?actid=Const2010>
- Greene, J. C. (2008). Is Mixed Methods Social Inquiry a Distinctive Methodology? *Journal of Mixed Methods Research*, 2(1), 7–22. <https://doi.org/10.1177/1558689807309969>
- Greenspan, J. A., McMahon, S. A., Chebet, J. J., Mpunga, M., Urassa, D. P., & Winch, P. J. (2013). Sources of community health worker motivation: A qualitative study in Morogoro Region, Tanzania. *Human Resources for Health*, 11 (1), 52. <https://doi.org/10.1186/1478-4491-11-52>
- Grossman-Kahn, R., Schoen, J., Mallett, J. W., Brentani, A., Kaselitz, E., & Heisler, M. (2018). Challenges facing Community Health Workers in Brazil's Family Health Strategy: A qualitative study. *The International Journal of Health Planning and Management*, 33(2), 309–320. <https://doi.org/10.1002/hpm.2456>
- Gu, J., Maxwell, A. E., Ma, G. X., Qian, X., Tan, Y., Hsieh, H.-C., Tu, S.-P., & Wang, J. H. (2019). Evaluating the Training of Chinese-Speaking Community Health Workers to Implement a Small-Group Intervention Promoting Mammography. *Journal of Cancer Education : The Official Journal of the American Association for Cancer Education*, 34(4), 705–711. <https://doi.org/10.1007/s13187-018-1361-5>

- Gullo, S., Galavotti, C., Sebert Kuhlmann, A., Msiska, T., Hastings, P., & Marti, C. N. (2017). Effects of a social accountability approach, CARE's Community Score Card, on reproductive health-related outcomes in Malawi: A cluster-randomized controlled evaluation. *PLOS ONE*, *12*(2), e0171316. <https://doi.org/10.1371/journal.pone.0171316>
- Gullo, S., Galavotti, C., Sebert Kuhlmann, A., Msiska, T., Hastings, P., & Marti, C. N. (2020). Effects of the Community Score Card approach on reproductive health service-related outcomes in Malawi. *PloS One*, *15*(5), e0232868. <https://doi.org/10.1371/journal.pone.0232868>
- Gullo, S., Kuhlmann, A. S., Galavotti, C., Msiska, T., Nathan Marti, C., & Hastings, P. (2018). Creating spaces for dialogue: A cluster-randomized evaluation of CARE's Community Score Card on health governance outcomes. *BMC Health Services Research*, *18*(1), 858. <https://doi.org/10.1186/s12913-018-3651-3>
- Gurung, G., Derrett, S., Gauld, R., & Hill, P. C. (2017). Why service users do not complain or have 'voice': A mixed-methods study from Nepal's rural primary health care system. *BMC Health Services Research*, *17*(1), 81. <https://doi.org/10.1186/s12913-017-2034-5>
- Ha, B. T., Tac, P. V., Duc, D. M., Duong, D. T., & Thi, L. M. (2015). Factors associated with four or more antenatal care services among pregnant women: A cross-sectional survey in eight South Central Coast provinces of Vietnam. *International Journal of Women's Health*, *7*, 699–706. <https://doi.org/10.2147/IJWH.S87276>
- Hamal, M., de Cock Buning, T., De Brouwere, V., Bardají, A., & Dieleman, M. (2018). How does social accountability contribute to better maternal health outcomes? A qualitative study on perceived changes with government and civil society actors in Gujarat, India. *BMC Health Services Research*, *18*(1), 653. <https://doi.org/10.1186/s12913-018-3453-7>
- Hamal, M., Heiter, K., Schoenmakers, L., Smid, M., de Cock Buning, T., De Brouwere, V., Bardají, A., Nepal, C., & Dieleman, M. (2019). Social Accountability in Maternal Health Services in the Far-Western Development Region in Nepal: An Exploratory Study. *International Journal of Health Policy and Management*, *8*(5), 280–291. <https://doi.org/10.15171/ijhpm.2019.05>
- Hanusz, Z., Tarasinska, J., & Zieliński, W. (2016). *Shapiro–Wilk test with known mean*. *14* (1), 89–100. <http://dx.doi.org/10.57805/revstat.v14i1.180>
- Heary, C., & Hennessy, E. (2012). Focus Groups Versus Individual Interviews with Children: A Comparison of Data. *The Irish Journal of Psychology*, *27*(1), 58–68. <https://doi.org/10.1080/03033910.2006.10446228>
- Hernández, A., Ruano, A. L., Hurtig, A.-K., Goicolea, I., San Sebastián, M., & Flores, W. (2019). Pathways to accountability in rural Guatemala: A qualitative

- comparative analysis of citizen-led initiatives for the right to health of indigenous populations. *World Development*, 113 (1), 392–401. <https://doi.org/10.1016/j.worlddev.2018.09.020>
- Hill, Z., Dumbaugh, M., Benton, L., Källander, K., Strachan, D., ten Asbroek, A., Tibenderana, J., Kirkwood, B., & Meek, S. (2014). Supervising community health workers in low-income countries--a review of impact and implementation issues. *Global health action*, 7(10), 3402. <https://doi.org/10.3402/gha.v7.24085>
- Ho, L. S., Labrecque, G., Batonon, I., Salsi, V., & Ratnayake, R. (2015). Effects of a community scorecard on improving the local health system in Eastern Democratic Republic of Congo: Qualitative evidence using the most significant change technique. *Conflict and Health*, 9(1), 27. <https://doi.org/10.1186/s13031-015-0055-4>
- Hodgins, S., Kok, M., Musoke, D., Lewin, S., Crigler, L., LeBan, K., & Perry, H. B. (2021). Community health workers at the dawn of a new era: 1. Introduction: tensions confronting large-scale CHW programmes. *Health Research Policy and Systems*, 19(3), 109. <https://doi.org/10.1186/s12961-021-00752-8>
- Hoffman, J. I. E. (Ed.). (2019). Front Matter. In *Basic Biostatistics for Medical and Biomedical Practitioners (Second Edition)* (pp. i–ii). Academic Press. <https://doi.org/10.1016/B978-0-12-817084-7.09993-9>
- Hoxie, C., Berkebile, R., & Todd, J. (2012). Stimulating regenerative development through community dialogue. *Building Research & Information*, 40(1), 65–80. <https://doi.org/10.1080/09613218.2011.628546>
- Hurst, S., Arulogun, O. S., Owolabi, A. O., Akinyemi, R., Uvere, E., Warth, S., & Ovbiagele, B. (2015). Pretesting Qualitative Data Collection Procedures to Facilitate Methodological Adherence and Team Building in Nigeria. *International journal of qualitative methods*, 14, 53–64. <https://doi.org/10.1177/160940691501400106>
- Joshi, A. (2007). Producing Social Accountability? The Impact of Service Delivery Reforms. *IDS Bulletin*, 38(6), 10–17. <https://doi.org/10.1111/j.1759-5436.2007.tb00414.x>
- Joshi, A. (2017). Legal Empowerment and Social Accountability: Complementary Strategies Toward Rights-based Development in Health? *World Development*, 99(c), 160–172. <https://doi.org/10.1016/j.worlddev.2017.07.008>
- Joshi, A., & Houtzager, P. P. (2012). Widgets or Watchdogs?: Conceptual explorations in social accountability. *Public Management Review*, 14(2), 145–162. <https://doi.org/10.1080/14719037.2012.657837>
- Källander, K., Tomson, G., Nsabagasani, X., Sabiiti, J., Pariyo, G., & Peterson, S. (2006). Can community health workers and caretakers recognise pneumonia in

- children? Experiences from Western Uganda. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 100(10), 956–963. <https://doi.org/10.1016/j.trstmh.2005.11.004>
- Kalyango, J. N., Rutebemberwa, E., Alfven, T., Ssali, S., Peterson, S., & Karamagi, C. (2012). Performance of community health workers under integrated community case management of childhood illnesses in eastern Uganda. *Malaria Journal*, 11, 282. <https://doi.org/10.1186/1475-2875-11-282>
- Kamuzora, P., Maluka, S., Ndawi, B., Byskov, J., & Hurtig, A. K. (2013). Promoting community participation in priority setting in district health systems: experiences from Mbarali district, Tanzania. *Global health action*, 6, 22669. <https://doi.org/10.3402/gha.v6i0.22669>
- Kane, S., Kok, M., Ormel, H., Otiso, L., Sidat, M., Namakhoma, I., Nasir, S., Gemechu, D., Rashid, S., Taegtmeier, M., Theobald, S., & de Koning, K. (2016). Limits and opportunities to community health worker empowerment: A multi-country comparative study. *Social Science & Medicine*, 164, 27–34. <https://doi.org/10.1016/j.socscimed.2016.07.019>
- Karanja, D. M. S., Ogutu, M., Omedo, M. O., Alaii, J., Matey, E. J., Awiti, A., Secor, W. E., Mwinzi, P. N. M., & Montgomery, S. P. (2012). Community Health Workers' Experiences and Perspectives on Mass Drug Administration for Schistosomiasis Control in Western Kenya: The SCORE Project. *The American Journal of Tropical Medicine and Hygiene*, 87(6), 1065–1072. <https://doi.org/10.4269/ajtmh.2012.12-0435>
- Kaushik, V., & Walsh, C., (2019). Pragmatism as a Research Paradigm and Its Implications for Social Work Research. *Social Sciences*, 8(9) 1-17. <https://doi.org/10.3390/socsci8090255>
- Kawakatsu, Y., Sugishita, T., Kioko, J., Ishimura, A., & Honda, S. (2012). Factors influencing the performance of community health workers in Kisumu West, Kenya. *Primary Health Care Research & Development*, 13(4), 294–300. <https://doi.org/10.1017/S1463423612000138>
- Kawakatsu, Y., Sugishita, T., Tsutsui, J., Oruenjo, K., Wakhule, S., Kibosia, K., Were, E., & Honda, S. (2015). Individual and contextual factors associated with community health workers' performance in Nyanza Province, Kenya: A multilevel analysis. *BMC Health Services Research*, 15, 442. <https://doi.org/10.1186/s12913-015-1117-4>
- Kebriaei, A., & Moteghedhi, M. S. (2009). Job satisfaction among community health workers in Zahedan District, Islamic Republic of Iran. *EMHJ - Eastern Mediterranean Health Journal*, 15 (5), 1156-1163, 2009. <https://apps.who.int/iris/handle/10665/117745>

- Kenya National Bureau of Statistics. (2019). *knbs 2019 census report pdf*—Google Search. <https://www.google.com/search?q=knbs+2019+census+report+pdf&sxsrf>
- Kigongo, S. (2012). Population and health dynamics in Nairobi's informal settlements: Report of the Nairobi cross-sectional slums survey (NCSS) 2012.*. APHRC. <https://aphrc.org/publication/population-and-health-dynamics-in-nairobis-informal-settlements-report-of-the-nairobi-cross-sectional-slums-survey-ncss-2012-2/>
- Kiracho, E. E., Aanyu, C., Apolot, R. R., Kiwanuka, S. N., & Paina, L. (2021). Designing for Scale and taking scale to account: Lessons from a community score card project in Uganda. *International Journal for Equity in Health*, 20(1), 31. <https://doi.org/10.1186/s12939-020-01367-1>
- Kiracho, E. E., Namuhani, N., Apolot, R. R., Aanyu, C., Mutebi, A., Tetui, M., Kiwanuka, S. N., Ayen, F. A., Mwesige, D., Bumbha, A., Paina, L., & Peters, D. H. (2020). Influence of community scorecards on maternal and newborn health service delivery and utilization. *International Journal for Equity in Health*, 19(1), 145. <https://doi.org/10.1186/s12939-020-01184-6>
- Kok, M. C., Dieleman, M., Taegtmeier, M., Broerse, J. E., Kane, S. S., Ormel, H., Tijm, M. M., & de Koning, K. A. (2015). Which intervention design factors influence performance of community health workers in low- and middle-income countries? A systematic review. *Health Policy and Planning*, 30(9), 1207–1227. <https://doi.org/10.1093/heapol/czu126>
- Kok, M. C., Ormel, H., Broerse, J. E. W., Kane, S., Namakhoma, I., Otiso, L., Sidat, M., Kea, A. Z., Taegtmeier, M., Theobald, S., & Dieleman, M. (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), 1404–1432. <https://doi.org/10.1080/17441692.2016.1174722>
- Kok, M. C., Vallières, F., Tulloch, O., Kumar, M. B., Kea, A. Z., Karuga, R., Ndima, S. D., Chikaphupha, K., Theobald, S., & Taegtmeier, M. (2018). Does supportive supervision enhance community health worker motivation? A mixed-methods study in four African countries. *Health Policy and Planning*, 33(9), 988–998. <https://doi.org/10.1093/heapol/czy082>
- Kowitt, S. D., Emmerling, D., Fisher, E. B., & Tanasugarn, C. (2015). Community Health Workers as Agents of Health Promotion: Analyzing Thailand's Village Health Volunteer Program. *Journal of Community Health*, 40(4), 780–788. <https://doi.org/10.1007/s10900-015-9999-y>
- Kruk, M. E., Gage, A. D., Arsenault, C., Jordan, K., Leslie, H. H., Roder-DeWan, S., Adeyi, O., Barker, P., Daelmans, B., Doubova, S. V., English, M., Elorrio, E. G., Guanais, F., Gureje, O., Hirschhorn, L. R., Jiang, L., Kelley, E., Lemango,

- E. T., Liljestrand, J., ... Pate, M. (2018). High-quality health systems in the Sustainable Development Goals era: Time for a revolution. *The Lancet Global Health*, 6(11), e1196–e1252. [https://doi.org/10.1016/S2214-109X\(18\)30386-3](https://doi.org/10.1016/S2214-109X(18)30386-3)
- Lawn, J. E., Rohde, J., Rifkin, S., Were, M., Paul, V. K., & Chopra, M. (2008). Alma-Ata 30 years on: Revolutionary, relevant, and time to revitalise. *Lancet (London, England)*, 372(9642), 917–927. [https://doi.org/10.1016/S0140-6736\(08\)61402-6](https://doi.org/10.1016/S0140-6736(08)61402-6)
- Lehmann, U., & Sanders, D. (2007). Policy Brief: Community Health Workers: What Do We Know About Them? The State of the Evidence on Programmes, Activities, Costs and Impact on Health Outcomes of Using Community Health Workers. *Evidence and Information for Policy*, 2. World Health Organisation
- Lemay, N. V., Sullivan, T., Jumbe, B., & Perry, C. P. (2012). Reaching Remote Health Workers in Malawi: Baseline Assessment of a Pilot mHealth Intervention. *Journal of Health Communication*, 17(1), 105–117. <https://doi.org/10.1080/10810730.2011.649106>
- Leung, H., & Savithiri, R. (2009). Spotlight on focus groups. *Canadian Family Physician*, 55(2), 218-219. <https://doi.org/https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2642503/>
- Liamputtong, P. (2011). *Focus Group Methodology: Principles and Practice*. SAGE Publications Ltd. <https://doi.org/10.4135/9781473957657>
- Lobdell, D., Gilboa, S., Mendola, P., & Hesse, B. (2005). Use of focus groups for the environmental health researcher. *Journal of Environmental Health*, 67(6), 36–42. https://www.researchgate.net/publication/7786166_Use_of_focus_groups_for_the_environmental_health_researcher
- Lodenstein, E., Dieleman, M., Gerretsen, B., & Broerse, J. E. W. (2017). Health provider responsiveness to social accountability initiatives in low- and middle-income countries: A realist review. *Health Policy and Planning*, 32(1), 125–140. <https://doi.org/10.1093/heapol/czw089>
- Loevinsohn, B., Guerrero, E., & Gregorio, S. (1995). Improving primary health care through systematic supervision: A controlled field trial. *Health Policy and Planning*, 10(1), 144–153. <https://doi.org/10.1093/heapol/10.2.144>
- Lopes, S. C., Cabral, A. J., & de Sousa, B. (2014). Community health workers: To train or to restrain? A longitudinal survey to assess the impact of training community health workers in the Bolama Region, Guinea-Bissau. *Human Resources for Health*, 12(1), 8. <https://doi.org/10.1186/1478-4491-12-8>
- Ludwick, T., Turyakira, E., Kyomuhangi, T., Manalili, K., Robinson, S., & Brenner, J. L. (2018). Supportive supervision and constructive relationships with

- healthcare workers support CHW performance: Use of a qualitative framework to evaluate CHW programming in Uganda. *Human Resources for Health*, 16(1), 11. <https://doi.org/10.1186/s12960-018-0272-1>
- Maes, K. (2015). Community health workers and social change: *Annals of Anthropological Practice*, 39(1), 1–15. <https://doi.org/10.1111/napa.12060>
- Mafuta, E. M., Dieleman, M. A., Essink, L., Khomba, P. N., Zioko, F. M., Mambu, T. N. M., Kayembe, P. K., & de Cock Buning, T. (2017). Participatory approach to design social accountability interventions to improve maternal health services: A case study from the Democratic Republic of the Congo. *Global Health Research and Policy*, 2(1), 4. <https://doi.org/10.1186/s41256-017-0024-0>
- Mafuta, E. M., Dieleman, M. A., Hogema, L. M., Khomba, P. N., Zioko, F. M., Kayembe, P. K., de Cock Buning, T., & Mambu, T. N. M. (2015). Social accountability for maternal health services in Muanda and Bolenge Health Zones, Democratic Republic of Congo: A situation analysis. *BMC Health Services Research*, 15(1), 514. <https://doi.org/10.1186/s12913-015-1176-6>
- Mahmood, S. S., Rasheed, S., Chowdhury, A. H., Hossain, A., Selim, M. A., Hoque, S., & Bhuiya, A. (2020). Feasibility, acceptability and initial outcome of implementing community scorecard to monitor community level public health facilities: Experience from rural Bangladesh. *International Journal for Equity in Health*, 19(1), 155 . <https://doi.org/10.1186/s12939-020-01265-6>
- Malena, C., Forster, R., & Singh, J. (2004). *Social accountability: An introduction to the concept and emerging practice*. World Bank. Malone, H., Nicholl, H., & Coyne, I. (2016). Fundamentals of Estimating sample size. *Nurse Researcher*, Volume 23(5), 21–25. <https://doi.org/10.7748/nr.23.5.21.s5>
- Marczyk, G. R., DeMatteo, D., & Festinger, D. (2005). *Essentials of research design and methodology*. John Wiley & Sons.
- Martin, S., Leitão, J., Muhangi, D., Nuwa, A., Magul, D., & Counihan, H. (2017). Community dialogues for child health: Results from a qualitative process evaluation in three countries. *Journal of Health, Population, and Nutrition*, 36(1), 29. <https://doi.org/10.1186/s41043-017-0106-0>
- Martin, S., Rassi, C., Antonio, V., Graham, K., Leitão, J., King, R., & Jive, E. (2021). Evaluating the feasibility and acceptability of a community dialogue intervention in the prevention and control of schistosomiasis in Nampula province, Mozambique. *PloS One*, 16(8), e0255647. <https://doi.org/10.1371/journal.pone.0255647>
- Martínez-Mesa, J., González-Chica, D. A., Duquia, R. P., Bonamigo, R. R., & Bastos, J. L. (2016). Sampling: How to select participants in my research

- study? *Anais Brasileiros de Dermatologia*, 91(3), 326–330. <https://doi.org/10.1590/abd1806-4841.20165254>
- McCollum, R., Limato, R., Otiso, L., Theobald, S., & Taegtmeier, M. (2018). Health system governance following devolution: Comparing experiences of decentralisation in Kenya and Indonesia. *BMJ Global Health*, 3(5), e000939. <https://doi.org/10.1136/bmjgh-2018-000939>
- McHugh, M. L. (2013). The Chi-square test of independence. *Biochemia Medica*, 23(2), 143–149. <https://doi.org/10.11613/BM.2013.018>
- Meili, R., Fuller, D., & Lydiate, J. (2011). Teaching social accountability by making the links: Qualitative evaluation of student experiences in a service-learning project. *Medical Teacher*, 33(8), 659–666. <https://doi.org/10.3109/0142159X.2010.530308>
- Ministry of Health. (2006). *Reversing the Trends. The Second National Health Sector Strategic Plan of Kenya*. https://archive.ids.ac.uk/clts/sites/communityledtotalsanitation.org/files/community_strategy.pdf
- Ministry of Health. (2014). *Kenya Health Policy 2014-2030. Towards Attaining the Highest Standard of Health*. <https://www.ncikenya.or.ke/documents/kenya-health-policy.pdf>
- Ministry of Health. (2015). *Implementers' Manual for Social Accountability in the Health Sector for County Managers and Other Stakeholders*. Government of Kenya.
- Ministry of Health. (2020). *Kenya Community Health Strategy 2020-2025*. https://www.health.go.ke/wp-content/uploads/2021/01/Kenya-Community-Health-Strategy-Final-Signed-off_2020-25.pdf
- Ministry of Health, (2020). *Kenya Community Health Policy 2020-2030—Nurturing Care Framework for Early Childhood Development*. (2020, August 21). <https://nurturing-care.org/kenya-community-health-policy-2020-2030/>
- Mirzoev, T., & Kane, S. (2017). What is health systems responsiveness? Review of existing knowledge and proposed conceptual framework. *BMJ Global Health*, 2(4), e000486. <https://doi.org/10.1136/bmjgh-2017-000486>
- Mohajer, N., & Singh, D. (2018). Factors enabling community health workers and volunteers to overcome socio-cultural barriers to behaviour change: Meta-synthesis using the concept of social capital. *Human Resources for Health*, 16(1), 63. <https://doi.org/10.1186/s12960-018-0331-7>
- Molyneux, S., Atela, M., Angwenyi, V., & Goodman, C. (2012). Community accountability at peripheral health facilities: A review of the empirical literature

- and development of a conceptual framework. *Health Policy and Planning*, 27(7), 541–554. <https://doi.org/10.1093/heapol/czr083>
- Morgan, D. L. (2014). Pragmatism as a Paradigm for Social Research. *Qualitative Inquiry*, 20(8), 1045–1053. <https://doi.org/10.1177/1077800413513733>
- Muhwezi, W. W., Palchik, E. A., Kiwanuka, D. H., Mpanga, F., Mukundane, M., Nanungi, A., Bataringaya, D., Ssesanga, P., & Aryaija-Karemani, A. (2019). Community participation to improve health services for children: A methodology for a community dialogue intervention in Uganda. *African Health Sciences*, 19(1), 1574–1581. <https://doi.org/10.4314/ahs.v19i1.32>
- Mukhopadhyay, D. K., Mukhopadhyay, S., Mallik, S., Nayak, S., Biswas, A. K., & Biswas, A. B. (2016). A study on utilization of Janani Suraksha Yojana and its association with institutional delivery in the state of West Bengal, India. *Indian Journal of Public Health*, 60(2), 118–123. <https://doi.org/10.4103/0019-557X.184543>
- Munakampe, M. N., Nkole, T., Silumbwe, A., Zulu, J. M., Cordero, J. P., & Steyn, P. S. (2020). Feasibility testing of a community dialogue approach for promoting the uptake of family planning and contraceptive services in Zambia. *BMC Health Services Research*, 20, 728. <https://doi.org/10.1186/s12913-020-05589-5>
- Musinguzi, L. K., Turinawe, E. B., Rwemisisi, J. T., de Vries, D. H., Mafigiri, D. K., Muhangi, D., de Groot, M., Katamba, A., & Pool, R. (2017). Linking communities to formal health care providers through village health teams in rural Uganda: Lessons from linking social capital. *Human Resources for Health*, 15(1), 4. <https://doi.org/10.1186/s12960-016-0177-9>
- Musoke, D., Atusingwize, E., Ikhile, D., Nalinya, S., Ssemugabo, C., Lubega, G. B., Omodara, D., Ndejjo, R., & Gibson, L. (2021). Community health workers' involvement in the prevention and control of non-communicable diseases in Wakiso District, Uganda. *Globalization and Health*, 17(1), 7. <https://doi.org/10.1186/s12992-020-00653-5>
- Nandi, S., & Schneider, H. (2014). Addressing the social determinants of health: A case study from the Mitanin (community health worker) programme in India. *Health Policy and Planning*, 29(2), ii71–ii81. <https://doi.org/10.1093/heapol/czu074>
- Ndagije, H. B., Manirakiza, L., Kajungu, D., Galiwango, E., Kusemererwa, D., Olsson, S., Spinewine, A., & Speybroeck, N. (2019). The effect of community dialogues and sensitization on patient reporting of adverse events in rural Uganda: Uncontrolled before-after study. *PloS One*, 14(5), e0203721. <https://doi.org/10.1371/journal.pone.0203721>
- Ndima, S. D., Sidat, M., Give, C., Ormel, H., Kok, M. C., & Taegtmeier, M. (2015). Supervision of community health workers in Mozambique: A qualitative study

- of factors influencing motivation and programme implementation. *Human Resources for Health*, 13(1), 63. <https://doi.org/10.1186/s12960-015-0063-x>
- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence Based Nursing*, 18(2), 34–35. <https://doi.org/10.1136/eb-2015-102054>
- Okuga, M., Kemigisa, M., Namutamba, S., Namazzi, G., & Waiswa, P. (2015). Engaging community health workers in maternal and newborn care in eastern Uganda. *Global Health Action*, 8. <https://doi.org/10.3402/gha.v8.23968>
- Olang'o, C. O., Nyamongo, I. K., & Aagaard-Hansen, J. (2010). Staff attrition among community health workers in home-based care programmes for people living with HIV and AIDS in western Kenya. *Health Policy*, 97(2), 232–237. <https://doi.org/10.1016/j.healthpol.2010.05.004>
- Oluoch-Aridi, J., Smith-Oka, V., Milan, E., & Dowd, R. (2018). Exploring mistreatment of women during childbirth in a peri-urban setting in Kenya: Experiences and perceptions of women and healthcare providers. *Reproductive Health*, 15(1), 209. <https://doi.org/10.1186/s12978-018-0643-z>
- Onwuegbuzie, A. J., Leech, N., & Collins, K. M. (2012). Qualitative Analysis Techniques for the Review of the Literature. *The Qualitative Report*, 17(28) 1-28. <https://doi.org/10.46743/2160-3715/2012.1754>
- Ormel, H., Kok, M., Kane, S., Ahmed, R., Chikaphupha, K., Rashid, S. F., Gemechu, D., Otiso, L., Sidat, M., Theobald, S., Taegtmeier, M., & de Koning, K. (2019). Salaried and voluntary community health workers: Exploring how incentives and expectation gaps influence motivation. *Human Resources for Health*, 17(1), 59. <https://doi.org/10.1186/s12960-019-0387-z>
- Osawa, E., Kodama, T., & Kundishora, E. (2010). Motivation and sustainability of care facilitators engaged in a community home-based HIV/AIDS program in Masvingo Province, Zimbabwe. *AIDS Care*, 22(7), 895–902. <https://doi.org/10.1080/09540120903499196>
- Østebø, M. T., Cogburn, M. D., & Mandani, A. S. (2018). The silencing of political context in health research in Ethiopia: Why it should be a concern. *Health Policy and Planning*, 33(2), 258–270. <https://doi.org/10.1093/heapol/czx150>
- Osterholt, D. M., Onikpo, F., Lama, M., Deming, M. S., & Rowe, A. K. (2009). Improving pneumonia case-management in Benin: A randomized trial of a multi-faceted intervention to support health worker adherence to Integrated Management of Childhood Illness guidelines. *Human Resources for Health*, 7(1), 77. <https://doi.org/10.1186/1478-4491-7-77>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and

- analysis in mixed method implementation research. *Administration and Policy in Mental Health*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- Pallas, S. W., Minhas, D., Pérez-Escamilla, R., Taylor, L., Curry, L., & Bradley, E. H. (2013). Community Health Workers in Low- and Middle-Income Countries: What Do We Know About Scaling Up and Sustainability? *American Journal of Public Health*, 103(7), e74–e82. <https://doi.org/10.2105/AJPH.2012.301102>
- Panday, S., Bissell, P., van Teijlingen, E., & Simkhada, P. (2017). The contribution of female community health volunteers (FCHVs) to maternity care in Nepal: A qualitative study. *BMC Health Services Research*, 17(1), 623. <https://doi.org/10.1186/s12913-017-2567-7>
- Panday, S., Bissell, P., van Teijlingen, E., & Simkhada, P. (2019). Perceived barriers to accessing Female Community Health Volunteers' (FCHV) services among ethnic minority women in Nepal: A qualitative study. *PLoS ONE*, 14(6), e0217070. <https://doi.org/10.1371/journal.pone.0217070>
- Pérez, L. M., & Martinez, J. (2008). Community Health Workers: Social Justice and Policy Advocates for Community Health and Well-Being. *American Journal of Public Health*, 98(1), 11–14. <https://doi.org/10.2105/AJPH.2006.100842>
- Perry, H. B., Zulliger, R., & Rogers, M. M. (2014). Community Health Workers in Low-, Middle-, and High-Income Countries: An Overview of Their History, Recent Evolution, and Current Effectiveness. *Annual Review of Public Health*, 35(1), 399–421. <https://doi.org/10.1146/annurev-publhealth-032013-182354>
- Perry, H., & Crigler, L. (2014). *Developing and strengthening community health worker programs at scale. A reference guide and case studies for program managers and policymakers. Undefined.* <https://www.semanticscholar.org/paper/Developing-and-strengthening-community-health-at-A-Perry-Crigler/8fed039a3311eb80ba2a2d5ed39af54c0218fa3b>
- Peterson, N., & Hughey, J. (2004). Social cohesion and intrapersonal empowerment: Gender as moderator. *Health Education Research*, 19(5), 533–542. <https://doi.org/10.1093/her/cyg057>
- Pieterse, P. (2019). Citizen feedback in a fragile setting: Social accountability interventions in the primary healthcare sector in Sierra Leone. *Disasters*, 43(S2), S83-S229. <https://doi.org/10.1111/disa.12331>
- Rachlis, B., Naanyu, V., Wachira, J., Genberg, B., Koech, B., Kamene, R., Akinyi, J., & Braitstein, P. (2016). Community Perceptions of Community Health Workers (CHWs) and Their Roles in Management for HIV, Tuberculosis and Hypertension in Western Kenya. *PLoS ONE* 11(2) e0149412. <https://doi.org/10.1371/journal.pone.0149412>

- Ramukumba, M. M. (2020). Exploration of Community Health Workers' views about in their role and support in Primary Health Care in Northern Cape, South Africa. *Journal of Community Health, 45*(1), 55–62. <https://doi.org/10.1007/s10900-019-00711-z>
- Rao, S. (2013). *Interventions for collective action and accountability*. 10. GSDRC Helpdesk Research Report 904. Birmingham, UK: GSDRC, University of Birmingham. <http://www.gsdrc.org/go/display&type=Helpdesk&id=904>
- Rassi, C., Martin, S., Graham, K., Cola, M. A. de, Christiansen-Jucht, C., Smith, L. E., Jive, E., Phillips, A. E., Newell, J. N., & Massangaie, M. (2019). Knowledge, attitudes and practices with regard to schistosomiasis prevention and control: Two cross-sectional household surveys before and after a Community Dialogue intervention in Nampula province, Mozambique. *PLOS Neglected Tropical Diseases, 13*(2), e0007138. <https://doi.org/10.1371/journal.pntd.0007138>
- Reddy, A. T., Lazreg, S. A., Phillips, R. L., Jr, Bazemore, A. W., & Lucan, S. C. (2013). Toward Defining and Measuring Social Accountability in Graduate Medical Education: A Stakeholder Study. *Journal of Graduate Medical Education, 5*(3), 439–445. <https://doi.org/10.4300/JGME-D-12-00274.1>
- Roman, G., Gramma, R., Enache, A., Pârvu, A., Moisa, Ş. M., Dumitraş, S., & Ioan, B. (2013). The health mediators-qualified interpreters contributing to health care quality among Romanian Roma patients. *Medicine, health care, and philosophy, 16*(4), 843–856. <https://doi.org/10.1007/s11019-013-9467-3>
- Rowe, S. Y., Kelly, J. M., Olewe, M. A., Kleinbaum, D. G., McGowan, J. E., McFarland, D. A., Rochat, R., & Deming, M. S. (2007). Effect of multiple interventions on community health workers' adherence to clinical guidelines in Siaya district, Kenya. *Transactions of the Royal Society of Tropical Medicine and Hygiene, 101*(2), 188–202. <https://doi.org/10.1016/j.trstmh.2006.02.023>
- Sachs, J. (2008). The End of Poverty: Economic Possibilities for Our Time. *European Journal of Dental Education : Official Journal of the Association for Dental Education in Europe, 12*(1), 17–21. <https://doi.org/10.1111/j.1600-0579.2007.00476.x>
- Saprii, L., Richards, E., Kokho, P., & Theobald, S. (2015). Community health workers in rural India: Analysing the opportunities and challenges Accredited Social Health Activists (ASHAs) face in realising their multiple roles. *Human Resources for Health, 13*(1), 95. <https://doi.org/10.1186/s12960-015-0094-3>
- Schaaf, M., Fox, J., Topp, S. M., Warthin, C., Freedman, L. P., Robinson, R. S., Thiagarajan, S., Scott, K., Maboe, T., Zanchetta, M., Ruano, A. L., Kok, M., & Closser, S. (2018). Community health workers and accountability: Reflections from an international 'think-in'. *International Journal for Equity in Health, 17*(1), 66. <https://doi.org/10.1186/s12939-018-0781-5>

- Schaaf, M., Topp, S. M., & Ngulube, M. (2017). From favours to entitlements: Community voice and action and health service quality in Zambia. *Health Policy and Planning*, 32(6), 847–859. <https://doi.org/10.1093/heapol/czx024>
- Schaaf, M., Warthin, C., Freedman, L., & Topp, S. M. (2020a). The community health worker as service extender, cultural broker and social change agent: A critical interpretive synthesis of roles, intent and accountability. *BMJ Global Health*, 5(6), e002296. <https://doi.org/10.1136/bmjgh-2020-002296>
- Schleiff, M. J., Aitken, I., Alam, M. A., Damtew, Z. A., & Perry, H. B. (2021). Community health workers at the dawn of a new era: 6. Recruitment, training, and continuing education. *Health Research Policy and Systems*, 19(S3), 113. <https://doi.org/10.1186/s12961-021-00757-3>
- Schneider, H. (2018). The Governance of National Community Health Worker Programmes in Low- and Middle-Income Countries: An Empirically Based Framework of Governance Principles, Purposes and Tasks. *International Journal of Health Policy and Management*, 8(1), 18–27. <https://doi.org/10.15171/ijhpm.2018.92>
- Scott, K., Beckham, S. W., Gross, M., Pariyo, G., Rao, K. D., Cometto, G., & Perry, H. B. (2018). What do we know about community-based health worker programs? A systematic review of existing reviews on community health workers. *Human Resources for Health*, 16(1), 39. <https://doi.org/10.1186/s12960-018-0304-x>
- Scott, K., & Shanker, S. (2010). Tying their hands? Institutional obstacles to the success of the ASHA community health worker programme in rural north India. *AIDS Care*, 22(2), 1606–1612. <https://doi.org/10.1080/09540121.2010.507751>
- Sekaran, U. (2003) *Research Methods for Business: A Skill-Building Approach*. (4th ed.), John Wiley & Sons. [10.4236/crcm.2022.118046](https://doi.org/10.4236/crcm.2022.118046)
- Service, R. W. (2009). Book Review: Corbin, J., & Strauss, A. (2008). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (3rd ed.). Thousand Oaks, CA: Sage. *Organizational Research Methods*, 12(3), 614–617. <https://doi.org/10.1177/1094428108324514>
- Siongco, K. L. L., Nakamura, K., Seino, K., Moncatar, T. R. T., Tejero, L. M. S., Vega, S. A. F. D. L., Bonito, S. R., Javier, R., Tsutsui, T., Tashiro, Y., Al-Sobaihi, S., Lorenzo, F. M. E., & Canila, C. C. (2021). Improving Community Health Workers' Attitudes toward Collaborative Practice in the Care of Older Adults: An In-Service Training Intervention Trial in the Philippines. *International Journal of Environmental Research and Public Health*, 18(19), 9986. <https://doi.org/10.3390/ijerph18199986>

- Steyn, P. S., Boydell, V., Cordero, J. P., McMullen, H., Habib, N., Nguyen, T. M. H., Nai, D., Shamba, D., Kiarie, J., & CaPSAI Project. (2020). Rationale and design of a complex intervention measuring the impact and processes of social accountability applied to contraceptive programming: CaPSAI Project. *Gates Open Research*, 4, 26. <https://doi.org/10.12688/gatesopenres.13075.2>
- Steyn, P. S., Cordero, J. P., Gichangi, P., Smit, J. A., Nkole, T., Kiarie, J., & Temmerman, M. (2016). Participatory approaches involving community and healthcare providers in family planning/contraceptive information and service provision: A scoping review. *Reproductive Health*, 13(1), 88. <https://doi.org/10.1186/s12978-016-0198-9>
- Strachan, D. L., Källander, K., Ten Asbroek, A. H. A., Kirkwood, B., Meek, S. R., Benton, L., Conteh, L., Tibenderana, J., & Hill, Z. (2012). Interventions to improve motivation and retention of community health workers delivering integrated community case management (iCCM): Stakeholder perceptions and priorities. *The American Journal of Tropical Medicine and Hygiene*, 87(5), 111–119. <https://doi.org/10.4269/ajtmh.2012.12-0030>
- Sudhinaraset, M., Treleaven, E., Melo, J., Singh, K., & Diamond-Smith, N. (2016). Women’s status and experiences of mistreatment during childbirth in Uttar Pradesh: A mixed methods study using cultural health capital theory. *BMC Pregnancy and Childbirth*, 16(1), 332. <https://doi.org/10.1186/s12884-016-1124-4>
- Sunguya, B. F., Mlunde, L. B., Ayer, R., & Jimba, M. (2017). Towards eliminating malaria in high endemic countries: The roles of community health workers and related cadres and their challenges in integrated community case management for malaria: a systematic review. *Malaria Journal*, 16(1), 10. <https://doi.org/10.1186/s12936-016-1667-x>
- Svensson, J., & Bjorkman, M. (2007). *Power To The People: Evidence From A Randomized Field Experiment Of A Community-Based Monitoring Project In Uganda*. The World Bank. <https://doi.org/10.1596/1813-9450-4268>
- Tariq, S., & Woodman, J. (2013). Using mixed methods in health research. *JRSM Short Reports*, 4(6), 2042533313479197. <https://doi.org/10.1177/2042533313479197>
- Tashakkori, A., & Teddlie, C. (2009). Integrating qualitative and quantitative approaches to research. In L. Bickman, & D. J. Rog *The SAGE handbook of applied social research methods* (pp. 283-317). SAGE Publications, Inc., <https://dx.doi.org/10.4135/9781483348858.n9>
- Tavener, M., Chojenta, C., & Loxton, D. (2016). Generating qualitative data by design: the Australian Longitudinal Study on Women's Health qualitative data collection. *Public health research & practice*, 26(3), 2631631. <https://doi.org/10.17061/phrp2631631>

- Thomas, E., & Brown, J. (2021). Using Feedback to Improve Accountability in Global Environmental Health and Engineering. *Environmental Science & Technology*, 55(1), 90–99. <https://doi.org/10.1021/acs.est.0c04115>
- Topp, S. M., Edelman, A., & Taylor, S. (2018). “We are everything to everyone”: A systematic review of factors influencing the accountability relationships of Aboriginal and Torres Strait Islander health workers (AHWs) in the Australian health system. *International Journal for Equity in Health*, 17(1), 67. <https://doi.org/10.1186/s12939-018-0779-z>
- Topp, S. M., Price, J. E., Nanyangwe-Moyo, T., Mulenga, D. M., Dennis, M. L., & Ngunga, M. M. (2015). Motivations for entering and remaining in volunteer service: Findings from a mixed-method survey among HIV caregivers in Zambia. *Human Resources for Health*, 13, 72. <https://doi.org/10.1186/s12960-015-0062-y>
- Tremblay, M. (2009). The Key Informant Technique: A Non-Ethnographic Application. *American Anthropologist*, 59(4), 688–701. <https://doi.org/10.1525/aa.1957.59.4.02a00100>
- United Nations Habitat. (2010). *State of the World’s Cities 2010/2011- Cities for All: Bridging the Urban Divide* / Retrieved 3 June 2022, from <https://unhabitat.org/state-of-the-worlds-cities-20102011-cities-for-all-bridging-the-urban-divide>
- United Nations High Commissioner of Refugees [UNHCR], (2010). *Joint statement by the Government of Kenya and the United Nations High Commissioner for Refugees: Dadaab and Kakuma Refugee Camps Roadmap*. UNHCR. Retrieved 3 June 2022, from <https://www.unhcr.org/news/press/2021/4/608af0754/joint-statement-government-kenya-united-nations-high-commissioner-refugees.html>
- Vedam, S., Stoll, K., Taiwo, T. K., Rubashkin, N., Cheyney, M., Strauss, N., McLemore, M., Cadena, M., Nethery, E., Rushton, E., Schummers, L., Declercq, E., & GVtM-US Steering Council (2019). The Giving Voice to Mothers study: inequity and mistreatment during pregnancy and childbirth in the United States. *Reproductive health*, 16(1), 77. <https://doi.org/10.1186/s12978-019-0729-2>
- Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the Qualitative-Quantitative Divide: Guidelines for Conducting Mixed Methods Research in Information Systems. *MIS Quarterly*, 37(1), 21–54. <https://doi.org/10.25300/MISQ/2013/37.1.02>
- Vernon, R., Staunton, A., García, M., Arroyo, J. J., & Rosenberg, R. (1994). A test of alternative supervision strategies for family planning services in Guatemala. *Studies in Family Planning*, 25(4), 232–238. <https://doi.org/10.2307/2137906>

- Wangũi Machira, Y. (2015). *Integrating Social Accountability in Healthcare Delivery: Lessons Drawn from Kenya* [Working Paper]. World Bank. <https://openknowledge.worldbank.org/handle/10986/21666>
- Warthin, C., Manning, A., & Schaaf, M. (2018). *Community Health Worker Voice, Power, and Citizens' Right to Health Meeting brief for "think-in" to develop a research agenda*. 20. https://accountabilityresearch.org/wp-content/uploads/2018/01/Learning_Exchange_Report3_January-18-1.19.18.pdf
- Westgate, C., Musoke, D., Crigler, L., & Perry, H. B. (2021). Community health workers at the dawn of a new era: 7. Recent advances in supervision. *Health Research Policy and Systems*, 19(3), 114. <https://doi.org/10.1186/s12961-021-00754-6>
- World Health Organization. (1978). *Declaration of Alma-Ata*. World Health Organization. <https://www.who.int/teams/social-determinants-of-health/declaration-of-alma-ata>
- World Health Organization. (2007). *Everybody's business: Strengthening health systems to improve health outcomes : WHO's framework for action*. World Health Organization.
- World Health Organization. (2008). *Towards people-centred health systems—An innovative approach for better health outcomes*. 34. World Health Organization.
- World Health Organization (Ed.). (2010). *Monitoring the building blocks of health systems: A handbook of indicators and their measurement strategies*. World Health Organization.
- World Health Organization. (2018). *Defining competent maternal and newborn health professionals: Background document to the 2018 joint statement by WHO, UNFPA, UNICEF, ICM, ICN, FIGO and IPA: definition of skilled health personnel providing care during childbirth*. World Health Organization. <https://apps.who.int/iris/handle/10665/272817>
- Zachariah, R., Ford, N., Philips, M., Lynch, S., Massaquoi, M., Janssens, V., & Harries, A. D. (2009). Task shifting in HIV/AIDS: Opportunities, challenges and proposed actions for sub-Saharan Africa. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 103(6), 549–558. <https://doi.org/10.1016/j.trstmh.2008.09.019>

APPENDICES

Appendix i: Informed Consent Letter

Dear Respondents,

**RE: SEEKING CONSENT FOR YOUR INCLUSION IN THE STUDY
TITLED “EFFECTIVENESS OF CHWs IN ADVANCING SOCIAL
ACCOUNTABILITY IN THE HEALTH SYSTEM”**

The above subject matter refers.

My name is Malkia Abuga, and I am a PhD student at Kenya Methodist University in Kenya. I will be conducting a study in your CHU & Health Facility with the title as mentioned in the reference above. The findings will be used to strengthen health systems in Kenya and other developing countries. The communities and individuals will benefit from improved healthcare services that are responsive to the needs of the client. The proposal is significant as it will be the basis of capacity building on Social Accountability to increase the voice of the community in shaping the health system.

Procedure to Be Followed

If you choose to participate in this study, I will provide you with a questionnaire that will require your responses to specific questions social accountability. You have the right to refuse to answer any or all of the questions without being victimized.

Remember that this is a voluntary participation and you are free to withdraw at any stage of the intervention. You may also ask any questions related to the study prior, during and after the study.

Discomforts and Risks

This study will run for 3 months, and you will be contacted at some stage through the CHA or contact information you provide for reasons of this study. If you find some of the questions too personal or that creates discomfort or risks with which you are uncomfortable, you may choose not to answer or withdraw from the study at any stage.

Benefits

Your participation will help in strengthening health systems in Kenya, particularly service delivery and leadership and Governance. The intervention will generate knowledge that the government can use to make informed decisions about the health system.

Rewards and Bonuses

It is voluntary and free of charge to participate in this research. There will be no rewards or bonuses for anyone who chooses to participate in it.

Confidentiality

The study will be private and names will not be required at any point of the study. The personal details you provide will be kept safe and treated with confidentiality. All the responses will only be used for academic purposes.

Contact Information

In case of any interests, concerns or questions relating to the study, you may contact the KeMU Scientific Ethics Research Committee: Chair Ethical Committee, Email address: serc@kemu.ac.ke or VC@Kemu.ac.ke +254 725 751 878/ 0735 701 311

Respondent's Statements

The above statements and requirements of the study have been read to me in a language I understand, and they are clear to me. I have been informed that my participation in this study is voluntary with no rewards whatsoever, and that any information I provide will be kept safe and confidential, and used only for academic purposes. I also understand that I can withdraw from the study at any stage without victimization. I also understand that by signing this form, I agree to participate in the study under the contents of this letter as read to me.

Signature.....

Date...../...../20.....

Investigator's Statement

I, the undersigned, have read and explained to the volunteer respondent, in a language he or she understand, the procedures of the study and the risks as well as the benefits involved.

Name of investigator: Malkia Abuga

Signature.....

Date...../...../20/.....

Appendix ii: Focused Group Discussion Guide

Participants: Community Health Workers from the Selected CHU/Community

Participant Consent: Participants will sign a consent form to participate in the discussion

Demographic Data: to be collected before commencing discussion

Facilitator: The researcher

Data Collection: Audio recorded, then transcribed

Time and Place of Discussion: Discussion to be done at a community venue for 45-60 minutes.

FOCUS GROUP: DISCUSSION GUIDE

Welcoming remarks

Good morning/afternoon/evening and welcome to our session.

Thank you for taking time to join us and to talk about social accountability or how to have constructive engagement between the community and the health service providers. My name is Malkia Abuga and the assisting me is.....The goal of this study is to assess the effectiveness of CHWs/community in advancing Social Accountability. Social accountability refers to actions and mechanisms initiated by citizen groups to hold health service providers to account for their conduct and performance in terms of delivering services, improving people's welfare and protecting people's rights. You are taking part because your opinions are very important. I acknowledge your busy schedules and I appreciate you taking your time to be involved.

Introductory remarks

This focus group discussion is prepared to assess your feelings, opinions, and thoughts on involving communities in speaking about their health complaints/complements. The focus group discussion will take between 45-60 minutes. Is it okay if I record the discussion to facilitate the recollection of what we discuss? (Wait for the green light)

Anonymity assurance

I would like you to be assured that, in spite of being recorded, the discussion will be anonymous. The recording will be kept safely with me until they are transcribed,

then they will be deleted. The transcription of the focus group discussion will not contain any information that would link any individual to any specific statements. Please try to comment on and answer questions as truthfully and accurately as possible. The participants of this focus group are highly besieged to refrain from discussing the comments of other participants outside this focus group. In case of any discussion or questions you do not wish to participate or answer, you do not have to do so; however, kindly try to be involved as much as possible.

Ground rules for the focus group

1. Only one participate speaks at a time. If anyone feels the temptation to intervene, kindly wait until the participant is done talking.
2. There are not wrong or right answers. All comments are important and will be taken into consideration.
3. It is important for us to hear everyone's ideas and opinions
4. Stay with the group, please don't have side conversations, and speak clearly to increase recording quality
5. Silence cell phones
6. There is no particular order of speaking
7. Please speak up if you have something to comment as all your views are important.
8. You do not have to share or agree with the opinions of other participants in this focus group.

Is there any question? (Wait for answers)

We can begin

Turn on the Tape Recorder

Introduction of the Participants

I would like everyone to introduce themselves. Can you tell us your name?

Introductory question

I am going to give you a few minutes to reflect on a time that you were not happy with the health care services you received, what action did you take? Is there anyone happy to share her experience?

Interview guide

1. Please tell me if you have been trained on Social Accountability

2. Could you tell me what you know about Social Accountability?

Probe: Holding officials to account/citizen engagement/monitoring/voicing/raising concerns

3. How do you engage with communities to discuss issues concerning the health system/facility (*mechanisms, voice, and practices*).

Probe: capacity building/Collection of complains/complements written or verbal @ the household or community meeting/dialogue / channel of complain handling/ feedback to the community/facility on any concerns or complains/ Do they get complains/complements by asking or they wait for the client to advice

4. How do you or community deal with unsatisfactory/satisfactory performance of service providers/health facility? (Check for involvement of relevant authorities?)

Probe: CHC? CHA? HFC? SCHMT? Local Administrator? Other

5. Share experiences on consequence to satisfactory/unsatisfactory performance of service providers/health facility

Probe: Recognition/reward/transfer out /promotion/ other?

Probe: If none explain hindering actors

6. What can enable you to engage communities in raising their concerns?

Probe: Political & cultural aspects/ Community based groups/ Trust & respect/ Knowledge/ Supervision/Training/remuneration

7. Please tell me about community health dialogues.

Probe: aim of dialogues and how they are conducted? What issues do discuss

8. What kind of SAc interventions (targeting CHW) are there in the community?

Probe: Complements / complains collection/ training/ capacity building/ dialogues/community follow up

9. Where are these interventions available/carried out?

Probe: Health Facility/Community Health unit/household/CBO

10. Who is responsible for carrying out these interventions?

Probe: CBO, CHWs, CHA, CHC, HFC

11. Whether and why do you think these interventions are not working or are not sufficient?

Probe: the type of intervention? The way the interventions are carried out? Approach? Lack of personnel? Untrained personnel? Unavailable working tools? Supervision/political

12. Now imagine that you are part of a committee of people designing the modification of such an intervention. What are the factors that you will make sure your committee considers in designing these modifications?

Probe: Remember, these can be in many areas such as:

- a) Context: Format, setting, personnel, population
- b) Content: Integrating another approach into the intervention or the intervention into another approach, adding or removing elements
- c) Training and evaluation process: enough training/workshop sessions/follow up

13. Is there anything else that we have not discussed yet which you think is important for modifications of SAc intervention for CHWs?

14. Do you have any question for me?

Concluding question

Out of the discussions we have had, what are some of the most important issues you wish to echo?

Conclusion

Once again, thank you for taking part in this focus group discussion. That concludes our focus group discussion. Thank you so much for coming and sharing your thoughts and opinions with us. All your opinions will be of extreme value to the study, and I hope you found the discussion interesting. I would like to remind you that all your comments in this report will remain anonymous, and if anyone has anything they wish to complain about or unhappy, please speak to me after this.

Appendix iii: Key Informant Guide

To be filled by CHA/ Community Health Coordinator/SCHMT

Introduction: Name, years of experience, place of work etc

1. Have you been trained on Social Accountability?
2. Have your SCCSC/ CHA /CHVs been trained on SAc?
3. Could you tell me what you know about Social Accountability?
4. How does CHVs engage with communities to discuss issues concerning the health system/facility?
5. How does CHV/Community deal with unsatisfactory/satisfactory performance of service providers/health facility?
6. Share experiences on consequence to satisfactory/unsatisfactory performance of service providers/health facility
7. What do you think can enable CHVs to engage communities in raising their concerns?
8. Please tell me about community health dialogues (**aim, issues discussed**)
9. What kind of SAc interventions (targeting CHV) are there in the community?
10. Now imagine that you are part of a committee of people designing the modification of such an intervention. What are the factors that you will make sure your committee considers in designing these modifications?
11. Is there anything else that we have not discussed yet which you think is important for modifications of SAc intervention for CHVs?
12. Do you have any question for me?

Appendix iv: Document Analysis Criteria

The researcher will follow below criteria to conduct document analysis as adapted from (Altheide, 1996) ‘Process of Document Analysis’.

1. Setting Inclusion Criteria of Documents: In this study the documents to be included for review will be SAc policy documents, scheme of service, minute’s reports, community dialogue reports, complain and complement books, training reports in the last 3 quarters July 2020 to March 2021.

2. Collecting Documents: The documents will be requested from the contacts in the study area. The researcher will probably request for a desk to review the documents at the source.

3. Articulating key areas of analysis

The researcher will review documents with reference to the research aims and questions. Analysis will be done in reference with the identified themes.

4. Document Coding and Analysis

Each document identified will be examined, and text relevant to each theme will be highlighted and coded.

5. Verification

To ensure consistency and reliability of the coding and assessment process, the analysis of every document will be verified by a second person.

6. Analysis

Documentary data will be analysed together with data from KII, FGD and themes on social accountability will emerge from all three sets of data. This combination of various methods help in reducing the possible biases that might result in use of one method as it has been indicated by various researchers.

Appendix v: Social Accountability Knowledge & Practices Questionnaire

This questionnaire is prepared to assess Social Accountability perspectives. You are kindly requested to read the questions carefully and respond in the manner clearly indicated for each. The information you provide is very crucial for the success of the study. You are, therefore, kindly requested to be honest towards all the items provided. Your responses will only be used for research purpose and therefore be kept confidential.

Section A

A1 CHW ID

A2 Interviewer Name

A3 Interview Date (dd/mm/yy)

A4 Interview Time (24 hour)

A5 County

A6 Sub county

A7 Link Facility

Yes 1

A8 Do you agree to take part? 2 If No -

No END

INTERVIEW

Section B: Community Volunteers Characteristics

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
B1	How old are you? (enter in years)	_____ (write in years)		
B2	Gender of Community Health Volunteer	Female	1	
		Male	2	
B3	How many years have you worked as a CHV?	_____ (write in years)		
B4	What is the highest level of schooling you attended?	Never attended school	0	
		Nursery/pre-unit	1	
		Primary	2	
		Secondary/ 'A' level	3	
		College (middle level)	4	
		University	5	
B5	What is your marital status now?	Never Married	0	
		Married/living together	1	
		Divorced/separated	2	
		Widowed	3	
B6	What is your main occupation	Full time volunteer	1	
		Part time volunteer	2	

		Salaried/Employed	3	
		Businessman /self-employed	4	
		Part time employed	5	
		Others (specify) _____	6	
B7	Do you receive any form of income?	Yes	1	
		No	2	
B8	What is the total monthly income	_____ write in Kenya Shillings		
B9	What is your religion?	Christian	1	
		Muslim	2	
		No religion	3	
		Other (specify)	88	
B10	Have you received any form of training/sensitization on Social Accountability	Yes	1	
		No	2	Skip to B12
B11	If yes what training have you received	General information about Social Accountability	1	
		Components of Social Accountability	2	
		Role and responsibility of Social Accountability Actors	3	
		Social Accountability Mechanisms	4	
		Health Rights linked to Social Accountability	5	
		Factors that enhance social accountability	6	
		Mainstreaming Social Accountability in the community health system	7	
		Others specify	88	
B12	What platform do you use for data collection in the community?	Electronic	1	
		Paper- based	2	
		Other (specify)	88	

SECTION C: CHV Practices			
We want to understand the practices or role you play for the purpose of expressing community concerns, monitoring performance of service providers etc.)			
<i>Now I will read a series of statements. Please let me know if you never or always do the following actions</i>			
C1	I continuously sensitize the community on their health rights & entitlement	Never	0
		Rarely	1
		Sometimes	2

		Often	3
		Always	4
C2	I encourage communities to speak up on issues concerning health (services)	Never	0
		Rarely	1
		Sometimes	2
		Often	3
		Always	4
C3	I listen to complaints/concerns of clients on health issues	Never	0
		Rarely	1
		Sometimes	2
		Often	3
		Always	4
C4	I document complaints/clients issues	Never	0
		Rarely	1
		Sometimes	2
		Often	3
		Always	4
C5	I report clients concerns to the appropriate actor at the health facility/system	Never	0
		Rarely	1
		Sometimes	2
		Often	3
		Always	4
C6	I follow up to ensure clients concerns have been resolved	Never	0
		Rarely	1
		Sometimes	2
		Often	3
		Always	4
C7	I get feedback on the reported issues from the CHA or health facility	Never	0
		Rarely	1
		Sometimes	2
		Often	3
		Always	4
C8	I provide feedback to the client on the issues raised	Never	0
		Rarely	1
		Sometimes	2
		Often	3
		Always	4

If you found out a problem in your health system or facility that wanted you to do something about, how well do you think you will be able to do each of the following?

C9	Identify individuals and/or groups to help with the problem	I definitely can't	0
		I probably can't	1
		Maybe	2
		I probably can	3
		I definitely can	4
C10	Organize people within your community to address the problem.	I definitely can't	0
		I probably can't	1
		Maybe	2
		I probably can	3
		I definitely can	4
C11	Get other people to care about the problem	I definitely can't	0
		I probably can't	1
		Maybe	2
		I probably can	3
		I definitely can	4
C12	Call someone on the phone that you had never met before and get their help with the problem.	I definitely can't	0
		I probably can't	1
		Maybe	2
		I probably can	3
		I definitely can	4
C13	Call/visit the health officials to get help with the problem	I definitely can't	0
		I probably can't	1
		Maybe	2
		I probably can	3
		I definitely can	4
C14	Write an opinion letter to a local newspaper	I definitely can't	0
		I probably can't	1
		Maybe	2
		I probably can	3
		I definitely can	4
C15	I get feedback on the reported issues from the CHA or health facility	I definitely can't	0
		I probably can't	1

		Maybe	2
		I probably can	3
		I definitely can	4
C16	Call an elected official about the problem	I definitely can't	0
		I probably can't	1
		Maybe	2
		I probably can	3
		I definitely can	4
C17	Specify any other action that you would take that is not mentioned above		88

SECTION D: External Components that Shape Social Accountability			
We want to understand factors that enable CHVs to promote citizen health rights, Speaking up on complaints/complements of the health system			
<i>Now I will read a series of statements. Please let me how important or unimportant this factors are</i>			
D1	Support from the local administration e.g. Chiefs	Unimportant	0
		Slightly important	1
		Moderately important	2
		Important	3
		Very Important	4
D2	Support from the Health Facility Management Committee, SCHMT	Unimportant	0
		Slightly important	1
		Moderately important	2
		Important	3
		Very Important	4
D3	Support from elected official (MP, MCA etc)	Unimportant	0
		Slightly important	1
		Moderately important	2
		Important	3
		Very Important	4
D4	Involvement of Community-based Structures (e.g. CHC, Nyumba Kumi)	Unimportant	0
		Slightly important	1
		Moderately important	2

		Important	3
		Very Important	4
D5	CHV selection and recruitment criteria	Unimportant	0
		Slightly important	1
		Moderately important	2
		Important	3
		Very Important	4
D6	Residence of the CHVs	Unimportant	0
		Slightly important	1
		Moderately important	2
		Important	3
		Very Important	4
D7	Remuneration of CHVs	Unimportant	0
		Slightly important	1
		Moderately important	2
		Important	3
		Very Important	4
D8	Support Supervision	Unimportant	0
		Slightly important	1
		Moderately important	2
		Important	3
		Very Important	4
D9	Provision of working tools (job aids)	Unimportant	0
		Slightly important	1
		Moderately important	2
		Important	3
		Very Important	4
D10	Respect from health providers	Unimportant	0
		Slightly important	1
		Moderately important	2
		Important	3
		Very Important	4
D11	Respect from Community members	Unimportant	0
		Slightly important	1
		Moderately	2

		important	
		Important	3
		Very Important	4
D12	Trust from community members	Unimportant	0
		Slightly important	1
		Moderately important	2
		Important	3
		Very Important	4

SECTION F: Social Accountability Elements
In this section, kindly try and recall if any of the following activities occurred in the last six months

Now I'd like you to listen to these statements and respond appropriately

F1	In the last 6 months, have you reported any complains/complements from the community to the facility?	Yes	1	Skip to F6
		No	0	
F2	If yes, approximately how many complains have you reported?	_____		
	If yes, approximately how many complements have you reported?	_____		
F3	Approximately how many complains have you aggregated?	_____		
	Approximately how many complements have you aggregated?	_____		
F4	During that period have you documented any complain/complement	Yes	1	
		No	0	
F5	What channel did you use to report the complain /complement? (Multiple response)	Documented report	1	
		Monthly report (MOH 514)	2	
		Meeting	3	
		Community dialogue day	4	
		Verbal report to the CHA	5	
		Verbal report to the Health facility in charge	6	
		Other (specify)	88	
F6	Over the past 30days have you sensitized any community member on their rights and entitlements	Yes	1	End Interview
		No	0	
F7	Over the past 30days, about how many clients have you sensitized on health rights and entitlements	_____		

Enforceability			
F8	Of the complaints you reported, how many led to action being taken to resolve the problem		
F9	How many of those complains resulted to formal disciplinary?		
F10	How many complements have you ever raised that have contributed to the health provider's award in the last six months?		
Answerability			
F11	Of the complaints received, how many have you reported to the health provider/supervisor?		
F12	Of the complaints/complements raised, how many have you provided feedback to the community on the use of the information given?		

TIME INTERVIEW ENDED: [__|__:__|__] [RECORD TIME IN 24-HOUR CLOCK]

PLEASE REMEMBER TO THANK THE RESPONDENT INTERVIEWER'S COMMENTS

Appendix vi: Pre-test & Post Test

- A. Social Accountability refers to strategies in which citizens express their opinions about the quality of services. The statement is
- 1) True
 - 2) False
- B. Which of the following options are components of Social Accountability?
- 1) Information Sharing
 - 2) Community Participation
 - 3) Both 1&2
- C. Which of the following options is the importance of Social Accountability?
- 1) Improves the delivery of health services
 - 2) Leads to discouraging health service providers
 - 3) Seeks to establish faults in the health system
- D. What type of information can be shared with citizens that promote Social Accountability?
- 1) Citizen rights and obligations
 - 2) Citizen roles in health service delivery
 - 3) Both 1&2
- E. Every person has the right to the highest attainable standard of health, which includes the right to health care services including reproductive health care. The statement is
- 1) True
 - 2) False
- F. Which of the following options is an entitlement to all community members?
- 1) Access to essential medicines
 - 2) Discrimination to health services
 - 3) Stigma
- G. Which is a platform for community participation?
- 1) Community Dialogues
 - 2) Baraza
 - 3) Both 1&2
- H. Which of the following is a key element for verifying participation took place?
- 1) Dialogue occurs in an environment free of intimidation

- 2) None disclosure of public information
Complaint/Compliment Handling Mechanism helps the health system to be accountable, responsive or user- friendly. The statement is

I. Which of the following is a Social Accountability Tools?

- 1) Community Score Card
- 2) Citizen Report Cards
- 3) Both 1 & 2

J. Match the following Social Accountability tools with their use

Tool	Use
1. Community Scorecard	A powerful medium to express the opinions and voice of citizens about the services they receive.
2. Citizen report cards	These are formal meetings at the community level where local officials and citizens have the opportunity to exchange information and opinions on community affairs.
3. Public Hearings	A public notice displayed by public institutions which provide public services for the information of the service receivers.
4. Citizens Charters	A community-based monitoring tool that aims to ensure service providers' accountability and responsiveness

K. Which of the following is the role of CHVs in social accountability?

- 1) Listen, document and address complaints
- 2) Mobilise resources for Social Accountability in community activities
- 3) Both 1&2

L. Which of the following options is an indicator in information sharing?

- 1) Number of households sensitized on health rights and entitlements
- 2) Number of households vaccinated
- 3) Number of households with handwashing facilities

M. Which of the following is a tool that can be used to report Social accountability?

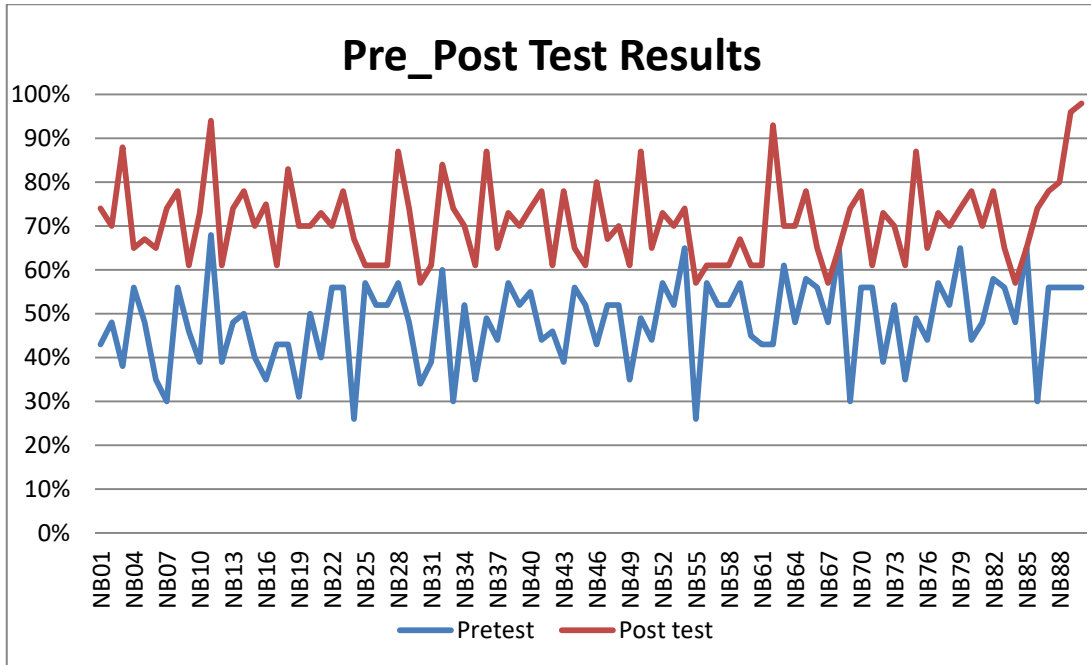
- 1) Complaint/compliment handling register
- 2) Community dialogue minutes
- 3) Both 1&2

N. Which of the following options is an indicator of community participation?

- 1) Number of Community Action Days
- 2) Number of community dialogue days
- 3) Both 1&2

Appendix vii: (Pre_Post Test Scores

Graph 4.1: CHVs Pre_Post Test Scores



Appendix viii: Generation of Themes and Sub-themes from the transcribed data

Codes	Subthemes	Themes
<ol style="list-style-type: none"> 1. Raising an Alarm 2. Speaking up on issues 3. Clients being attended well 4. CHVs checking on community members health status 5. Clients being attended by qualified providers 6. Clients getting medicine at the hospital 7. Health providers following standards and protocols 	Understanding of Social Accountability/Describing SAc	Knowledge of Social Accountability
<ol style="list-style-type: none"> 8. Community Rights 9. Facility ownership 10. Prevention of diseases 11. Services Available at the health facility 	Information Sharing/Health education	CHVs Practices on Social Accountability
<ol style="list-style-type: none"> 12. Monitoring Health Service Providers 13. Community referrals 	Services Provided by CHVs	
<ol style="list-style-type: none"> 14. Feedback during Community Dialogues 15. Feedback during Household Visits 16. Feedback from Support groups 17. Collection through phone calls 	Forums to collect complain and complements	CHVs Complain and Compliment Mechanism
<ol style="list-style-type: none"> 18. Denial of services for clients 19. Mistreatment of clients 20. Lack of medicine 21. Inadequate simple diagnostic tests 22. lack of services at the designated times 	Type of complains received from community members	

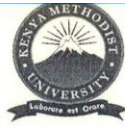
<p>23. CHVs unaware of how to handle complain</p> <p>24. CHV not able to follow up on clients complain</p> <p>25. Using other people to help report complain</p> <p>26. unaware of options of raising concerns</p> <p>27. CHVs report complains only to the CHA</p>	<p>CHVs complain and complement handling</p>	
<p>28. Disconnect between the referral and the actual service provided</p> <p>29. Fear of complaining</p> <p>30. Discrimination that affect CHVs from speaking up</p> <p>31. unaware of alternative channel to raise issues</p> <p>32. Lack of reporting tools</p>	<p>Barriers of CHVs in raising and addressing complains</p>	
<p>33. Collaboration among CHVs</p> <p>34. Collaboration between CHVs and the health service providers</p> <p>35. Joint meetings of CHVs and Facility service providers</p>	<p>Suggestions on how to handle some complains</p>	
<p>36. CHVs raise complains through the CHA</p> <p>37. Verbal reporting</p> <p>38. CHVs faces the health provider</p> <p>39. Administration office to address health service complains</p> <p>40. CHA cascades the complaint to the facility in-charge</p>	<p>Reporting of complains and complements</p>	
<p>41. Client Satisfaction</p>	<p>Effect of Feedback to clients</p>	
<p>42. Non response from suggestion</p>	<p>Challenges on Existing</p>	

boxes	Complain and complement mechanism	
43. Community complain desks 44. Training on SAc 45. Clear protocols for CHVs to follow to handle complains 46. Include indicators on complain and complement mechanism on service log book and referral log book 47. Representation of the CHVs in the HFC 48. Alternative complain reporting and handling other than the CHA 49. Community work improvement teams 50. Team building 51. CHVs union 52. Monthly meetings with facility staff 53. CHVs to have their own suggestion box	Suggested changes	
54. Nyumba kumi 55. Opinion leaders, administrators	1) Community based structures	External Components that shape SAc
56. Poor understanding of CHVs role	2) Challenges with community based structures	
57. CHVs feel not valued 58. CHVs feel unappreciated 59. Work priority than CHVs concerns 60. Communication gaps 61. CHVs viewed as unlearned 62. CHVs feel un-respected 63. 'Volunteer' on the title makes them to be viewed as inferior	1. Health System Treatment	

<p>64. Replace volunteer with worker</p> <p>65. Respect</p> <p>66. Allocate budget for Community Activities</p> <p>67. Advocacy</p> <p>68. Include CHVs in HFCM</p> <p>69. Government to recognise CHVs through actions</p> <p>70. Increase Visibility of CHVs through Magazines</p> <p>71. Provision of identification cards for the CHVs</p>	<p>2. Suggestions of improving CHVs treatment by the Health system</p>	
<p>72. Facility health providers discriminate CHVs</p> <p>73. CHVs feel unappreciated</p> <p>74. Fear</p> <p>75. Mistrust</p>	<p>Poor CHV interaction with health providers</p>	
<p>76. Positive attitude</p> <p>77. Team building</p> <p>78. HCWs to respect CHVs</p> <p>79. Signing of referrals</p> <p>80. Orienting new staff on the role of CHVs</p>	<p>Suggestion to improve CHVs and Health Providers interaction</p>	
<p>81. CHVs to be paid</p> <p>82. Increase activity pay</p> <p>83. Provide Airtime , NHIF, Phone</p> <p>84. Rewarding best performing CHU</p>	<p>1. Remuneration</p>	
<p>85. High attrition rate</p>	<p>2. Effect of inadequate remuneration</p>	
<p>86. Reporting tools</p> <p>87. PPEs</p> <p>88. Equip health facilities with commodities</p> <p>89. Identification and branding commodities</p>	<p>Provision of working tools</p>	

90. Phones		
91. High community expectations 92. Mistrust 93. Confidentiality	Community Perception on CHVS	
94. Information sharing 95. Utilization of services 96. Increases CHVs visibility 97. Ease CHVs work 98. Enhance community trust 99. Feedback opportunity	Benefits of Community Dialogues	Community Dialogues
100. Health topics 101. Insecurity issues 102. General community issues	Types of Issues raised in Dialogues	

Appendix ix: KEMU Ethical Clearence



KENYA METHODIST UNIVERSITY
P. O. BOX 267 MERU - 60200, KENYA FAX: 254-64-30162
TEL: 254-064-30301/31229/30367/31171 EMAIL: serc@kemu.ac.ke

July 19, 2021

KeMU/SERC/HSM/36/2021

Malkia Moraa Abuga
HSM-4-0109-1/2019

Dear Malkia,

SUBJECT: EFFECT OF COMMUNITY HEALTH STRATEGY IN ADVANCING SOCIAL ACCOUNTABILITY IN THE HEALTH SYSTEM IN NAIROBI COUNTY, KENYA

This is to inform you that Kenya Methodist University Scientific Ethics and Review Committee has reviewed and approved your above research proposal. Your application approval number is KeMU /SERC/HSM/36/2021. The approval period is 19th July 2021 – 19th July 2022.

This approval is subject to compliance with the following requirements

- I. Only approved documents including (informed consents, study instruments, MTA) will be used.
- II. All changes including (amendments, deviations, and violations) are submitted for review and approval by Kenya Methodist University Scientific Ethics and Review committee.
- III. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to KeMU SERC within 72 hours of notification.
- IV. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to KeMU SERC within 72 hours.
- V. Clearance for export of biological specimens must be obtained from relevant institutions.

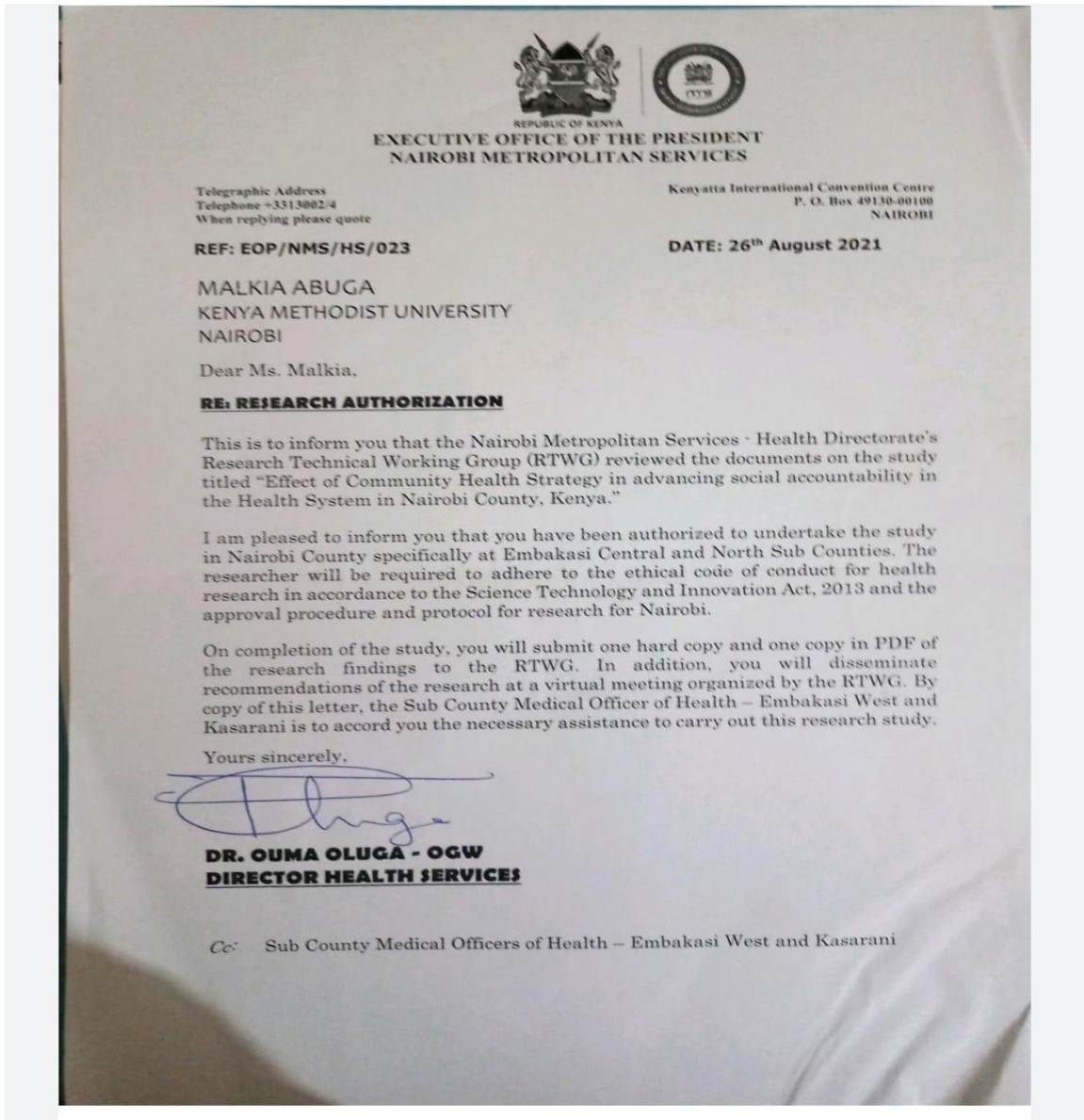
- VI. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
- VII. Submission of an executive summary report within 90 days upon completion of the study to KeMU SERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,
19 JUL 2023
Dr. A. WAMACHI
Chair, SERC



Appendix xi: Nairobi Metropolitan Approval Letter



Appendix xii: Training Guide used during the Intervention

SOCIAL ACCOUNTABILITY TRAINING MANUAL

Training Guide for Community Health Volunteers

**Malkia M. Abuga, Wanja Tenambergen &
Kezia Njoroge**

UNIT ONE: INTRODUCTION TO SOCIAL ACCOUNTABILITY		
Purpose	The goal of this unit is to familiarize participants with the concept of social accountability, as well as its importance and components. This will allow participants to interrogate and follow up on improvements to service delivery points available to them.	
Expected Learning Outcomes	By the end of this unit, the participant will be able to: <ul style="list-style-type: none"> i. Describe social accountability ii. Explain the importance of social accountability iii. Discuss the components of social accountability 	
Unit Contents	Sessions	Duration
	Session 1.1: Definition of social accountability.	30 minutes
	Session 1.2: Why is social accountability important?	30 minutes
	Session 1.3: What are the components of social accountability?	60 minutes
Preparation	<ul style="list-style-type: none"> • Participants list and participants' materials ready at least 30 minutes before workshop begins. 	
Materials needed	<p>For the training sessions</p> <ul style="list-style-type: none"> • Marker pens • Flip chart paper • Stick notes • LCD projector • Speakers • Laptop • Videos <p>For each participant</p> <ul style="list-style-type: none"> • Pens • Notebooks • Training schedule • Content hand-outs 	
Teaching Methods	<ul style="list-style-type: none"> • Mini lectures • Role plays • Exercises • Discussions • Group work 	
Evaluation of Learning	<ul style="list-style-type: none"> • Question and answer 	

	<ul style="list-style-type: none"> • Direct observation during training • End of training questionnaire
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UNIT TWO: SOCIAL ACCOUNTABILITY TOOLS		
Purpose	The goal of this unit is to familiarize participants with social accountability tools and their use. This will equip the participants on the skills to use the tools in improving service delivery.	
Expected Learning Outcomes	By the end of this unit, the participant will be able to: <ul style="list-style-type: none"> i. Identify social accountability tools ii. Explain the use of different social accountability tools iii. Utilize the relevant community social accountability tools 	
Unit Contents	Sessions	Duration
	Session 2.1: List social accountability tools.	10 minutes
	Session 2.2: Community scorecards	45 minutes
	Session 2.3 : Citizen Report Cards	30 minutes
	Session 2.4: Summary of other SAc Tools	30 minutes
Preparation	<ul style="list-style-type: none"> • Have participants' materials ready at least 30 minutes before workshop begins. • Write programme and workshop objectives on flipchart paper or present on a slide. 	
Materials needed	<p>For the training sessions</p> <ul style="list-style-type: none"> • Marker pens, • Flip chart, • LCD projector • Speakers • Laptop • Videos • Sample of community score card & citizen report card <p>For each participant</p> <ul style="list-style-type: none"> • Pens • Notebooks • Training schedule • Sample of community scorecard 	

	<ul style="list-style-type: none"> • Content handout
Teaching Methods	<ul style="list-style-type: none"> • Mini lectures • Role plays • Exercises • Discussion • Group work
Evaluation of Learning	<ul style="list-style-type: none"> • Question and answer • Direct observation during training • End of training questionnaire

UNIT THREE: ROLE AND RESPONSIBILITIES OF SOCIAL ACCOUNTABILITY ACTORS		
Purpose	The goal of this unit is to familiarize participants with their roles and others in social accountability. This will enable the participants to effectively perform their role in Social Accountability.	
Expected Learning Outcomes	By the end of this unit, the participant will be able to: <ul style="list-style-type: none"> i. Analyse the various roles and responsibilities of social accountability actors ii. Demonstrate their roles in social accountability 	
Unit Contents	Sessions	Duration
	Session 3.1: Role and responsibility of SAc Actors	10 minutes
	Session 3.2: Role of County Health Management Teams	15 minutes
	Session 3.3: Role of HFMC and Hospital Boards	15 minutes
	Session 3.4: Role of Community Health Assistant (CHA)	30 minutes
	Session 3.5: Role of CHCs and CHVs	30 minutes
	Session 3.6: Role of Communities and Households Individuals	15 minutes
	Session 3.7: Use of intermediaries in Social Accountability	5 Minutes
Preparation	<ul style="list-style-type: none"> • Have participants list, payment list, pen, and participants' materials ready at least 30 minutes before the workshop begins. • Write programme and workshop objectives on flipchart paper or present on a ppt slide. 	

Materials needed	<p>For the training sessions</p> <ul style="list-style-type: none"> • Marker pens • Flip chart paper • LCD projector • Speakers • Laptop • Videos <p>For each participant</p> <ul style="list-style-type: none"> • Pens • Notebooks • Training schedule • Content hand-out
Teaching Methods	<ul style="list-style-type: none"> • Mini lectures • Role plays • Exercises • Discussion • Group work
Evaluation of Learning	<ul style="list-style-type: none"> • Question and answer • Direct observation during training • End of training questionnaire

UNIT FOUR: MONITORING AND EVALUATION		
Purpose	The goal of this unit is to familiarize participants with the concept monitoring and evaluation of social accountability. This will enhance the participant's skills in reporting SAc activities.	
Expected Learning Outcomes	By the end of this unit, the participant will be able to: <ul style="list-style-type: none"> i. Identify tools that can be used to monitor and evaluate complaint /compliments ii. Describe SAc indicators. 	
Unit Content	Sessions	Duration
	Session 4.1: Tools for Monitoring and Evaluating Complaints/Compliments	30 minutes
	Session 4.2: Social Accountability indicators	30 minutes
Preparation	<ul style="list-style-type: none"> • Have participants list, payment list, pen, and participants' materials ready at least 30 minutes before workshop is to begin. • Write programme and workshop objectives on flipchart paper or present on a slide. 	
Materials needed	<p>For the training sessions</p> <ul style="list-style-type: none"> • Marker pens • Flip chart • LCD projector • Speakers • Laptop 	

	<ul style="list-style-type: none"> • Videos <p>For each participant</p> <ul style="list-style-type: none"> • Pens • Notebooks • Training schedule • Content handout
Teaching Methods	<ul style="list-style-type: none"> • Mini lectures • Role plays • Exercises • Discussion • Group work
Evaluation of Learning	<ul style="list-style-type: none"> • Question and answer • Direct observation during training • End of training questionnaire

References

- Bauhoff, S., Rabinovich, L., & Mayer, L. A. (2017). Developing citizen report cards for primary health care in low and middle-income countries: Results from cognitive interviews in rural Tajikistan. *PloS one*, *12* (10), e0186745. <https://doi.org/10.1371/journal.pone.0186745>
- Ministry of Health (2015). *Implementers' Manual for Social Accountability in the Health Sector: for County Health Managers and Other Health Stakeholders* Nairobi, Ministry of Health, Republic of Kenya.