

Title: An exploration of mothers' experiences, perceptions and attitudes towards existing behavioural change communication interventions on exclusive breastfeeding in Mpika District, Zambia.

**By
Baleke Ng'ambi**

A Mini-thesis submitted in partial fulfilment of the requirements for the degree of

Master of Public Health at the School of Public Health of the University of the Western Cape.



**UNIVERSITY of the
Supervisor: Mrs. Jill Wilkenson
WESTERN CAPE**

Co-Supervisor: Prof. Ernesta Kunneke

October 2020

Abstract

Introduction: World Health Organisation and UNICEF recommend exclusive breastfeeding (EBF) for the first six months and continuation of breastfeeding for two years and beyond. Despite this recommendation, EBF rates have not been optimal globally, with coverage ranging from 1% - 23% in Europe to 0.3% - 73% in sub Saharan Africa. In Zambia, despite recording an increase in EBF during the first six months of life from 61% (2007) to 73% (2014), there is a rapid decline in EBF as infants get older during the first six months, from 94% among infants aged less two (02) months to 45% among infants aged 4 to 5 months. This study explored mothers' experiences, perceptions and attitudes towards existing Behavioural Change Communication (BCC) interventions and the possible influence thereof on the adoption of exclusive breastfeeding among mothers of infants under six months in Tazara and Chilonga areas of Mpika district.

Methodology: A Qualitative approach with a descriptive, exploratory study design was applied in this study. Four focus group discussions (FDGs) were conducted with 32 mothers of infants less than six months of age who were still breastfeeding, two in each of the study areas. FDGs were audio-tape recorded and transcribed verbatim. Thematic and content analysis of transcribed data was done.

Results: The study found that group education offered during under-five and post-natal clinics was the most commonly used, most appropriate and accessible BCC method to nearly all mothers; Furthermore, group education was found to have the greatest influence on mothers' ability to adopt EBF. The study also revealed health workers had good knowledge and skills for delivery of BCC. In terms of challenges, the findings indicated that some of the health workers were not friendly to mothers during under-five clinics, which made it difficult for them to assimilate information. Mothers who delivered from their homes had challenges attending under-five and post-natal sessions as they were required to pay penalty fees. Home visits and community meetings were also not frequently conducted and as such mothers that did not attend under-five or post-natal clinics missed out. Other challenges included availability of appropriate BCC materials and inaccessibility to radio programmes.

Conclusion:

It is evident from this study that group education offered during under-five and post-natal clinics is the most commonly used BCC method, and the most appropriate and accessible method to nearly all mothers. The health system should therefore consider regularly updating health workers' s knowledge on infant and young child feeding so that they are able to provide correct information to mothers, and also explore the use a mix of health facility and community based BCC interventions such as home visits, community meetings and radio programmes informed by needs on the grounds so that all mothers including those that do not frequently attend under-five and post-natal clinics could be reached with information on EBF. Finally, Client friendly services should be promoted so that mothers are encouraged to attend health services and access key Infant and young child feeding information.



Key words:

Exclusive Breastfeeding

Behavioural Change Communication

Experiences, Perceptions and Attitudes

Baby-friendly Hospital Initiative

Breastfeeding mothers of infants less than 6 months

Focus group discussion

Qualitative

Health facilities



UNIVERSITY *of the*
WESTERN CAPE

Abbreviations and Acronyms

BCC	Behavioural Change Communication
CHA	Community Health Assistants
CHWs	Community Health Workers
EBF	Exclusive Breastfeeding
FGDs	Focus Group Discussions
FHI	Family Health International
GIZ	Germany's Agency for International Cooperation
IEC	Information Education Communication
IYCF	Infant and Young Child feeding
LMICs	Low to Middle Income Countries
MCH	Maternal Child Health
NFNC	National Food and Nutrition Commission
SUN	Scaling Up Nutrition
UNZABREC	University of Zambia Biomedical Research Ethics Committee
UNICEF	United Nations International Emergency Children's Fund
USAID	United States AID for International Development
WHO	World Health Organisation
ZDHS	Zambia Demographic and Health Survey
ZICTA	Zambia Information and Communication Technology Authority

DECLARATION

I declare that this thesis entitled “An exploration of mothers’ experiences, perceptions and attitudes towards existing behavioural change communication interventions on exclusive breastfeeding in Mpika District, Zambia” is my own work and it has not been submitted for any degree or examination in any other university and that all the references I have used or quoted have been acknowledged.

Full Name: Baleke Ng’ambi

Signed: 

Date: 28.09.2020



UNIVERSITY *of the*
WESTERN CAPE

ACKNOWLEDGEMENTS

My MPH course has been a very long journey which started in January 2017 and has enabled me to learn from others. It has not been an easy journey and along the way I felt like giving up. I would like to firstly give thanks to the Almighty God for his grace and blessings upon my life throughout this Journey. Indeed, our Lord is good all the time.

My heartfelt thanks goes to my supervisors: Jill Wilkenson and Dr. Ernesta Kunneke for their patience, valuable input, support, and encouragement throughout my Journey. Your numerous reviews and timely feedback of both my research proposal and mini-thesis largely contributed to completion of this mini-thesis. You were my great source of inspiration and strength.

I would like to thank my wife Masuzyo and my children Chaata, Ngwane and Uchizi for their support and encouragement throughout my studies. To my daddy Mr. Killian Ng'ambi and a friend and former workmate Philimon Cheeba, may I simply say thank you for your encouragements.

Finally, my heartfelt thanks goes to the following:

- My employers both from the previous (CARE International in Zambia) and current organisation (Save the Children) for giving me the opportunity to pursue these studies.
- Mpika District Health Office (DHO) for allowing me to carry out the research in their respective facilities.
- Health facility staff and neighbourhood health committee members at Chilonga Mission Hospital and Tazara Urban Clinic for their support during the data collection exercise
- The study's participants for sharing their thoughts, ideas and feelings with me. Thank you. May God richly bless you.

TABLE OF CONTENTS

Abstract	ii
Key words	iv
Abbreviations and Acronyms	v
Declaration	vi
Acknowledgements	vii
Chapter One. Introduction	1
1.1. Introduction	1
1.2. Problem statement	2
1.3. Justification of the Study	2
1.4. Thesis outline	2
Chapter Two. Literature Review	4
2.1. Behavioural Change Communication	4
2.2. Behavioural Change Communication and exclusive breastfeeding	4
2.3. Behavioural Change Communication in local setting	7
2.4. Summary	8
Chapter Three. Methodology	10
3.1. Introduction	10
3.2. Aim and Objectives	10
3.2.1. Objectives	10
3.3. Research approach and study design	10
3.4. Study Setting	11
3.5. Study Population	12
3.6. Study sample and sampling approach	12
3.6.1. Sample size	12
3.6.2. Data collection	13
3.6.3. The pilot study	13
3.6.4 The focus group discussions	13
3.7. Data analysis	14

3.8. Rigour and trustworthiness of the study	14
3.9 Ethical considerations	16
Chapter Four. Results	17
4.1. Introduction	17
4.2. Characteristics of the participants	17
4.3. Themes	18
4.4. Findings	18
4.4.1. <i>Experiences with existing behavioural change communication interventions on exclusive breastfeeding</i>	19
4.4.1.1. Delivery and Frequency of BCC interventions	19
4.4.1.2. Contribution of BCCs to mothers infant feeding practices	22
4.4.1.3. Health workers' knowledge and skills in delivery of BCC	26
4.4.2. <i>Perceptions and Attitudes towards behavioural change communications interventions</i>	27
4.4.2.1. Appropriateness and accessibility of current BCC interventions	27
4.4.2.2. Challenges with the current BCC interventions	30
4.4.3. <i>Current efforts in Promoting EBF and suggested Actions</i>	33
Chapter Five. Discussion	39
5.1. Introduction.....	39
5.2. Behavioural Change Communication Interventions on EBF	40
5.2.1. <i>Sources of Information on EBF</i>	40
5.2.2. <i>Appropriateness and accessibility of BCC interventions</i>	40
5.2.3. <i>Other available BCC interventions</i>	42
5.2.4 <i>Contribution of BCCs to mothers infant feeding practices BCCs and adoption of EBF</i>	43
5.3. Health facilities' capacity to deliver BCC	44
5.3.1. <i>Mothers' perceptions of health workers' knowledge and skills for delivery of BCC</i>	44
5.3.2. <i>Delivery of BCC</i>	45
5.4. Community support for EBF	46
5.4.1. <i>Peer support for EBF</i>	46

5.5. Challenges with the current BCC interventions	47
5.6. Mothers’ suggestion for improving BCC interventions	48
5.7. Summary	48
Chapter Six. Limitations, Conclusion and Recommendations	50
6.1. Study Limitations	50
6.2. Conclusions	50
6.3. Recommendations	51
References	54
List of Tables
Table 1. Socio-demographic information of all study participants.....	17
Table 2. Classification of themes.....	18
Appendix.1. UWC Ethical Clearance	63
Appendix.2. UNZA BREC Approval	64
Appendix.3. NHRA Clearance	66
Appendix.4. Mpika DHO Permission	67
Appendix.5. FGD Guides for Breastfeeding Mothers of children less than six months – English version.....	68
Appendix.6. FGD Guides for Breastfeeding Mothers of children less than six months – Ichibemba version.....	72
Appendix.7. Participant information sheet -English	76
Appendix.8. Participant information sheet -Ichibemba	80
Appendix.9. Informed consent -English	83
Appendix.10. Informed consent -Ichibemba	84
Appendix.11. FGD confidentiality binding form- English	85
Appendix 12. FGD confidentiality binding form- Ichibemba	87

CHAPTER ONE. INTRODUCTION

1.1 Introduction

World Health Organisation (WHO) and UNICEF recommend initiation of breastfeeding within the first hour after birth, exclusive breastfeeding (EBF) for the first six months and continuation of breastfeeding for two years and beyond. EBF means that the infant receives only breast milk; no other liquids or solids are given not even water with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines (UNICEF, 2017; WHO, 2017). Optimal breastfeeding of infants under two years of age has the greatest potential impact on child survival of all preventive interventions, with the potential to prevent over 800,000 deaths (13 percent of all deaths) in children under-five in the developing world (Black et al., 2013). There is sufficient evidence of cause for certain preventive interventions such as exclusive breastfeeding in the first six months in the prevention of diarrhoea, pneumonia and neonatal sepsis (Gareth et al., 2003).

Globally, only 38% of infants aged 0 to 6 months are exclusively breastfed (Cai et al., 2012). Analyses indicate that suboptimal breastfeeding practices, including non-exclusive breastfeeding, contribute to 11.6% of mortality in children under 5 years of age (Black et al., 2013). An exclusively breastfed child is 14 times less likely to die in the first six months than a non-breastfed child, and breastfeeding drastically reduces deaths from acute respiratory infection and diarrhoea, two major child killers (UNICEF, 2017).

Despite this recommendation, EBF rates have not been optimal globally, with coverage ranging from 1% - 23% in Europe, to 0.3% - 73% in sub-Saharan Africa (WHO, 2017). Although considerable improvements have been made in some regions, the prevalence of EBF remains far too low in many areas of the developing world including Africa with less than 40% of infants younger than six months of age estimated to be exclusively breastfed in 2010 (Cai et al., 2012). This was far below the widely accepted “universal coverage” target of 90% coverage (Cai et al., 2012). In Africa, most women breastfeed their children for up to two years of age, but seldom practice WHO recommended exclusive breastfeeding up to six months of age (Vaahtera, 2001; Ziyane, 1999; Kruger et al., 2003). This is in part due to a lack of knowledge on the protective effects of exclusive breastfeeding for the recommended duration (Claeson et al., 2003).

The situation is not different in Zambia, 70% of infants were exclusively breast fed for the first six months of life (Zambian Statistics Agency et al., 2019). Despite this coverage, there was a

rapid decline in EBF as infants got older during the first six months, from 91% among children aged 0-1 months to 76% among those aged 2-3 months and to 42% among infants aged 4 to 5 months (Zambian Statistics Agency et al., 2019:182).

1.2 Problem statement

Despite Zambia having recorded an increase in EBF rates during the first six months of life from 61% (2007) to 73% of infants (Central Statistical Office et al., 2014), preliminary results from 2018 ZDHS indicate that EBF rates declined from 73% (Central Statistical Office et al., 2014) to 70% (Zambia Statistics Agency et al., 2019).

This downward trend is a cause for concern particularly as the Zambian Ministry of Health and cooperating partners have made considerable investments in Infant and Young Child Feeding (IYCF) promotion through the USAID, GIZ, European Union and UK aid funded Scaling up Nutrition's (SUN) 1st 1,000 Most Critical Days Programme. SUN has supported the Ministry of Health to develop and implement the country's communication and implementation strategy on nutrition, including EBF from 2014 to date (National Food and Nutrition Commission [NFNC], 2014).

1.3 Justification of the Study

The purpose of this study was to explore mothers' experiences, perceptions and attitudes towards existing BCC interventions and how these influenced the adoption of EBF among mothers of infants under six months of age. This study endeavours to fill this gap in knowledge and generate knowledge that will be used by programme managers and policy makers to design and scale up BCC strategies and materials which are context-specific and informed by the needs of mothers of children less than six months in Zambia.

1.4 Thesis Outline

This thesis is divided into five chapters. Chapter 1 describes the background, the problem statement, and the rationale for the research topic. This chapter also explains the trends in the practice of exclusive breastfeeding globally and in Africa and further describes the practice of exclusive breastfeeding in Zambia.

The remaining chapters are structured as follows: Chapter 2 presents a review of the literature on factors influencing the adoption of exclusive breastfeeding among mothers of children aged less

than six months. The third chapter describes the research methodology of the study. Chapter 4 presents the findings of the study. Chapter 5 follows, with discussion and interpretation of results. Lastly, Chapter 6 presents the conclusion of the study and recommendations based on the findings of the study.



CHAPTER 2. LITERATURE REVIEW

This chapter focuses on literature in Africa and other parts of the world where studies on exploration of mothers' experiences, perceptions and attitudes towards existing behavioural change communication interventions on exclusive breastfeeding have been done. The literature review is structured under sub-headings namely: Behavioural Change Communication; Behavioural Change Communication and exclusive breastfeeding; Behavioural Change Communication in local setting and Summary.

2.1 Behavioural Change Communication

Behavioural Change Communication (BCC) is an interactive process with communities (as integrated with an overall program) to develop tailored messages and approaches using a variety of communication channels to develop positive behaviours; promote and sustain individual, community and societal behaviour change; and maintain appropriate behaviours (Family Health International [FHI], 2002). Some of the commonly used channels for Behavioural Change Communication include; mass media, community networks and traditional media, interpersonal and group communication (FHI, 2002).

2.2 Behavioural Change Communication and exclusive breastfeeding

Globally, many studies have been done to evaluate various behavioural change communication strategies on promotion of exclusive breastfeeding and their impact on the adoption and practice of EBF during the first six months of life (Coutinho et al., 2014; Marrow et al., 1999; Tylleskär et al., 2011; Jolly et al., 2012; Quinn et al., 2005).

Evidence from a study done in Bangladesh showed that community-based breastfeeding counselling offered by peers had been successful in increasing EBF rates in Bangladesh where hospital-based strategies for breastfeeding promotion cannot reach mothers because about 95% have home deliveries. The proportion of mothers still breastfeeding at 5 months was high in the intervention group at 70% compared to 6 % in control group (Haider et al., 2000). This is also supported by other studies done in Mexico, UK, Burkina Faso, South Africa and Uganda (Tylleskär et al., 2011; Jolly et al., 2012).

In Zambia, findings from the USAID's Infant and Young Child Nutrition (IYCN) programme also revealed that trained Community health volunteers filled a key role in providing high quality infant and young child counseling and supporting mothers at health facilities and community level, where health workers are often overwhelmed (IYCN,2010). This clearly shows that community based breast feeding programme could play a key role in increasing the uptake of EBF among mothers of children under six months of age (USAID,2010).

In Mexico, home-based peer counseling showed marked improvements in the duration of exclusive and partial breastfeeding in a transitional, peri-urban neighbourhood of Mexico. At 3 months' post-partum, EBF was practiced only by 12% of control mothers, compared with 67% of the mothers visited six times, and 50% of the mothers who were visited three times by a peer counsellor (Marrow et al., 1999). A study done by Tylleskär et al. (2011) in Burkina Faso, South Africa and Uganda showed that EBF promotion by peer counsellors more than doubled the proportion of mothers who reported to have exclusively breastfed their infants. Another study was done by Bland et al. (2008) in Kwa Zulu Natal in South Africa on increasing exclusive breastfeeding rates for 6 months after delivery in HIV-positive and HIV-negative women in KwaZulu-Natal, South Africa. The study found that counseling visits were strongly associated with adherence to cumulative EBF at 4 months, as those who had received the scheduled number of visits were more than twice as likely to still be exclusively breastfeeding than those who had not (Bland et al., 2008). A community-based, educational intervention study conducted in Bangladesh and Pakistan where community educators delivered health messages on a one-to-one basis through house-to-house visits and group discussions on EBF, found that the majority (94%) of intervention group mothers continued EBF until four months of age as against 7% in the control group (Akram et al., 1997; Khan et al., 2013; Nankunda et al., 2010). The study also concluded that health education programmes in the antenatal period as well as after birth could promote EBF (Akram et al., 1997).

A study done by Marinda et al. (2017) in Choma districts of Zambia revealed that 98% of mother were practicing EBF and 62% of these mothers had received some form of support for infant feeding via community support channels predominantly from the community health volunteers but also empowered peer mother groups. This clearly shows the prominent role that peer educators could play in increasing the uptake of EBF among mothers under six months of age through the Community based infant and young child feeding programme.

Use of multifunctional Community Health Assistants (CHA) to deliver breastfeeding counselling at scale within a routine health service has been associated with a significant increase in rates of EBF (Coutinho et al., 2014). A study done in Recife, Brazil compared rates of exclusive breastfeeding associated with a breastfeeding counselling intervention in which CHA received 20 hours of training directed at counselling and practical skills with rates pre-intervention when CHA received 4 hours of didactic teaching. The study found that rates of EBF greatly improved when CHA were trained to provide breastfeeding counselling and were significantly higher by 10–13 percentage points at age 3– 5.9 months compared with pre-intervention rates. Post-intervention point prevalence of EBF for infants aged <4 months was 63 %, and for those aged <6 months was 50 % (Coutinho et al., 2014; Chapman et al., 2010). The study further found that most mothers (83 %) reported receiving advice about breastfeeding, and 85 % of these were counselled by CHA. Other sources of advice included other health professionals (74 %). Most mothers (73 %) trusted the CHA's advice and were satisfied with answers given to queries and concerns (Coutinho et al., 2014). The study by Kipp et al. (2017) in the Southern province of Zambia also suggested that Community Health Workers played an important role in providing basic child health education and services and linking women and children with the health system. CHWs could bridge the gaps between health facilities and community and thereby contributing to increased EBF rates.

Implementation of large-scale community-level behaviour change programmes has helped to improve the adoption of EBF among mothers of infants under the age of six months. An evaluation of a large-scale community-level behaviour change programme implemented in Bolivia, Ghana and Madagascar revealed a marked improvement in exclusive breastfeeding of infants of 0 to 6 months of age from 54% to 65% in Bolivia, 68% to 79 % in Ghana and 46% to 68% in Madagascar (Quinn et al., 2005). The programme used an approach built on partnerships, training, Behavioural Change Communication, and community activities.

Use of educational interventions through individual and group counselling for exclusive breastfeeding has been shown to increase the adoption of EBF among mothers. A systemic review of over 66 studies done in developing countries revealed that educational interventions significantly increased EBF rates at day one by 43%; 30% at <1 month, and 90% at 1-5 months,

analyses showed that the effects of individual counselling and combined individual and group counselling were significant, with increases of 31% and 27% respectively.

Facility-based interventions were found to increase EBF rates significantly by 26%, and combined facility and community-based interventions showed a significant increase of 31%. At 1-5 months, analyses showed that both individual and group counselling had significant impacts at 90%, respectively. Combined individual and group counselling led to an increase of 101% (Haroon, Das, Salam, Imdad and Bhutta, 2013). These findings are also supported by a quasi-experimental study on a breastfeeding promotion project implemented in Ife South Local Government Area (LGA) in Nigeria that showed that breastfeeding promotion in rural communities was feasible and could lead to behavioural changes. The programme employed the following interventions among intervention groups: training workshops on breastfeeding for community health workers, breastfeeding promotional posters displayed in prenatal care clinics and in homes, handouts on breastfeeding, breastfeeding talks in the clinics and in homes, and individual counselling on breastfeeding before and after delivery. Pregnant women were enrolled in the programme during the last trimester. The programmes showed improvement in the prevalence of EBF at 4 months at 39.8% in the intervention group compared to 13.9% for the controls (Davies-Adetugbo, 1996). These findings are similar to a study done by Froozani Permezhadeh, Motlagh and Golestan (1999) in Iran where 59 mothers in the study group received breastfeeding education face-to-face, after delivery and during follow-up for 4 months in the mother and child health (MCH) centre or in their homes while the remaining 61 mothers comprised the control group. EBF rates were significantly higher in the study group (54%) than in the control group (6.5%). Evidence highlighted above has shown that Behavioural Change Communication interventions have greatly contributed to increased uptake of EBF among mothers of infants less six months.

2.3 Behavioural Change Communication in Zambia

A study done in Zambia by Fjeld et al. (2008) found that mothers actively sought advice on exclusive breastfeeding from health workers and clearly expressed their motivation to follow health worker's guidance. The same study found that although mothers were recommended to practice EBF, it was never actively followed up and a mother in doubt was at high risk of returning to the traditional practice of mixed feeding (Fjeld et al.2008:10). The study by Fjeld et al. (2008)

also revealed some gaps in the health education given by the health personnel. The risks of mixed feeding in general, and in terms of HIV transmission, in particular, were never brought up, not even when talking about the benefits of EBF (Fjeld et al. 2008:10). Another study by Katepa-Bwalya (2008) revealed that nurses were an important source of support for EBF as they were knowledgeable and shared their knowledge during antenatal and under-five clinics, 83.5% (Mazabuka) and 79.5% (Kafue) of mother interviewed during the study indicated that they had received information on breastfeeding from health workers (Katepa-Bwalya, 2008).

2.4 Summary

In summary, the literature has shown that various community and health centre based BCC interventions have been quite effective in influencing mothers of children under six months to adopt and practice exclusive breastfeeding during the first six months of the child's life. Some of the community and health facility-based BCC interventions that have been found to be effective include use of community educators to deliver health messages on a one-to-one basis through house-to-house visits and group discussions at both community and facility level, and group education or counselling offered by health facility staff during maternal and child health clinics.

From several studies done around the world, it is clear that various community and health centre based interventions have been effective in influencing mothers to adopt and practice EBF during the first six months of their child's life.

In Zambia, very few studies have been done to determine the effect of various Behavioral change strategies both at health facility and community level on increasing the adoption and uptake of exclusive breast feeding among mothers of children under six months of age. Furthermore, no study has been done to determine mother's experiences, perception and attitudes towards the existing BCC interventions and their influence thereof on adoption of EBF. It will be good for such studies to be done in order to understand the effect of facility and community based infant and young child feeding BCC intervention on increasing rates of EBF, and also understand mother's experiences, perceptions and attitudes towards existing BCC interventions and their influence thereof on adoption and practice of EBF. This study therefore seeks to fill this gap in knowledge by understanding mother's experiences, perceptions and attitudes towards existing BCC interventions on EBF and their influence thereof on the adoption and practice of EBF. Findings from this study will help programme managers and policy makers to formulate

strategies that will help address the low uptake of exclusive breastfeeding during the first six months of life, and also strengthen the delivery of existing BCC on infant and young child feeding



UNIVERSITY *of the*
WESTERN CAPE

CHAPTER THREE. METHODOLOGY

3.1 Introduction

In this chapter, the methodology used in this research study is described. The chapter outlines the study design, study population and sampling procedures used. It also describes the data collection procedure, including the research tools and the process of data collection and analysis. Finally, the chapter addresses the issues of rigour and ethical considerations.

3.2 Aim and Objectives

The study explored mothers' experiences, perceptions of and attitudes toward existing behavioural change communication (BCC) interventions for exclusive breastfeeding in Mpika district of Muchinga Province of Zambia.

3.2.1 Objectives

1. To explore mothers' experience with existing behavioural change communication interventions on exclusive breastfeeding.
2. To explore mothers' perception of the various behavioural change communications interventions on exclusive breastfeeding implemented at the health facility and community level in Mpika district.
3. To explore attitudes held by mothers towards existing behavioural change communication interventions on exclusive breastfeeding.

3.3 Research Approach and Study Design

This was a descriptive, exploratory study using a qualitative research approach to explore mothers' experience with existing BCC interventions on exclusive breastfeeding and how these interventions influenced mothers to adopt the practice of EBF during the first six months of life. A qualitative approach, using specific qualitative methodology, can provide an understanding of health behaviour in its every-day context and help the researcher to understand reasons for certain behaviours (Sankar et al., 2015). According to Vaughn, Schumm & Sinagub (1996), people are a valuable source of information as they are able to verbalise their feelings and perceptions, especially on issues that directly or indirectly affect them. The study explored participants' views, opinions, experiences, cultural and traditional factors and other variables on existing BCC

interventions on EBF, which are mostly complex, interwoven and difficult to measure quantitatively.

A qualitative descriptive and exploratory study design was implemented as this type of study design allows for the exploration of the context within which the practice and adoption of exclusive breastfeeding take place.

3.4 Study Setting

This study was carried out in the Mpika district of Zambia. The district has a total population of 280,537 (Ministry of Health, 2016). Like other rural districts in Zambia, 70% of the population live in the rural areas (Ministry of Health, 2017). Eighty percent of Mpika population live in abject poverty (Mpika District Health office, 2017). The vastness of the district, compounded by the rough terrain, (valleys, escarpments, plains) makes access to health and social services very difficult. The district has thirty-one health centers, one government hospital and one mission hospital. All the health facilities provide Maternal, Neonatal and Child health services including breastfeeding counselling. The median duration of EBF for Muchinga in which Mpika falls is 3.4 months which is below the recommended six months of EBF (Central Statistical Office et al., 2014). Chilonga Mission Hospital is located 30 kilometers away from Mpika Business District and covers a population of 7,612 people while Tazara Health facility is located about 12 kms from Mpika Business District (Mpika District Health office, 2017).

The two study areas have a population of 5,615 (Tazara 4,010 and Chilonga, 1,605) of women of children bearing age (MoH, 2019). About 90% of these mothers are not employed and thus earn a living through agriculture and informal trading. The majority of them are also not educated and have an average education level of Primary school (MoH, 2018). The fertility rates for these areas are quite high. The mean provincial fertility rate for Muchinga province is 5.7 per woman under which Mpika falls which is higher than the national average of 4.7 women (Zambia Statistics Agency et al., 2019). In terms of infant and young child feeding practices, the provincial average for Muchinga province under which Mpika falls indicates that 70% of infants were started with breastfeeding within 1 hour of birth while the median duration (months) of breastfeeding among children aged less six months was 4.3 (Zambia Statistics Agency et al., 2019). The study population consisted of mothers from the reproductive age group from these two areas.

3.5 Study Population

The study population comprised mothers of infants less than six months of age who were still breastfeeding in Tazara and Chilonga areas of Mpika District. Tazara and Chilonga areas were selected because they have the highest number of children between 0 to 23 months at 5,131 and 13,691 (MoH, 2017) respectively. These two areas also contribute greatly to Mpika district health office's health service coverage and thus undertaking this study in these two areas provided the researcher with richer and more detailed information on mothers' experiences with BCC interventions and how these influence mothers to adopt EBF.

3.6 Study sample and sampling approach

According to Rice and Ezzy (1999), sampling in qualitative research targets information rich cases for in-depth study. In order to achieve this, qualitative research employs purposive sampling. Chopra and Coveney (2003) suggest that purposive sampling is the method in which the researcher's judgment is used to decide which study units should be included in a study sample.

The study purposively recruited breastfeeding mothers of infants less than six months from each of the two study sites who were still breastfeeding. Women without children less than 6 months were excluded from the study. The researcher visited the target township and village in Tazara and Chilonga respectively and explained the study and participant's selection process to community leaders. The local leaders, with support from health center staff and neighbourhood health committees, were requested to identify breastfeeding mothers of infants under six months in the village and township who met the inclusion criteria of the study.

3.6.1. Sample Size

Since the goal in qualitative research is not to get a population representative sample but rather information rich sample, the study used a small sample to study the phenomenon in-depth and in detail (Patton, 2002). A total of four focus group discussions of 8 breastfeeding mothers of infants less than six months per group were held in the community. The researcher opted to choose 8 participants in line with the recommended number of 6-10 participants per each FGD (Morgan,1997).

The study sample comprised of 32 mothers from Tazara and Chilonga Districts who had infants less than six months of age and who were still breastfeeding and who consented to participate in

the study. FGDs were conducted in each of the two target areas among breastfeeding mothers of infants less than six months.

3.6.2 Data collection

Focus Group Discussion was used as the data collection method in order to explore and get consensus and diversity in participant's knowledge, experiences, preferences, and assumptions on existing BCC on exclusive breastfeeding. Groups were kept as homogenous as possible to ensure participants felt comfortable sharing their perceptions within a larger group. This was done through recruiting breastfeeding mothers of children under six months from the same socio-cultural and economic backgrounds. This was done with the help of community leaders and community health workers in the two study sites. A semi-structured interview guide in the local language, Bemba, was developed for the focus group discussions (Appendix 05).

3.6.3 The pilot study

Piloting was done with a group of breastfeeding mothers of infants less than six months similar to the study sample in a non-study area, Mpika urban catchment area. The pilot study was done in order to test the research protocol, FGD semi-structured interview guide, and sample recruitment strategies and identify potential problem areas and deficiencies in the interview guide and protocol prior to the implementation of the full study (Hassan et al., 2006).

Insights from the pilot helped the researcher to finalise the semi-structured interview guide. From the pilot, the researcher found Question 2, "How are these BCC interventions offered, who offers, where and how often?", in section A was being answered in Question 1, "What Behavioural change communication (BCC) interventions for promoting exclusive breastfeeding among mothers are currently being implemented in your community or at the health centre? Could you list/name them..... Probe: (For each intervention) Please tell me more about that intervention". Participants when explaining about the interventions were also explaining about how the BCC were offered by who, where and how often. The researcher had to merge the two questions into one question.

3.6.4 The focus group discussions

Before the FGDs started, the researcher introduced himself to the participants and clarified the purpose of the study and what would be done with data. The participants were given the

information sheet and FGD binding form (Appendix. 08). After making an informed decision to participate in the study, the participants signed the consent and the FGD binding forms. The FGDs were facilitated by the researcher while a research assistant was responsible for taking notes. Both the researcher and research assistant had a very good cultural understanding of the two areas in terms of norms and local traditions regarding interaction with mothers in smaller group discussions. This helped the researcher to successfully hold all planned FGDs in the two study areas. Furthermore, both the researcher and the research assistant had the ability to communicate with respondents in their local language-Icibemba.

3.7 Data Analysis

After data collection, the audio tapes of the interviews were listened to repeatedly and transcribed into Bemba by the researcher. The researcher then translated the transcripts from Bemba into English. The analysis of data was on a continuous process that started during data collection. The rationale behind this was to ensure that emerging themes could be followed up in order to verify them. The thematic method of data analysis as described by Miles and Huberman (1994) was used in this study. The first stage was data familiarisation stage, which was accomplished by reading and re-reading the data sets in order for the researcher to familiarise himself with the data, and obtain an overall impression on the mothers' perception of BCC interventions and their influence on adoption of exclusive breastfeeding. The second stage was a process of coding of data by looking at relevant words, phrases, sentences and sections in relation to the study objectives. The third stage was categorising of codes which were important by seeing trends in which words were repeated and the meaning they held to various participants in relation to BCC and adoption of EBF. These assisted the researcher to establish the meaning of various responses from the respondents. The recurring themes related to experiences of mothers on existing BCC interventions on EBF and their influence thereof on the adoption and practice of EBF among mothers were identified through this process. The fourth stage involved labelling of categories or themes which were most relevant in relation to the research objectives and questions.

3.8 Rigour and trustworthiness of the study

Rigour in qualitative research encompasses the concepts of credibility, dependability, transferability and confirmability of data. It relates to whether findings accurately reflect the real

situation and are backed by evidence. It also refers to the extent to which the data collection strategies and instruments measure what they intend to measure (Lincoln and Guba, 1985).

Transferability refers to the degree to which findings can be applied in another context and settings or with other groups. Confirmability refers to the degree to which the results of the research can be confirmed by others, especially external auditors who attempt to follow through the progression of events in the research to try and understand how and why decisions were made (Krefting, 1991). Credibility refers to the confidence in the 'truth' of the findings while dependability shows that the findings are consistent and could be repeated (Lincoln and Guba, 1985).

To ensure credibility in this study, respondents were identified and described carefully. Furthermore, similar questions were asked to all FGD participants to ensure uniformity across all groups. The FGD processes were explained to participants clearly and discussions were transcribed verbatim. Peer debriefing in the form of constant communication and contact with my supervisor throughout the study was another way of ensuring that this study was credible. Transferability was ensured by providing a dense description of the study settings (Tazara and Chilonga), themes and participants so as to allow the audience to judge for themselves this study's applicability to other settings or similar contexts (Creswell and Miller, 2000). In addition, the researcher endeavoured to demonstrate that the findings were well grounded in the life experiences of the people who participated in FGDs and reflected their typical and atypical elements.

Dependability was ensured through maintaining a "decision trail" used by the researcher in the study (Lincoln and Guba, 1985). In this study an "audit trail" was ensured by a thick description of the research's methodology (Creswell and Miller, 2000:128). The decision trail was provided through a clear and detailed description of the data collection and analysis process. Furthermore, the chosen methodology and data analysis was well presented, clarified and justified by demonstrating all the actions of the research, the influences on them and events that occurred during the course of the study (Holloway and Wheeler, 1996). Confirmability as a criterion for neutrality in qualitative research (Holloway and Wheeler, 1996). In this study, confirmability was achieved by ensuring dependability, credibility and transferability of the study as described above (Sandelowski, 1983).

Trustworthiness was also achieved by developing an interview guide that was grounded in the literature.

3.9 Ethical Considerations

Ethical clearance to conduct the research was obtained from University of the Western Cape's Faculty of Community and Health Sciences Higher Degrees Committees, UWC Biomedical Research Ethics Committee, Ethics reference number BM 19/6/2 (Appendix 01), and the University of Zambia Biomedical Research Ethics Committee (UNZABREC), Ref. no. 407-2019 (Appendix 02) while permission to access the two study sites was given by Mpika District Health office (Appendix 04). Participants were assured that participation was voluntary, and individuals were under no obligation to participate. If they chose to participate, they could withdraw from the study at any time and/or refuse to answer any questions, without suffering any negative consequences.

An information sheet explaining the details about the study, the benefits and risks, the voluntary nature of the study and assuring them of confidentiality was provided in Icibemba and read out to participants (Participant information sheet – Appendix 06). Informed consent was sought and signed only by those who accepted to participate (Informed consent Appendix 07). Participants were assured that information from FGDs would be used only for the study and subsequent publishing of these findings. All information provided during FGDs was kept confidential, everyone in the group was asked to respect everyone's privacy and confidentiality. Furthermore, each participant was requested to sign the FGD confidentiality binding form that would bind them from disclosing the identity of participants and whatever was discussed in the FDGs (Appendix 08). Individual names were not recorded with their responses. A unique identifier code was assigned to each participant to identify him or her for the audiotape and transcripts. Anonymity was maintained throughout. Audiotaping only took place if all focus group participants agreed. FGDs were scheduled at a time and place convenient to participants, so as to minimise any economic risk. The audio tape recorder and transcripts are locked in a safe and only the researcher and the supervisor had access to them. Results from this study will be disseminated to key stakeholders working in the health and nutrition sectors in Mpika and at national level in Lusaka. Meetings will also be organised in Tazara and Chilonga to provide feedback to the community on the results from the study. Confidentiality will be maintained throughout the process and no individual names will be mentioned.

CHAPTER FOUR. RESULTS

4.1 Introduction

This chapter presents the findings of the study. The chapter first sets out the characteristics of the participants before describing the findings. This section reviews several issues that arose during focus group discussions. The findings are presented thematically, focusing on the key research objectives that informed the data collection process, and quotes have been used to illustrate the comments made by respondents.

4.2 Characteristics of the participants

All the 32 participants who participated in the focus group discussions were mothers of infants less than six months of age who were still breastfeeding in Tazara and Chilonga areas of Mpika District. All lived within the catchment area of the two clinics. They all fell into the age category of 19 – 38 years. Despite coming from different tribes, all the participants were fluent in Bemba, the local language in the Mpika district. Most of the participants were not employed and had an average education level of primary school. Most of them lived within the 10 km radius from the clinic except for one participant in Tazara who lived outside the 10km radius.

Table 1: Socio-demographic information of all the study participants

Characteristic	Frequency (N)
Participant per each catchment	
Chilonga - Group 1	8
Chilonga - Group 2	8
Tazara –Group 1	8
Tazara –Group 2	8
Age of Respondent in Years	
19-24	13
25-34	17
34-39	2
Occupation	
Unemployed	29
Informal employment	3

4.3 Themes

The main themes that emerged from analysis of FGDs with mothers were: mothers' experiences with existing behavioural change communication interventions on exclusive breastfeeding; and mothers' perception and attitudes towards the various behavioural change communications interventions, and from each theme sub-themes emerged.

Table 2. Classification of Themes

Theme	Sub-theme
Experiences with existing behavioural change communication interventions on exclusive breastfeeding	1.1. Delivery and frequency of BCC interventions
	1.2 Influence of BCCs on adoption of EBF
	1.3 Health workers' s knowledge and skills in delivery of BCC
Perceptions and attitudes towards behavioural change communications interventions	2.1 Appropriateness and accessibility of current BCC interventions
	2.2 Challenges with the current BCC interventions
Current efforts in promoting EBF and suggested actions	

4.4 Findings

In his introductory remarks the investigator defined Behavioural Change Communication as the use of communication to promote positive health outcomes such as increasing breastfeeding among mothers of children less six months. He explained that BCC used various channels such as mass media (which included both radio and television), interpersonal channels (such as client-health provider interaction, group counselling or talk) and community mobilisation (through community meetings, home visits, community drama/theatre) to achieve desired behaviours.

This was done so that he could be sure that everybody had clarity on what BCC meant and that everyone was talking about the same thing.

4.4.1 Experiences with existing Behavioural Change Communication interventions on exclusive breastfeeding

4.4.1.1 Delivery and Frequency of BCC interventions

In this study most mothers agreed that group education was the most commonly used BCC interventions for promoting exclusive breastfeeding in both Chilonga and Tazara areas of Mpika District. Mothers indicated that group education on exclusive breastfeeding was offered during under-five and post-natal clinics on a monthly basis by health workers, community health workers and traditional birth attendants prior to mothers receiving under-five and post-natal services respectively.

“Ah, one of the ways that BCC interventions are being implemented here at our health facility is through the dissemination of information on exclusive breastfeeding to mothers during under-five clinics, and this is done through Group health education by Health workers, Community health workers and Traditional birth attendants (FGD #1, mother #1, Chilonga).

“Here at our health facility, it’s only Group education that is being used to disseminate information on exclusive breastfeeding during under-five clinics” (FGD#1, Mother # 3, Chilonga)

“Group education are done through under-five clinics and Post-natal clinics” (FGD #2, Mother # 6, Tazara)

“From my view, Under-five clinics are held monthly and thus health education sessions are offered on a monthly basis” (FGD#1, Mother #1, Chilonga)

It also emerged from FGDs that there were also other BCC interventions that were being implemented by health facilities alongside group education, and these included home visits, placement of posters in strategic places such as health facilities and public places, handing out of leaflets, and airing of radio programmes on exclusive breastfeeding.

“Health education/Counseling are carried out by Community health workers during home visits. CHWs carry out door to door education on exclusive breastfeeding though it is a long time since they conducted their visit” (FGD#2, Mother # 8, Chilonga)

“Information is also shared through Posters placed on trees, walls at the clinic and public places and leaflets which are given out to us” (FGD#1, Mother # 4, Tazara)

“Through Radio programmes, done on Mpika FM radio by staff from the department of health” (FGD#1, Mother # 4, Tazara)

“BCC interventions at this health facility are offered through under-five clinics, home visits and radio programmes” (FGD#2, Mother #3, Chilonga).

However, some mothers stressed that posters and flyers on exclusive breastfeeding were only distributed and given out during major events such as bi-annual child health and Annual World Breastfeeding weeks.

“Posters and flyers are distributed especially during commemoration of child health week and world breastfeeding week. CHWs and health workers distribute these posters and Flyers during these events” (FGD#2, Mother #2, Chilonga)

One participant had a totally different view, she mentioned that she had not witnessed any BCC interventions being offered on exclusive breastfeeding as this was her first baby.

“I have not witnessed any BCC interventions on exclusive breastfeeding as this is my first baby” (FGD#1, Mother #1, Chilonga)

On Community participation in the delivery of BCC interventions, most mothers agreed that mothers who practiced exclusive breastfeeding were involved in the delivery of BCC intervention such as group education during under-five clinics. Mothers felt that this was good as it served as an example to other mothers to practice exclusive breastfeeding.

“Yes, it happens, mothers who practice exclusive breastfeeding are called upon to teach fellow mothers on how they practice exclusive breastfeeding and share their experience on EBF, and this is done during under-five clinics”. (FGD#1, Mother#7, Chilonga)

“Yes, they have been involving mothers to educate fellow mothers on EBF during under-five clinics especially when there are many mothers during that particular under-five session” (FGD#1, mother 5, Tazara)

“At times, they split us into groups to discuss among ourselves and thereafter we reconvene to share what we learnt on exclusive breastfeeding from that particular session. This greatly helps us to grasp information” (FGD#1, Mother#2, Tazara)

One mother from 2nd FGD in Chilonga felt that mothers who practice exclusive breastfeeding were not involved in the promotion of exclusive breastfeeding, while another from the 1st FGD at the same health facility felt that use of mothers to deliver or share information of exclusive breastfeeding was not consistently done as mothers are involved only during some of the under-five clinics.

“No, they do not involve breastfeeding mothers in the promotion of exclusive breastfeeding. They only use Posters to teach us during under-five clinics.” (FGD#2, Mother 3, Chilonga)

“It depends on which monthly visits one attends. Like for me, most of the monthly visits I attend, mothers who practice exclusive breastfeeding are not called upon to take part in sharing their experiences and teaching fellow mothers on exclusive breastfeeding” (FGD#1, Mother 1, Chilonga).

For health facilities that did not involve mothers in disseminating information on exclusive breastfeeding, participants felt that it would be a good idea to do so as this would serve as an example to other mothers.

“Yes, it can be a good idea. Using Mothers who practice exclusive breastfeeding to teach other mothers will serve as an example to other mothers and compel them to practice exclusive breastfeeding” (FGD#1, Mother #4, Chilonga).

“We are okay with health facilities using other women who practice exclusive breastfeeding because it is easier to learn from our fellow women” (FGD#1, Mother#7, Tazara).

Participants also suggested how best health facilities could be involving mothers in the dissemination of BCC interventions at both health facility and community level.

“Health facilities could facilitate the formation of a group of mothers who practice exclusive breastfeeding who can volunteer to be teaching fellow mothers on exclusive

breastfeeding during under-five clinic sessions or community meetings” (FGD#2, Mother 5, Chilonga).

“Health facilities could also use Traditional birth attendants to visit homes and provide health education to mothers on exclusive breastfeeding” (FGD#2, Mother 4, Chilonga).

“Health facility staff could be involving mothers who practice exclusive breastfeeding to share their experiences with other mothers, this can help mothers to adopt exclusive breastfeeding as they will get it from their fellow mothers” (FGD#1, Mother#3, Tazara).

“Mothers will be encouraged to adopt exclusive breastfeeding by hearing from their fellow mothers as opposed to health facility staff” (FGD#1, Mother#2, Tazara).

However, one participant from one of the FGDs indicated that she did not see it as a good idea using mothers who practice exclusive breastfeeding to educate fellow mothers, as she felt these mothers may not in reality be practicing exclusive breastfeeding.

“On my own, I do not see it as a good idea because some of the mothers might not be practicing exclusive breastfeeding in reality. The information that they might be sharing may not be helpful. It is better for health workers and trained community health workers to teach us as opposed to mothers” (FGD# 1, Mother #6, Chilonga).

On health facilities that do not involve mothers to disseminate information on exclusive breastfeeding, participants did not know the reasons why this was so.

“We do not know the reason why they do not involve mothers who practice exclusive breastfeeding to teach other mothers. May be it could be due to shortage of human resources.” (FGD#2, Mother 6, Chilonga)

4.4.1.2 Contribution of BCCs to mother’s infant feeding practices

During FGDs, most respondents indicated that BCC interventions had greatly helped them to practice exclusive breastfeeding and have noted great improvements from the time they started practicing exclusive breastfeeding. Group education offered during under-five and postnatal clinics was mentioned as one of the BCC interventions that had the greatest influence on mothers’ ability to adopt exclusive breastfeeding. Participants indicated that group education afforded them an opportunity to ask questions where they were not clear and responses were provided

immediately, this resulted in increased understanding of the benefits of practicing exclusive breastfeeding.

For other media such as radio, participants indicated that they were usually too busy with house chores for them to listen to radio programmes, and in some cases they did not have batteries to enable them power their radios, tune in and listen to radio programmes. Participants also cited the current electricity loadshedding as barriers to listening to radio programmes.

“What has helped me are group education on exclusive breastfeeding which are offered during under- five clinic sessions as at home we are usually busy to listen to Radio programmes on promotion of exclusive breastfeeding” (FGD#1, Mother 4, Chilonga).

“Under- five clinics have been very effective in educating us on exclusive breastfeeding as we are able to ask questions where we are not clear” (FGD#1, mother#4, Tazara).

“Yes, the Current BCC interventions that are offered at this facility such as Group education have helped me to practice breastfeeding. With all my children, I do breast feed them exclusively during the 1st six months” (FGD# 1, Mother #6, Tazara)

“We do not have any other interventions apart from group education done under-five and post-natal. Home visits are not done despite having community health workers in our communities” (FGD#1, Mother 3, Chilonga).

“Group education has greatly helped me to adopt exclusive breastfeeding as I now know the benefits of exclusive breastfeeding” (FGD#1, Mother 2, Tazara)

“Health education offered during post-natal clinics has also helped me as that is the only opportunity we have to get information on exclusive breastfeeding, for radio we do not have batteries or electricity to enable us listen to programmes on promotion of exclusive breastfeeding” (FGD#1, Mother 6, Chilonga).

“With radio, if you are not clear, it is not possible to ask questions, and also with current electricity outages it makes it difficult for us to listen to radio programmes” (FGD#2, Mother 8, Chilonga).

“Under-five clinics are offered every month so they provide an opportunity for us to interact with health workers more often and learn about exclusive breastfeeding, and

during these clinics they emphasize a lot on exclusive breastfeeding” (FGD#2, Mother#5, Chilonga).

“I personally, I used to feel lazy to practice exclusive breastfeeding but from the teaching I get from under -five clinics, they have helped me to practice exclusive feeding” (FGD#1, Mother#2, Tazara).

One participant indicated that reading leaflets provided by the health facility has helped her to practice exclusive breastfeeding as it can be seen from the extract below.

“Reading leaflets on exclusive breastfeeding has also helped me to practice exclusive breastfeeding” (FGD#1, Mother#4, Tazara).

The overwhelming sentiment expressed was that women had seen great benefits in adopting and practicing exclusive breastfeeding as a result of being exposed to BCC interventions. Mothers noted that their children have been growing well without falling sick compared to babies that they had before they started practicing exclusive breastfeeding. Mothers indicated that BCC interventions had helped them to nurture their children to grow well and prevent diseases such as diarrhoea. They also noted that their children do not cry unnecessary compared to those that are not exclusively breastfed as noted in the extract below.

“Yes, BCC has helped us a lot. My children from the time, I started practicing exclusive breastfeeding have been growing well and they do not frequently suffer from diseases such as diarrhoea” (FGD#1, Mother #2 Chilonga).

“Health educations sessions have helped us greatly. I have observed that there is a lot of difference between babies that are started on complementary feeds say at 2 months with those that are exclusively breastfed. Babies that are exclusively breastfed do not easily suffer from diseases or illnesses” (FDG#1, Mother 6, Tazara)

“I have also seen great bonding between myself and my babies when I practice exclusive breastfeeding. The babies get to know her/his mother very well” (FGD#1, mother#4, Chilonga).

“My first child, I introduced him to solid foods at 4 months and he started to get sick more often but for subsequent children, I practiced exclusive breastfeeding and they grew healthy, this was after I learnt about exclusive breastfeeding” (FGD#1, Mother#3, Chilonga).

“I have noticed that my children who are exclusively fed do not give me problems like crying unnecessarily. Children who are started early on complementary feeds usually develop stomach pain as their bowels are not developed enough to handle solid foods, and usually cry unnecessarily” (FGD#1, mother 2, Tazara).

“Yes, I have noticed a lot of changes, Babies do not cry any how when they are exclusively breastfed, for example once I exclusive breastfeed my baby I can even work normally in my field.” (FGD#2, Mother#8, Chilonga).

“Our children, we have now are much better as they do not easily suffer from diseases, because of exclusive breastfeeding, compared to those that we used to have a long time ago before we started practicing exclusive breastfeeding, who frequently suffered from diseases like diarrhoea and flus that is what I can say” (FGD#2, Mother 6, Tazara).

“Initially, I used to give other foods and water to my children during the first Six months but from the time I started learning about exclusive breastfeeding, I no longer give them anything except breast milk.” (FGD#1, Mother 3, Tazara).

One participant brought out a different dimension of what BCC interventions had done to her family support system apart from helping her to adopt exclusive breastfeeding. She indicated that BCC interventions had helped her family members to be supportive of exclusive breastfeeding.

“BCC intervention such as Posters, Flyers and Radio programmes have also helped family members to be supportive to us in terms of encouraging us to practice exclusive breastfeeding.” (FGD#2, Mother 5, Tazara)

Another participant indicated that apart from helping her practice exclusive breastfeeding, BCC interventions offered at the health facility had also helped her to reach out to fellow mothers in her community and encourage them to practice exclusive breastfeeding.

“Apart from helping me practice exclusive breastfeeding, BCC interventions have helped me to encourage fellow mothers in the community to practice exclusive breastfeeding.” (FGD#2, Mother 2, Tazara)

It was also highlighted that BCC interventions have also helped in preventing mother to child transmission as HIV positive mothers are taught how to breast feed their children and avoid mixed feeding during the 1st six months of life.

“BCC interventions have helped in that those who are HIV positive are taught how to exclusively breast feed and prevent mother to child transmission of HIV.” (FGD#2, Mother 7, Tazara)

4.4.1.3 Health workers’ s knowledge and skills in delivery of BCC

Most mothers thought all health workers, community health workers and traditional birth attendant that deliver group education during under-five and postnatal clinics and also during outreach sessions, were quite knowledgeable about exclusive breastfeeding and had adequate skills in the delivery of BCC interventions on exclusive breastfeeding.

“Nurses and Community health workers are quite knowledgeable and we have no problem with the way they deliver their messages.” (FGD#1, Mother #8, Tazara).

“Yes, health workers, community health workers, TBAs and SMAGs are well trained and teach us very well, it is only that us people do not adhere to what they teach us. They teach us to exclusive breastfeed for the first six months but some mothers start porridge as early as 4 months.” (FGD #1, Mother #7, Chilonga).

“Personnel who conduct health education during under-five clinics, home visits and during radio programmes are adequately trained and explain very well information on exclusive breastfeeding, because we are able to see the benefits when we practice what they educate us on.” (FGD # 2, Mother #2, Chilonga)

“Health workers try to tailor their education to the information needs of mothers, for those who not educated, the simplify the message according to their level of understanding.” (FGD#2, Mother 8, Tazara).

Participants were also able to back up their claims by indicating that they had seen some benefits, and that the experience they were sharing during FGDs were as a result of the knowledge that they had gotten from the same group education.

“Yes, they teach us well and the experiences that we are sharing here are as a result of the teaching that we get from nurses and community health workers” (FGD#1, Mother#5, Tazara).

“...because we are able to see the benefits when we practice what they educate us on,” (FGD # 2, Mother #2, Chilonga)

One peculiar thing that came out from one of the FGDs was that despite health workers delivering information on exclusive breastfeeding very well, very few mothers actually practiced exclusive breastfeeding. One participant also mentioned that some mothers did not see the benefits of exclusive breastfeeding because they did not follow instructions from health workers.

“To be honest, they are very few mothers that practice exclusive breastfeeding as mothers feel babies do not easily get full just from breast milk especially if the child keeps crying after breastfeeding, and usually pressure comes from other family members to introduce complementary feeds. Health workers do teach us very well on exclusive breastfeeding” (FGD#1, Mother #8, Chilonga).

“It only does not work for mothers that disobey instructions from health personnel” (FGD#2, Mother #4, Chilonga)

4.4.2 Perceptions and Attitudes towards behavioural change communications interventions

4.4.2.1 Appropriateness and accessibility of current BCC interventions

Most participants felt that the current BCC intervention (group education) that was in use at health facilities were appropriate as they were offered in a participatory way and afforded mothers an opportunity to seek clarity on infant feeding related issues from health workers, community health workers and traditional birth attendants. Furthermore, the BCC intervention was incorporated into existing services such as under-five and postnatal clinics which most women attended every month.

“Yes, Group education is appropriate as it provide an opportunity for us to ask questions where we are not clear as opposed to other methods.” (FGD#1, Mother#1, Chilonga).

“Group education offered during under-five clinics is appropriate as most women attend under-five clinics and the method used is quite effective since they are participatory.” (FGD#1, Mother#2, Tazara).

“Yes, Group education offered during under-five clinic is appropriate, especially under-five clinics are attended by many women every month.” (FDG#2, Mother#2, Chilonga)

“During under-five sessions, Mothers are able to ask questions as opposed to other channels such as Radio programmes.” (FGD#1, Mother#5, Chilonga)

However, other participants felt that they would love health workers and community health workers to also conduct home visits apart from group education offered during under-five clinics and to teach mothers on exclusive breastfeeding.

“I would love health workers and CHWs to conduct home visits to teach us on exclusive breast feeding apart from group counselling done through under-five and postnatal.” (FGD#1, Mother#5, Chilonga)

“...they should also be coming to the community because there are mothers who do not attend under-five clinics.” (FGD#2, Mother#6, Chilonga)

Other participants felt provision of group education during under-five clinics was not appropriate as health workers were preoccupied with other tasks such as weighing of children and provision of vaccinations, which left them with no time to provide Group education. Furthermore, mothers who missed the opportunity of getting information on exclusive breastfeeding during antenatal clinics were also at risk of missing out again during under-five clinics.

“We do not see provision of group education during under-five clinics as appropriate. Health education is not consistently provided during under-five clinics as health workers’ focus is usually on weighing and vaccinations.” (FGD#2, Mother#4, Tazara)

“Mothers who did not attend antenatal clinics may also miss the opportunity to get information on exclusive breastfeeding if it is not routinely provided during under-five.” (FGD#2, Mother#8, Chilonga)

“Health education in certain situations is given a one on one basis especially to mothers of children not gaining weight and this makes other mothers to miss out.” (FGDs#2, Mother#3, Tazara)

Given the gaps with provision of group education during under-five clinics, participants suggested that there is a need to strengthen the sharing of information during under-five clinics rather than just focusing on weighing and vaccinations in order to make the current BCC intervention appropriate.

“In order to make the current BCC appropriate, there is need to strengthen information sharing during under-five as at times the focus is on weighing and vaccinations.”

(FGD#2, Mother#6, Tazara).

Accessibility of BCC interventions which were commonly used by health facilities was also discussed. Participants reported that the current BCC interventions such as group education were only accessible to mothers that attended under-five and post-natal clinics. However, participants felt that BCC interventions were only accessible at health facility level and for one to access them, one needed to go to the health facility. Radio programmes were also not run consistently which provided a missed opportunity of reaching out to mothers with access to radio services.

“Yes, the current BCC interventions are accessible at health facility level. Ah, at under-five clinics, most women attend and thus Group counseling/education during under-five is accessed by most mothers.” (FGD#2, Mother#1, Chilonga).

“In terms of accessibility, the current BCC interventions are only accessible at health facilities, and for one to get information, she has to attend under-five clinics.” (FGD#1, Mother#2, Chilonga).

“The information does not reach those who do not attend under-five clinics or those who deliver from homes and do not attend post-natal clinics, so these mothers might not know the importance of exclusive breastfeeding. I come across mothers that do not attend under-five clinics and these are missed.” (FGD#1, Mother#4, Chilonga).

“Some BCC interventions are not very accessible to mothers. Yes, for example Posters and Flyers are only distributed once in a while which makes some mothers miss out.” (FGD#2, Mother1, Tazara)

“Radio programmes are also aired occasionally which makes them inaccessible to mothers and their families.” (FGD#2, Mother#3, Tazara)

Participants also indicated that penalty slapped on mothers that delivered from home prevented them from accessing information of exclusive breastfeeding during under-five and post-natal clinics.

“Charging mothers that delivers from home a penalty when they come for post-natal and under-five clinics also discourages mothers from attending post-natal and under-five clinics thereby missing out on information on exclusive breastfeeding. If one delivers from home, they are made to pay K100 (\$7 or ZAR 102).” (FGD#1, Mother#8, Chilonga).

Inadequacy of the current BCC interventions also came out from the FGDs. Participants felt that the current BCC interventions offered at health facilities were not enough, and thus there was need to reach out to those mothers that did not attend under-five and post-natal clinics.

“...the current BCC interventions are not enough and there is need to carry out interventions that will reach mothers that do not attend under-five and post-natal clinics or those in far flung areas.” (FGD#1, Mother#4, Chilonga).

In terms of the current BCC interventions meeting information needs of mothers on exclusive breastfeeding, most of the participants felt that the current BCC interventions met mothers' information needs on exclusive breastfeeding as health workers made sure that mothers understood the information. Furthermore, BCC interventions afforded mothers with an opportunity to ask questions and seek clarity where they were not clear.

“Yes, the current BCC interventions meet our information needs. Health workers make sure we understand what they teach us by asking us questions, and repeating information in cases where we have not understood.” (FGD#1, Mother#3, Chilonga)

“Yes, BCC interventions are accessible during under-five clinics and information disseminated meets our information needs.” (FGD#1, Mother#7, Tazara)

4.4.2.2 *Challenges with the current BCC interventions*

Participants highlighted many challenges with regard to the implementation of current BCC interventions on exclusive breastfeeding at the two facilities. For instance, BCC interventions were more readily available at health facility level than at community level.

“At community level, we are unable to access information on exclusive breastfeeding as CHWs do not visit our home or organize community meeting to educate us on exclusive breastfeeding” (FGD#1, Mother#7, Chilonga).

“At health facilities, they are no challenges except there will be need for health facilities to extend BCC to community level” (FGD#1, Mother#8, Tazara)

Participants also indicated that they had challenges accessing information on exclusive breastfeeding disseminated through other media such as radio because they did not have batteries or electricity to enable them power their radio sets and listen to radio programmes on exclusive breastfeeding. Furthermore, radio did not provide an opportunity for listeners to ask questions in cases where they needed some clarification.

“For other BCC interventions such as Radio programme, we have challenges accessing information as we have no batteries or electricity to enable us listen to programmes on promotion of exclusive feeding.” (FGD#1, Mother#4, Chilonga).

“The problem of radio, majority of us, we do not have radios so it is very difficult to access programmes on exclusive breastfeeding.” (FGD#2, Mother#5, Tazara)

“The other problem with radio, we are unable to listen to programmes because of load shedding.” (FGD#2, Mother#7, Tazara)

“If one has a question, it is very difficult to ask during radio programmes, so we end up just listening.” (FGD#2, Mother#2, Tazara)

On the issue of home visits, participants felt that these were rarely conducted by health workers, community health workers and traditional birth attendants. Participants further indicated that home visits may not be effective as mothers are mobile, some go for work, others to the fields and markets so health workers may not find any mothers at their homes to provide information.

“Home visits are rarely done.” (FGD#2, Mother#3, Tazara).

“Home visits are not effective as mothers are mobile, some go out in search of jobs while others go to the field and some to markets. So when health workers or community health workers visit, they may not find some of the mothers.” (FGD#2, Mother#5, Tazara).

Participants indicated challenges with the group education sessions which are offered during under-five and Post-natal clinics. Participants mentioned that different health workers taught at each of the under-five sessions, of which some of them taught mothers very well while others were rude in the way they conducted their sessions.

With regard to the interpersonal skills of the health workers who conducted the under-5 sessions, mothers mentioned that this could at times be a factor which inhibited their participation.

“There are different people that teach at each under-five clinic session, some teach very well while others are rude in the way they respond to our questions.” (FGD#2, Mother#2, Chilonga)

“Most mothers shun under-five group education sessions when they notice that a rude health worker is presiding over the group education session.” (FGD#2, Mother #2 Tazara).

“It all depends on the mood of the health worker at that particular day, when they are okay, they teach well and when they are not okay, they do not teach well.” (FGD#2, Mother#6, Chilonga)

“In rare cases, when they conduct group education, when you ask a question, they usually throw it back to us, saying ‘what do you know about this subject matter?’.” (FGD#2, Mother#4, Tazara)

It also came to light that exclusive breastfeeding education/promotion was not routinely provided by health workers during under-five clinics. Participants indicated that in some cases health workers only provided information on a one-to-one basis in cases where the babies were not doing well in terms of their weight. Participants wondered what kept health workers busy from routinely conducting group education during under-five clinics.

“As mentioned earlier the focus of the current BCC is that they only provide information on exclusive breastfeeding on a one-on-one basis when the baby is not doing well in terms of weight.” (FGD#2, Mother#3, Tazara)

“They only do so when they have seen that the baby is not gaining weight for example if the baby’s weight stays the same for 2 to 3 months” (FGD#2, Mother#6, Tazara)

“We do not know what makes health workers busy to be rushing through to weighing and giving vaccinations.” (FGD#2, Mother#8, Tazara)

Challenges with other media such as posters written in English were also highlighted by participants, who mentioned that posters written in English posed a challenge to those that did not know how to read English.

“Use of posters on exclusive breastfeeding written in English also poses a challenge to us who do not know how to read and this makes us not to get anything.” (FGD#2, Mother#1, Tazara)

4.4.3 Current efforts in Promoting EBF and suggested Actions

Despite the challenges highlighted above, most participants indicated that they were happy with some of the health centres' efforts in promoting exclusive breastfeeding. They indicated that through group health education sessions conducted during under-five and post-natal clinics mothers had learnt a lot about exclusive breastfeeding, women were being involved in the dissemination of information, and that health workers and community health workers were friendly in the way they engaged mothers which made them to understand the information easily.

“Yes, the health facility was doing enough in promoting exclusive breastfeeding among children through under-five clinics and also post natally.” (FGD#1, Mother#3, Chilonga).

“Yes, health facilities were working well in promoting exclusive breastfeeding because we have learnt a lot on exclusive breastfeeding.” (FGD#2, Mother#7, Chilonga).

“The health facility was doing an excellent job in promoting exclusive breastfeeding. the health facility involves us in the dissemination of information.” (FGD#2, Mother#5, Tazara)

“Health workers and CHWs are very friendly and make sure that we understand.” (FGD#1, Mother#7, Tazara)

Participants also brought out suggestions on how health facilities could make current BCC interventions more effective and appropriate. Some of the suggestions that came out include: strengthening provision of BCC during under-five clinics as most mothers attended these clinics whether they were working or not working; health facilities needed to do a lot to reach out to those mothers who do not attend under-five clinics and those in far-flung areas; health facilities needed

to improve the way some health workers taught during under-five clinics; health centre in-charges needed to speak to rude health workers and see how best they could be helped in order for them to improve in the provision of information on exclusive breastfeeding to mothers; health facilities should be assigning health workers who are good to be teaching so that mothers are encouraged to attend under-five clinics.

“Strengthen provision of BCC through under-five clinics as nearly all mothers attend under-five whether they work or not.” (FGD#1, Mother#1, Tazara).

“Health facility needs to do a lot to reach out to those mothers that do not attend under-five five clinics and those that are in far flung areas.” (FGD#1, Mother#5, Chilonga).

“Use home visits to reach mothers that do not attend under-five clinics and also reach out to other family members so that they are able to support mothers practice exclusive breastfeeding.” (FGD#1, Mother#7, Tazara)

“Health facilities will need to improve especially in the way some health workers teach during under-five. Health facilities know health workers who are rude and those who are good. They will need to talk to those that are rude and see how best they can help them.” (FGD#2, Mother#3, Chilonga).

“Health facility should be assigning good health workers to be teaching during under-five clinics so that mothers are encouraged to attend clinics.” (FGD#2, Mother#3, Chilonga)

One participant had a different view on home visits, she felt men CHWs visiting home could be bringing about suspicions among their husbands. She mentioned that she was comfortable with the current strategy of using under-five to deliver health education on exclusive breastfeeding.

“That can be difficult especially if men CHWs visit homes as this can bring suspicions among our husbands. Me, I am comfortable with use of under-five to deliver health education on exclusive breastfeeding as opposed to home visits.” (FGD#1, Mother#4, Tazara).

Other suggestions that came out from FGDs include: health facilities organising community meetings and use of markets to reach out to mothers that do not attend under-five and post-natal clinics as there were more mothers in the community than those that attended under-five and post-

natal clinics. Participants also suggested the use of Public Address systems to mobilise mothers and disseminate information on exclusive breastfeeding in places such as markets.

“The health facility should be organising community meeting at least once in a month where they could be teaching mothers on exclusive breastfeeding. For example, they could use public places such as market where most mothers gather to disseminate information on exclusive breastfeeding.” (FGD#1, Mother#3, Chilonga)

“In addition to what my colleague has mentioned, this will help them reach out to mothers that do not attend under-five clinics. There are more mothers in the community compared with those that attend under-five clinics.” (FGD#2, Mother#4, Chilonga)

“They should also use strategies like the ones which were used by Anti-HIV programmes such as Public Address system to mobilize mothers sharing of testimonies by those practicing exclusive breastfeeding to disseminate information on exclusive breastfeeding.” (FGD#1, FGD#2 Mother#4, Chilonga)

Sticking of posters and issuing out flyers to mothers on exclusive breastfeeding in strategic areas and training more community health workers to deliver BCC on exclusive breastfeeding also came out as one of the ways mothers could be reached with information on exclusive breastfeeding.

“Apart from conducting home visits and holding community meetings, health facility could be sticking posters in strategic places and issuing out flyers to mothers on exclusive breastfeeding so that mothers could be reading on their own.” (FGD#1, Mother#2, Chilonga)

“Train more community health workers in exclusive breastfeeding so that they will be able to teach mothers in community.” (FGD#1, Mother#8, Chilonga).

One participant suggested the intensification in the use of radio programmes to reach mothers with information on exclusive breastfeeding.

“They could also intensify use of radio programmes to reach us with information on exclusive breastfeeding.” (FGD#2, Mother#7, Chilonga)

One participant brought out another dimension by suggesting that health facility staff needed to focus on counselling effectively to mothers who use replacement feeding so that they could help mothers prevent diarrhoea.

“Health facility staff should also counsel effectively mothers who use replacement feeding e.g. infant formulas such as lactogen from the time they give birth so that they help mothers prevent diarrhoea. So they should also teach these mothers.” (FGD#1, Mother#5, Tazara).

Participants also suggested some actions that the Ministry of Health could continue or do differently in relation to implementation of behavioural change communication interventions in future. These were: strengthen conducting of home visits and community meetings as a way of reaching every mother; MoH to stop health facilities from charging mothers that deliver from home a penalty fee to encourage them to attend post-natal and under-five clinics; explore use of markets, public address system and sharing of testimonies by mothers who practice EBF. It was mentioned that the programme could borrow some of the strategies that the HIV programmes has been using to woo people for HIV testing such as PA system and sharing of testimonies as this will help the programme to reach out to more mothers with information on exclusive breastfeeding.

“MoH should strengthen conducting of home visits and holding of community meetings as a way of reaching every mother with information on exclusive breastfeeding.” (FGD#1, Mother#7, Chilonga)

“MoH should stop health facilities from charging mothers that deliver from home as no one know when one will go into labour. This will help mothers that deliver at home to attend Post-natal and under-five clinics without any fear of paying penaty fees and be able to access information on exclusive breastfeeding.” (FGD#1, Mother#2, Chilonga).

“I came across a mother who delivered at home and feared to bring her baby to the health facility as she did not have the Zkw 100 (\$6) penalty fee, she was only saved by a good Samaritan that paid for her.” (FGD#1, Mother#8, Chilonga).

Mothers suggested that Ministry of Health through health facilities should consider rewarding mothers that practice exclusive breastfeeding by giving things like a piece of Chitenge (African

wrapper) or T-shirt, so that they are able to encourage other mothers to practice exclusive breastfeeding.

“Health facilities should be rewarding those that practice exclusive breastfeeding so that they are able to encourage other to practice exclusive breastfeeding.” (FGD#1, Mother#3, Chilonga).

Provision of user friendly services also came out as one of the areas that Ministry of Health needed to consider in order to encourage mothers to attend under-five and Post-natal clinics.

“MoH, should focus on providing user friendly services by assigning good health workers to under-five clinics to conduct health education. This will encourage more mothers to attend under-five clinics.” (FGD#2, Mother#5, Chilonga)

“Some health workers wear facial expressions which do not encourage mothers to interact or ask questions. It will be good that such staff are talked to so that they are jovial and welcoming to mothers.” (FGD#2, Mother#1, Tazara)

Mothers also suggested ways that MoH could help health facilities conduct under-five clinics so that they could effectively provide information to mothers. Some of the suggestions that emerged included: making it mandatory for group education to be conducted with mothers on exclusive breast findings before starting weighing and provision of vaccinations to children during under-five clinics, and assigning staff specifically for under-five clinics as currently staff cover two or three departments at the same time which makes it difficult for them to effectively provide group education.

“What they should be doing, is that before they start weighing children and giving vaccinations, they should conduct group education to mothers on exclusive breastfeeding.” (FGD#2, Mother #1, Tazara)

“They should not just focus on weighing and vaccination.” (FGD#2, Mother #5, Tazara).

“They should assign staff specifically for under-five clinics because at times staff serve two or three departments - Antenatal, Maternity and Outpatient departments, that this makes them to rush during under-five clinics. This could be the reason why they do not conduct group education or rush us through.” (FGD#2, Mother #8, Tazara).

This chapter presented the main findings from the study. Findings from this study reflect mothers’ experiences, perceptions and attitudes towards existing behavioural change communication interventions on exclusive breastfeeding which were currently being implemented by health facilities in Mpika district. Some of the key findings include: group education offered during under-five and post-natal clinics was the most commonly used BCC method, and the most appropriate and accessible method to nearly all mothers; while group education emerged as one of the BCC methods that had the greatest influence on mothers’ adoption of EBF. The study also revealed that health workers had good knowledge and skills for delivery of BCC.

In terms of challenges, the findings indicated that some of the health workers were not friendly to mothers during under-five clinics, which made it difficult for the mothers to assimilate information. Mothers who delivered from their homes had challenges attending under-five and post-natal sessions as they were required to pay penalty fees. Home visits and community meeting were also not frequently conducted and as a result mothers that did not attend under-five or post-natal clinics missed out. Mothers also made suggestions on how delivery of BCC could be improved. These included strengthening home visits, provision of user friendly under-five and post-natal clinics, stopping health centres from charging a penalty to mothers that delivered from their homes, and making it mandatory for group education to be done prior to other under-five clinic’s activities such as growth monitoring and provision of immunisations.

CHAPTER 5. DISCUSSION

5.1 Introduction

World Health Organisation and UNICEF recommend initiation of EBF for the first six months and continuation of breastfeeding for two years and beyond (UNICEF, 2017; WHO, 2017). Optimal breastfeeding of infants under two years of age has the greatest potential impact on child survival of all preventive interventions, with the potential to prevent over 800,000 deaths (13 per cent of all deaths) in children under-five in the developing world (Black et al., 2013). Despite this recommendation, EBF rates have not been optimal globally, with coverage ranging from 1% - 23% in Europe to 0.3% - 73% in sub Saharan Africa (WHO, 2017). In Zambia, 73% of infants were exclusively breastfed during the first six months of life (Central Statistical Office [Zambia] et al., 2013). Despite this coverage, there was a rapid decline in EBF as infants got older during the first six months, from 94% among infants aged less two months to 45% among infants aged 4 to 5 months (Central Statistical Office [Zambia] et al., 2013). This downward trend is a cause for concern particularly as the Zambian Ministry of Health and cooperating partners have made considerable investments in Infant and Young Child Feeding (IYCF) promotion (NFNC, 2014).

The purpose of this research study was to explore mothers' experiences, perceptions of and attitudes toward existing behavioural change communication interventions for exclusive breastfeeding in Mpika district of Muchinga Province of Zambia. As stated earlier in Chapter 3, the objectives of the study were to: 1) explore mothers' experience with existing behavioural change communication interventions on exclusive breastfeeding, 2) explore mothers' perception of the various Behavioural Change Communications interventions on exclusive breastfeeding implemented at health facility and community level in Mpika district, and 3) explore attitudes held by mothers towards existing behavioural change communication interventions on exclusive breastfeeding.

This chapter discusses the findings that were presented in Chapter 4 under the key headings of Behavioural Change Communication Interventions on EBF; Health facilities' capacity to deliver BCC; Community Support for EBF; Challenges with the current BCC interventions; and Mothers' suggestions for improving BCC interventions.

5.2 Behavioural Change Communication Interventions on EBF

5.2.1 Sources of Information on EBF

The study revealed that group education offered at health facilities by health workers during under-five and post-natal clinics was the most commonly used BCC interventions for promoting exclusive breastfeeding among mothers of children aged less six months. A Nigerian study which explored sociocultural determinants of EBF practices amongst rural mothers similarly identified health workers as a main source of information (Joseph & Earland, 2019). Studies done in other parts of Africa have also shown that health workers and health facilities are the main sources of information on infant and child feeding (Ihudiebube-Splendor et al., 2019; Katepa-Bwalya, 2008; Otoo et al., 2009; Ochola, 2013; Ukegbu et al., 2011). This shows that health care workers, traditional birth attendants and community health workers play a major role in the dissemination of information on exclusive breastfeeding during antenatal, post-natal and under-five clinics as most mothers attend maternal and child health services and receive information through these platforms.

In Zambia, this finding could be attributed to good attendance both during under-five and post-natal clinics by mothers. This can be seen from good vaccination coverage rates among children under 12 months for the first doses of DPT-HepB-Hib, PCV, and RV at 98%, 98%, and 95%, respectively, 91% for the second dose of RV and 92% and 90% for the third dose of DPT-HepB-Hib and PCV, while post-natal attendance stands at 75% (Zambia Statistics Agency et al., 2019).

This finding stresses the need to continue using maternal and child health clinics as platforms for the dissemination of information to mothers on key Infant and young child feeding practices as these clinics are well attended by most mothers. These platforms should also be strengthened so that information is provided consistently to mothers based on prevailing information needs. This approach will consequently contribute to increased knowledge, adoption and practice of EBF.

5.2.2 Appropriateness and accessibility of BCC interventions

Evidence from this study further suggests that the most used BCC intervention in most health facilities was group education. Mothers revealed that group education was appropriate as it was

offered in a participatory way, and afforded mothers an opportunity to immediately seek clarification on any issue that they were not clear about from health workers, community health workers and traditional birth attendants. A study done by Froozani et al. (1999) in Iran had similar findings. Mothers who were exposed to group education had a good understanding of EBF and had a higher adoption rate of exclusive breastfeeding compared to the group that was not exposed. Evidence from other studies done in various part of the world have also revealed that both prenatal and postnatal counselling help mothers to practice EBF and thus help to increase EBF at 6 months (Imdad et al., 2011; Aidam et al.,2005; Haroon et al.,2013; Lutter et al.,1997; Bhutta et al.,2008; Laar et al.,2015; Lartey,2008).

The participatory nature of group education provides a two way flow of communication which could provide an opportunity for health workers to understand myths and mis-conceptions, mothers' s fears and concerns on EBF, and also use the opportunity to provide correct information to mothers on EBF. Furthermore, health workers could share information from these interactions with programme manager for use in the design of context specific information Communication and Educational materials.

Another study done in Nigeria however revealed that mothers did not find counselling offered during group counselling useful as information was found too repetitive, generic and failed to provide solutions to their child's feeding difficulties (Agbozo, 2016). Furthermore, a randomised study conducted in Ghana to evaluate the performance of nutrition educators revealed that 60% of counselling sessions conducted by the nurses were individualised (Laar et al., 2015). The study reported that individualised counselling could not be provided to all caregivers due to exhaustion of the nurses. In addition, there was inadequate time available to provide counselling due to late arrival of either the health workers or the caregivers for growth monitoring sessions. Individualised counselling could also not be provided to caregivers because of time constraints and thus caregivers could not stay longer at health facilities to access counselling.

This resonates with findings in this study where mothers were offered individualised counselling only when their infants were not growing well. Routine visits were overly focused on health worker actions of weighing and issuing vaccinations and mothers felt that this was a wasted opportunity for one-on-one consultation. This findings is quite valuable as it stresses the need for regularly mentorship of health workers on good counseling skills and how they conducted

group discussion with mothers. This will greatly improve health workers' s skills and knowledge on counselling and engagement with mothers during maternal and child health clinics.

5.2.3 Other available BCC interventions

During FGDs, some discussants highlighted other BCC interventions that were being implemented by health facilities alongside group education. These included home visits, placement of posters in strategic places such as health facilities and public places, handing out of leaflets and airing of radio programmes on exclusive breastfeeding. This concurs with findings from other studies done in Bangladesh, Canada, Kenya and Nigeria, which revealed the following sources of information on exclusive breastfeeding among mothers: friends, media, doctors, radio, schools and neighbours (Ihudiebube-Splendor, 2019; Haider et al., 2010; Ochola, 2013; Leurer & Misskey, 2015).

In this study, the majority of mothers indicated that they were usually too busy to tune in to radio programmes because of other house chores, and in some cases even when they had time, they could not do so due to the lack of a power supply to operate their radios. Frequent electricity load-shedding was cited by mothers as another barrier to following radio programmes. Mothers also highlighted that with radio programmes, it was very difficult for them to ask questions compared to group education and one-on-one counselling. Nguyen et al., (2016) reported that exposure to mass media messages was generally passive, and was not sufficiently interactive or context-specific on its own to create a large change in social norms or rooted cultural habits.

However, this finding is in contrast with findings from other studies that have highlighted the influence of radio programmes on adoption of exclusive breastfeeding. A Nigerian study that evaluated radio programmes as a tool for empowering nursing mothers in the fight against infant mortality showed that the majority of the radio programmes benefited nursing mothers and enabled them to practice exclusive breastfeeding (Azienge, 2015). A study by Nguyen et al., (2016) also found that exposure to both mass media and interpersonal counselling had additive effects on EBF as well as on related psychosocial factors, compared with no exposure. For example, EBF prevalence was 26.1% higher in the group that received interpersonal counselling only, 3.9% higher in the mass media group and 31.8% higher in the group that received both interventions.

In Zambia, radio is not a popular medium and as such exposure to mass media in Zambia is quite low, for example only 5% of women and 13% of men have access to three specified types of mass media (newspaper, television, and radio) on a weekly basis (Zambia Statistics Agency et al., 2019).

Furthermore, there is low radio listenership among residents in Zambia because only 40% of the households own a working radio (ZICTA, 2018). This could also be another reason for low radio listenership among mothers. This finding highlights the need for BCCs interventions that are context specific and addresses the unique needs of local people in a particular locality. For example, areas with poor radio coverage, other BCC channels could be explored such as holding of community meeting and home visits as opposed to airing radio programmes. By understanding the prevailing opportunities and barriers to some of the existing BCC channels, planners will be able to effectively plan for cost-effective BCC interventions that will have maximum impact on mothers.

This study also showed that mothers especially those that did not know how to read and write had challenges reading posters and leaflets on EBF provided by health facilities, thus posing a challenge for mothers to assimilate messages. This result could also be attributed to low literacy levels particularly among women in rural parts of Zambia. According to the *Zambian Statistics Agency et al, 2019*, only one-third (54%) of rural women and 74% of rural men age 15-49 were literate. The largest proportion of women with no formal education was in Muchinga where Mpika falls at 15% (*Zambian Statistics Agency et al, 2019:34*).

Similar findings were observed in a study done by *Mangasaryan et al., (2012)* which found that printed materials were not as effective in Benin and Uganda in encouraging mothers to practice exclusive breastfeeding because of low literacy rates and multiple languages. This finding is quite useful as it seeks to guide Ministry of Health and other implementing partners to always take into account literacy levels of mothers in any given context as they designed IEC materials such as posters and leaflets. For example, in areas with low literacy levels, pictorial IEC materials could be used as opposed to IEC with narrative information. IEC materials with narrative information could be distributed to areas with high literacy rates such as workplaces and urban areas in general.

5.2.4 Contribution of BCCs to mothers' s infant and young child feeding practices

Discussants during FGDs indicated that group education sessions on exclusive breastfeeding which were offered during under-five and post-natal clinics had a lot of influence on mothers' ability to adopt exclusive breastfeeding. This observation is consistent with a systematic literature review conducted by *Imdad et al. (2011)* which identified studies that evaluated the impact of breastfeeding promotional strategies on EBF rates at 4-6 weeks and at 6 months. All studies

revealed that both prenatal and postnatal counselling were important in increasing EBF at 6 months.

An Iranian study which investigated the effects of breastfeeding education on the feeding pattern and health of infants in their first 4 months, similarly found that adoption of exclusive breastfeeding was higher among mothers who were exposed to breastfeeding education after delivery and during the first 4 months of lactation, than among those who were not exposed (Froozani et al.,1999). This also agrees with findings from other studies done by Asemahagn, 2016; Haroon et al., 2013; Lutter et al., 1997; Bhutta et al.,2008; Lartey, 2008, Tariku et al., 2017) which found group counselling as effective in promoting Infant and Young Child Feeding (IYCF) practices.

Mother's exposure to BCC was quite apparent during FGDs as mothers were able to identify some of the advantages of adopting and practicing exclusive breastfeeding. Some of the benefits that mothers brought out during FGDs include children growing well without falling sick as often (compared to babies that mothers used to have before they started practicing exclusive breastfeeding); children growing well; prevention of diseases such as diarrhoea, and children not crying unnecessarily compared to those that were not exclusively breastfed.

Other studies done globally have also identified various benefits of exclusive breastfeeding on children such as prevention of illnesses, making babies become healthy, intelligent and strong, and also helping babies to grow well (Fjeld et al., 2008; Katepa et al., 2015; Tadele et al., 2016).

Good understanding of the benefits of exclusive breastfeeding among mothers could be also linked to the good coverage of exclusive breastfeeding among children under the age of 6 months in Zambia, which currently stands at 70% (Zambia Statistical Agency et al, 2019).

5.3 Health facilities' capacity to deliver BCC

5.3.1 Mothers' Perceptions of Health workers' knowledge and skills for delivery of BCC

Discussants indicated that all health workers, community health workers and traditional birth attendants who delivered group education sessions during under-five and postnatal clinics and during outreach sessions, were quite knowledgeable about exclusive breastfeeding and had adequate skills in the delivery of BCC interventions on exclusive breastfeeding. This finding is consistent with findings from Fjeld et al. (2008) which revealed that mothers expressed great

confidence in the nurses as they were well educated and were considered knowledgeable in infant and young child feeding practices including EBF. Mothers mentioned that they got the best advice from trained health workers, rather than their parents, who gave them wrong advice. Similar studies done in Myanmar and Brazil revealed that mothers trusted the information that they received from health workers and community health workers on IYCF (Hmone et al., 2017; Coutinho, 2013). A Zambian study which evaluated mother's perception on health workers' knowledge and skills in delivering information of EBF and infant and young child feeding recommendations, also showed that mothers had a lot of confidence and trust in health care workers and community health workers who deliver group education and one-on-one sessions on exclusive breastfeeding (Hazemba et al., 2015; Katepa, 2008). This is the reason why health workers continue to be the main source of information on exclusive breastfeeding. As highlighted above, it will be good to strengthen health workers' s capacity so that they continue to provide correct information to mothers on IYCF.

5.3.2 Delivery of BCC

Mothers indicated that different health workers taught at each of the under-five sessions, some of whom taught mothers very well while others were rude in the way they conducted their sessions. Furthermore, health workers focused more on weighing and provision of vaccinations during under-five clinics rather than dissemination of information on exclusive breastfeeding.

These findings are consistent with findings from a study done by Kavle et al. (2019) which revealed that while mothers reported participating in group lectures on breastfeeding during well child visits, they did not report receiving individual advice on breastfeeding during these consultations. Health providers often prioritised growth monitoring and immunisation in the well child consultation despite counseling on breastfeeding difficulties. Individual breastfeeding counselling was only provided when a problem with weight gain was identified. In such situations, it was common for health providers to advise mothers regarding maternal diet during lactation.

The study by Kavle et al. (2019) revealed health providers also mentioned work overload was an impediment to provision of EBF counselling. A high number of patients negatively evaluated the quality of health talks, which included information on breastfeeding. A study by Phommachanh et al. (2019) also showed insufficient provision of information on danger signs during pregnancy, nutrition, breastfeeding and iron supplements to mothers, and very poor communication skills,

behaviour and attitude of health providers towards mothers. Less than a quarter of pregnant women were treated with kindness and respect. Though health staff were mentioned as a source of knowledge on exclusive breastfeeding, women perceived doctors and nurses from the hospital and clinic as too busy to be asked questions (Hmone et al., 2019)

Other studies have also highlighted similar barriers to infant and young child feeding education provided by health professionals including poor organisation and inadequate or inaccurate information on breastfeeding (Otoo et al.,2009), high workload and insufficient staff (Tawiah-Agyemang et al.,2008; Agunbiade & Ogunleye, 2012). Therefore, health workers need to be supported in their health promotion role as they perform multiple tasks. Many health workers working in rural areas are inadequately skilled due to limited opportunities to improve their medical knowledge and skills (Maonga et al., 2016). This finding brings out one aspect which most governments have not effectively dealt with, provision of User friendly services. MoH will need to re-orient the current maternal and child health services to client focused services, and this could be done through strengthening health workers' s skills in customer care services and creating enabling environment for health workers to effectively provide health services that meets the needs of their clients. The other thing could be done is beefing- up the number of staff that are currently in most health facilities so that health workers are not overworked, and also providing right equipment and supplies. This will greatly improve health workers' s capacity to provide client centred quality maternal and child health services to mothers and their children.

5.4 Community Support for EBF

5.4.1 Peer support for EBF

Most participants during FGDs indicated that participation of mothers or peers in the delivery of BCC interventions served as a good example to other mothers to practice exclusive breastfeeding. This study corroborates other studies that have evaluated the use of community based peer counsellors in dissemination of information on exclusive breastfeeding. For example, a study done in Dhaka, Bangladesh among women in their last trimester explored the effect of community based peer counsellors on exclusive breastfeeding found that Peer counselling significantly improved breastfeeding practices, the prevalence of exclusive breastfeeding at 5 months was 70% for the intervention group and 6% for the control group (Haider et al., (2000).

Another study done in Bangladesh which evaluated the impact of peer counselling on early initiation of breastfeeding and exclusive breastfeeding brought out similar findings. Intervention mothers were 5-fold more likely to practice EBF compared with the control group (Ara et al., 2018). These findings are also supported by the study by Shakya et al., (2017) which revealed that community-based peer support for nursing mothers significantly increased EBF duration among mothers in both LMICs and high-income countries. In LMICs, mothers who received such support exclusively breastfed their infants until 3, 5 or 6 months compared to those who did not have such support.

Furthermore, a study by Nankunda (2006) revealed that peer counsellors were well received by the community. None of the peer counsellors was refused entry into any of the homes they visited to counsel mothers. The husbands also welcomed the idea of the peer counsellors helping their wives with breastfeeding. Husbands of the women who were offered counselling hailed the introduction of peer counselling for breastfeeding to their community as a useful thing.

The literature supports the potential role of peer counsellors or mothers in the delivery of information on exclusive breastfeeding having a great impact on mother's adoption of exclusive breastfeeding. It also suggests that mothers learn more from their peers who practice exclusive breastfeeding or who have been trained to educate fellow mothers on exclusive breastfeeding than from trained health care workers. This, therefore shows that Peer to peer counseling is effective in increasing acceptance and adoption rates for EBF. More investment is needed in training more peer counsellors so that they supplement health workers' work at community level, and thus contribute to increased EBF coverage.

5.5 Challenges with the current BCC interventions

This study revealed numerous challenges with regard to the implementation of current BCC interventions on exclusive breastfeeding. Some of the challenges highlighted include: BCC interventions are more pronounced at health facility level than at community level; radio programmes do not provide an opportunity for listeners to ask questions in cases where they needed clarification; home visits are rarely conducted by health workers, community health workers and traditional birth attendants; difficulties in reading educational information materials written in English. These findings concur with studies done globally which have also highlighted

the above challenges (Diji et al.,2016; Guldan et al., 2000; Jama et al.,2017; Kavle et al., 2019; Laar et al.,2015; Mangasaryan et al., 2012; Nguyen et al., 2016; Penny et al., 2005).

5.6 Mothers' suggestions for improving BCC interventions

During FGDs, mothers made suggestions on how health facilities could make current BCC interventions more effective and appropriate. Some of the suggestions that emerged include:

- Strengthening provision of BCC during under-five clinics as most mothers attended these clinics whether they were working or not working.
- Health facilities will need to reach out to those mothers that do not attend under-five clinics and those that lived in far flung areas through carrying out home visits and holding of community meetings especially in strategic places such as markets.
- There is a need to address unfriendly practices of health workers assigned to work in child health clinics and stop charging mothers that deliver from home a penalty fees in order to improve access to infant and young feeding information by mothers.

Other suggestions that came out from the study include:

- Health facilities to make use of Public Address system for mobilising mothers and dissemination of information on exclusive breastfeeding.
- Health facilities should improve access to breastfeeding IEC materials in local languages – these should be displayed and distributed in strategic places.

5.7 Summary

This study brought out many issues around mothers' experiences, perceptions and attitudes towards existing behavioural change communication interventions on exclusive breastfeeding which are currently being implemented in Mpika district. The study revealed that group education offered during under-five and post-natal clinics was the most commonly used BCC method and was the most appropriate and accessible method to nearly all mothers. This finding resonates with Froozani et al. (1999)'s study in Iran which found that mothers who were exposed to group education had good understanding of EBF and had a higher adoption rate of exclusive breastfeeding compared to the group that was not exposed. Group education was perceived to have the greatest influence on mothers' adoption of EBF. This also agrees with findings from other studies done by Asemahagn, 2016; Haroon et al.,2013; Lutter et al., 1997; Bhutta et al.,2008;

Lartey, 2008, Tariku et al., 2017) which found group counselling as effective in promoting Infant and Young Child Feeding (IYCF) practices.

Mothers also indicated that health workers were the main source of information on exclusive breastfeeding and had good knowledge and skills for the delivery of BCC. This finding concurs with other studies done in other parts of Africa which also identified health workers as a main source of information on infant and child feeding (Joseph et al.; Ihudiebube-Splendor et al., 2019; Katepa, 2008; Otoo et al., 2009; Ochola, 2008; Ukegbu et al., 2011). Peer support was identified as one of the incentives for mothers to adopt and practice EBF. This corresponds with other studies done in other parts of the world also found that use of community based peer counsellors in dissemination of information on exclusive breastfeeding significantly increased EBF duration among breastfeeding mothers. Mother's exposure to BCC was quite evident from this study as mothers were able to identify some of the advantages of adopting and practicing exclusive breastfeeding and was also demonstrated by the good coverage of exclusive breastfeeding among children under the age of 6 months in Zambia which currently stands at 70% (Zambia Statistics Agency et al., 2019).

This finding is supported by findings from other studies done globally that have also identified various benefits of exclusive breastfeeding on children such as prevention of illnesses, good growth and the development of healthy, intelligent and strong babies. (Fjeld et al., 2008; Katepa et al., 2015; Tadele et al., 2016).

Unfriendly practices by health workers assigned to work in child health clinics, charging of penalty fees to mothers that deliver from home and lack of home visits were highlighted by mothers as some of the barriers to accessing information on infant and young child feeding. This is supported by similar findings from studies done in other parts of the world that showed insufficient provision of information on danger signs during pregnancy, nutrition, breastfeeding and iron supplementation. Health workers also displayed poor communication skills, behaviour and attitudes towards mothers (Diji et al., 2016; Guldani et al., 2000; Jama et al., 2017; Kavle et al., 2019; Laar et al., 2015; Mangasaryan et al., 2012; Nguyen et al., 2016; Phommachanh et al., 2019; Penny et al., 2005).

CHAPTER SIX. LIMITATIONS, CONCLUSION AND RECOMMENDATION

This chapter presents limitations, conclusion and further suggests recommendations that are based on the findings of this study.

6.1 Study Limitations

Despite measures to ensure trustworthiness and representativeness of the study, the findings of this study were limited in a number of ways. Only two of the 31 catchment areas were sampled for the qualitative data collection and may not be representative of the entire district, the province nor of the country. However, the findings from this study could help Mpika district and Zambia as a whole to better understand mothers' experiences with existing BCC interventions on EBF and how they influence mothers' adoption of EBF.

Furthermore, it may be possible that the use of FGD might have meant that minority views and stigmatising views may have been silenced. It may also be possible that the women's responses could be influenced by the fact that recruitment was done with the help of neighbourhood health committee members from the same community where FGDs were being conducted. However, this limitation may also have been addressed by the fact that neighbourhood health committee members were not present during discussions with the women.

6.2 Conclusions

Overall, group education offered during under-five and post-natal clinics is the most commonly used BCC method, and the most appropriate and accessible method to nearly all mothers. The health system should therefore strengthen this channel of behavioral change communication by making an integral part of maternal and child health clinics, and continue to consistently using it to reach out to mothers with correct information on infant and young child feeding practices. Group education sessions were more commonly offered interventions at health facilities than at community level. This potentially leaves out about 36% of mother that do not attend Maternal and Child health services from accessing correct information on infant and young child feeding (ZDHS,2018). In order to ensure universal coverage of this intervention and ensure that no one is left behind, the Ministry of Health and health facilities should consider a mix of health facility and community based BCC interventions such as home visits and radio programmes so that all mothers including those that may not frequently attend under-five and post-natal clinics could be reached

with information on EBF. Through this approach, more mothers will be able to adopt and practice EBF and thus make the country to go beyond the current 70% coverage of children under six months who are exclusively breast fed.

Peer support was also identified as one of the enablers for mothers to practice exclusive breastfeeding as mothers felt that other mothers served as a good example for them to practice exclusive breastfeeding. Therefore, health facilities should consider co-opting mothers as Infant and Young Child Feeding counsellors who could be trained and supported to carry out home visits and encourage mothers to practice EBF. This has the potential to bridge the gap that exists between health facility and community and help in improving infant and young child feeding practices community level, thereby contributing to increased rates of exclusive breastfeeding in Zambia and globally.

Health workers are the main source of information on exclusive breast feeding, the Ministry of health should continue updating their knowledge about infant and young child feeding as often as necessary so that they are able to provide correct information on IYCF to mothers. This is particularly important in view of infections such as HIV and emerging pandemics such as COVID-19 where important studies have revealed changes in the way families care for their children (Vazquez-Vazquez et al,2021; Rossouw et al,2016).

Finally, health system should consider addressing some of the factors that act as impediments to mothers accessing information on exclusive breastfeeding such as poor interpersonal skills among health workers, charging of penalty fees to mothers that deliver from home and lack of home visits. Ministry of Health should consider addressing these challenges by strengthening health workers' skills in provision of client centred maternal and child health services, creating an enabling environment for provision of client friendly maternal and child services and investing more in context specific community demand creation activities and outreach services.

6.3 Recommendations

- Ministry of health should strengthen the use of under-five and post-natal clinics for dissemination of information on exclusive breastfeeding, for example, group education could be made mandatory during child health clinics. It should be mandatory for all health

workers to start with group education prior to undertaking any other activities such as immunisations and growth monitoring. Currently, provision of group education is at the discretion of the health workers who may choose to do it or not do it depending on how they feel.

- Ministry of health should strengthen community outreach so that they are able to reach mothers that do not attend under-five clinics and those that lived in far-flung areas. This could be done through home visits, community meetings and holding of community sensitisation meetings in public places such as markets, and those platforms could be used to reach out to mothers that do not attend under-five and post-natal clinics. MoH could also consider integrating Public Address systems and sharing of testimonies by mothers that have practiced EBF during such activities to mobilise mothers and disseminate information on exclusive breastfeeding. In addition, MoH should consider training more infant and young child feeding counsellors so that they will be able to carry out home visits.
- Ministry of Health should strengthen the capacity of health workers to provide maternal and child health friendly services so that they will be able to provide quality health services and encourage mothers to attend under-five and post-natal clinics.
- Ministry of health should consider abolishing penalty fees for mothers who deliver from home. This will encourage mothers once they deliver at home to immediately take their children for post-natal and under-five clinics. MoH should instead strengthen the provision of information on the importance of institutional deliveries so that mothers are encouraged to deliver from health facilities. MoH could also consider working with other stakeholders such as Traditional and Religious leaders to encourage mothers to deliver from health facilities.
- Information Education Communication (IEC) materials such as posters and leaflets should be translated into local languages and posters should be stuck in strategic places such as markets, health centres and churches so that more mothers are able to access information on exclusive breastfeeding.
- Government should assign enough health workers to health facilities so that each department is well staffed. This will help health workers not to work under pressure and provide quality health services.

- Ministry of Health could consider rewarding mothers that practice exclusive breastfeeding by giving them gifts such as a piece of Chitenge (African wrapper) or T-shirts, which will encourage other mothers to practice exclusive breastfeeding.



REFERENCES

- Agbozo, F. (2016). Qualitative Assessment of Counselling on Infant and Young Child Feeding provided by Community Health Workers to Caregivers at Child Welfare Clinics in Ghana. *The International Journal of Communication and Health*. 2016 September / No.9.
- Agunbiade, M., & Ogunleye, V. (2012). Constraints to Exclusive Breastfeeding Practice among Breastfeeding Mothers in Southwest Nigeria: Implications for Scaling Up. *International Breastfeed Journal*. 2012 Apr 23;7:5. doi: 10.1186/1746-4358-7-5.
- Aidam, A., Perez-Escamilla, R., & Lartey, A. (2005). Lactation Counseling Increases Exclusive Breastfeeding rates in Ghana. *Journal of Nutrition*. 2005 Jul 1 ;135 (7):1691-5. doi: 10.1093/jn/135.7.1691.
- Akram, S., Agboatwalla, M., Shamshad, S. (1997). Effect of Intervention on Promotion of Exclusive Breastfeeding. *Journal of the Pakistan Medical Association*. 2016 Aug 2; 47(2):46-8. <https://doi.org/10.1186/s13006-016-0081-x>
- Asemahagn, M. (2016). Determinants of Exclusive Breastfeeding Practices among Mothers in Azezo District, Northwest Ethiopia. *International Breastfeed Journal*. 2016 Aug 2; 11 (22) . <https://doi.org/10.1186/s13006-016-0081-x>
- Azienge, V. (2015). *An Evaluation of Radio Programmes as a tool for Empowering Nursing Mothers in the Fight against Infant Mortality in Kaduna State*. Department of Mass Communication, Faculty of Social Science, Ahmadu Bello University, Zaria
- Ara, G., Khanam, M., Papri, N., Nahar, B., Haque, M., Kabir, I., et al. (2018). Peer Counselling improves Breastfeeding Practices: A Cluster Randomized Controlled Trial in Urban Bangladesh. *Maternal & child nutrition*. 2018 Jul;14(3):e12605. doi: 10.1111/mcn.12605.
- Bhutta, Z., Das, K., Rizvi, A., Gaffey, F., Walker, N., Horton, S., et al. (2013). The Lancet Nutrition Interventions Review Group. & the Maternal and Child Nutrition Study Group (2013). Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? *Lancet*. 2013 Aug 3;382(9890):452-477. doi:10.1016/S0140-6736(13)60996-4

Black, R., Victoria, C., Walker, S., Bhutta, Z., Christian, P., Onis, M., et al. (2013). 'Maternal and Child Undernutrition and Overweight in Low-income and Middle-income Countries', *The Lancet*, 382(9890): 427–451. 2013 Aug 3;382(9890): 427-451. doi: 10.1016/S0140-6736(13)60937-X.

Bland, R., Little, K., Coovadia, H., Coutsooudis, A., Rollins, N., & Newell, M. (2008). Intervention to Promote Exclusive Breastfeeding for the first 6 months of life in a High HIV prevalence area. *AIDS (London, England)*. 2008 Apr 23;22(7):883-891. DOI: 10.1097/qad.0b013e3282f768de.

Cai, X., Wardlaw, T., & Brown, D. (2012). Global trends in Exclusive breastfeeding. *International Breastfeeding Journal*. 2012 Sep 28;7(1):12. doi: 10.1186/1746-4358-7-12.

Central Statistical Office (CSO) [Zambia], Ministry of Health (MOH) [Zambia], and ICF International. (2014). *Zambia Demographic and Health Survey 2013-14*. Rockville, Maryland, USA: Central Statistical Office, Ministry of Health, and ICF International.

Chapman, D., Morel, K., Anderson, A., Damio, G; Pérez-Escamilla, R. (2010). Breastfeeding Peer Counseling: from Efficacy through Scale-up. *Journal Human Lactation*, 2010 Aug;26(3):314-326.

Chopra, M. & Coveney, J. (2003). Unit 3 - Session 2: Questionnaires, Sampling and Bias. In *Health Systems Research I*. Cape Town: SOPH,

Claeson, M., Victoria, C., Wagstaff, A., Schellenberg, A., Gwatkin, D. & Habicht, J. (2003). Applying an equity lens to child health and mortality: more of the same is not enough. *Lancet*. 2003 Jul 19;362(9379):233-241. doi:10.1016/S0140-6736(03)13917-7

Coutinho, S., Lira, P., Lima, M., & Frias, P. (2014). Promotion of Exclusive Breastfeeding at Scale within Routine Health Services: Impact of Breastfeeding Counselling training for Community Health Workers in Recife, Brazil. *Public Health Nutrition*, 2014 Apr;17(4):948-55. doi: 10.1017/S1368980013001833.

Creswell, W. & Miller, L. (2000). Determining validity in qualitative inquiry. *Theory into practice*.39 (3): 122-130

Davies-Adetugbo, A. (1996). Promotion of breastfeeding in the community: impact of health education programme in rural communities in Nigeria. *Journal of Diarrhoeal Disease Research*, 1996 Mar;14(1):5-11.

Diji, A.K., Bam, V., Asante, E., Lomotey, A., Yeboah, S. & Owusu, H (2016). Challenges and Predictors of Exclusive breastfeeding among Mothers attending the Child Welfare Clinic at a Regional Hospital in Ghana: A Descriptive Cross-sectional study. *International Breastfeeding Journal* (2017 Mar 9;12:13. doi: 10.1186/s13006-017-0104-2

Family Health International. (2002). *Behavioural Change Communication (BCC) for HIV/AIDS. A Strategic Framework*. Arlington, VA: Family Health International, Institute for HIV/AIDS.

Fjeld, E., Siziya, S., Katepa-Bwalya, M., Kankasa, C., Moland, K., & Tylleskar, T. (2008) “No Sister, the Breast alone is not enough for my baby” A qualitative assessment of potentials and barriers in the promotion of Exclusive breastfeeding in southern Zambia. *International Breastfeeding journal*. 2008 Nov 5;3:26. doi: 10.1186/1746-4358-3-26.

Froozani, D., Permehzadeh, K., Motlagh, R., & Golestan, B. (1999). Effect of Breastfeeding education on the feeding pattern and health of Infants in their first 4 months in the Islamic Republic of Iran. *Bulletin of World Health Organisation*. 1999, 77 (5): 381-385.

Gareth, J., Steketee, R., Black, R., Bhutta, Z., & Morris, S. (2003). How many child deaths can we prevent this year? *Lancet* 2003. 2003 Jul 5;362(9377):65-71. doi: 10.1016/S0140-6736(03)13811-1.

Guldan, G., Fan, C., Ma, X., Ni, Z., Xiang, X., & Tang, M. (2000). Culturally appropriate nutrition education improves infant feeding and growth in rural Sichuan, China. *The Journal of nutrition*. 2000 May 01;130(5):1204-11. doi: 10.1093/jn/130.5.1204.

Haider, R., Ashworth, A., Kabir, I., & Huttly, S. (2000). Effect of Community-Based Peer Counsellors on Exclusive Breastfeeding Practices in Dhaka, Bangladesh: a randomised controlled trial. *The Lancet*. 2000 Nov 11;356(9242):1643-7. doi: 10.1016/s0140-6736(00)03159-7.

Haroon, S., Das, J., Salam, R., Imdad, A, & Bhutta, Z. (2013). Breastfeeding Promotion Interventions and Breastfeeding Practices: A Systematic Review. *BMC Public Health* . 2013;13 Suppl 3(Suppl 3):S20. doi: 10.1186/1471-2458-13-S3-S20.

Hazemba, A., Ncama, B., & Ahmed, Y. (2015). Mothers' Perception of Infant Feeding Counselling in the context of Prevention of Mother-to-child Transmission of HIV in Lusaka, Zambia. January, 2012 *Medical Journal of Zambia* .Vol 42 No. 2. 2015: 58-67

Holloway, I. & Wheeler, S. (1996). Ch. 12-The Search for truth in Qualitative Research. In *Qualitative Research for Nurses*. Blackwell Science. Oxford: 162-185.

Hassan, Z. A., Schattner, P., & Mazza, D. (2006). Doing a Pilot Study: Why is it Essential? *Malaysian Family Physician: The Official Journal of the Academy of Family Physicians of Malaysia*. 2006 Aug 31;1(2-3):70-3. PMID: 27570591; PMCID: PMC4453116.

Hmone, M., Li, M., Agho, K., Alam, A., & Dibley, M. (2017). Factors associated with Intention to Exclusive Breastfeed in Central Women's Hospital, Yangon, Myanmar. *International breastfeeding journal*. 2017 Jul 06; 12(29). <https://doi.org/10.1186/s13006-017-0120-2>

Ihudiebube-Splendor, C., Okafor, C., Anarado, A., Jisieike-Onuigbo, N., Chinweuba, A., Nwaneri, A., et al. (2019). Exclusive Breastfeeding Knowledge, Intention to Practice and Predictors among Primiparous Women in Enugu South-East, Nigeria. *Journal of Pregnancy*. 2019 Jan 3;9832075. <https://doi.org/10.1155/2019/9832075>

Imdad, A., Yakoob, M. & Bhutta, Z. (2011). Effect of Breastfeeding Promotion Interventions on Breastfeeding rates, with special focus on Developing Countries. *BMC Public Health*. 2011 Apr 11; S24 . <https://doi.org/10.1186/1471-2458-11-S3-S24>

Jama, N.A., Wilford, A., Masango, Z., Haskin, L., Coutsoydis, A., Spies, L., & Harwood, C. (2017). Enablers and Barriers to Success among Mothers Planning to Exclusively Breastfeed for Six Months: A Qualitative Prospective Cohort Study in Kwazulu-Natal, South Africa. *International Breastfeed Journal*. 2017 Oct 03: 12(43). . <https://doi.org/10.1186/s13006-017-0135-8>

Jolly, K., Ingram L., Khan, S., Deeks, J., Freemantle, N., & MacArthur, C. (2012). Systematic Review of Peer support for Breastfeeding Continuation: Metaregression Analysis of the Effect of Setting, Intensity, and Timing. *BMJ*. 2012 Jan 25; 344 doi: <https://doi.org/10.1136/bmj.d8287> 344: d8287.

Joseph, F. & Earland, J. (2019). A Qualitative Exploration of the Sociocultural Determinants of Exclusive breastfeeding Practices among Rural Mothers, North West Nigeria. *International Breastfeed Journal*. 2019 Aug 19;14(38) . <https://doi.org/10.1186/s13006-019-0231-z>

Katepa-Bwalya, M. (2008). *Feeding Practices and Nutritional Status of Infants and Children in Mazabuka and Kafue Districts of Zambia*. Lusaka, University Teaching Hospital.

Kavle, J., Picolo, M., Buccini, G., Barros, I., Dillaway, C., & Pérez-Escamilla, R. (2019). Strengthening Counseling on Barriers to Exclusive breastfeeding through use of Job aids in Nampula, Mozambique. *PLoS ONE*. 2019 Dec 2; 14(12): e0224939. <https://doi.org/10.1371/journal.pone.0224939>

- Khan, I., Hawkesworth, S., Ekstro, C., Arifeen, S., Moore, E., Frongillo, A., et al. (2013). Effects of Exclusive breastfeeding Intervention on Child Growth and Body composition: the MINIMat trial, Bangladesh. *Acta-Paediatr.* 2013 August 20; 102(8):815–23. doi: 10.1111/apa.12282.
- Kipp, A., Maimbolwa, M., Brault, M, Kalesha-Masumbu, P., Katepa-Bwalya, M., Habimana, P., Vermund, S., Mwinga, K., & Haley, C.(2017). Improving access to child health services at the community level in Zambia: a country case study on progress in child survival, 2000-2013. *Health Policy Plan.* 2017 Jun 1;32(5):603-612. doi: 10.1093/heapol/czw141. PMID: 28453711; PMCID: PMC 5964895.
- Krefting L. (1991). Rigor in Qualitative Research: the Assessment of Trustworthiness. *American Journal of Occupational Therapy.* 1991 Mar 01;45(3):214-22. doi: 0.5014/ajot.45.3.214.
- Kruger R. & Gericke, G. (2003). A Qualitative Exploration of Rural Feeding and Weaning Practices, Knowledge and Attitudes on Nutrition. *Public Health Nutrition.* 2003 Apr : 6(2):217-223. doi:10.1079/PHN2002419
- Laar, M., Marquis, G., Lartey, A., & Gray-Donald, K. (2015). Growth Monitoring and Promotion in Rural Ghana: Lack of Motivation or Tools? *The FASEB Journal.* 2015 April 01; vol. 29 no. 1 Supplement 31.4. https://doi.org/10.1096/fasebj.29.1_supplement.31.4
- Lartey, A. (2008). Maternal and Child Nutrition in Sub-Saharan Africa: Challenges and Interventions. *Proceedings of the Nutrition Society.* 2008 Feb;67(1):105-8. doi: 10.1017/S0029665108006083. PMID: 18234138.
- Leurer, M. & Misskey, E. (2015). Be Positive as well as Realistic”: A Qualitative Description Analysis of Information Gaps experienced by Breastfeeding mothers. *International Breastfeeding Journal.* 2015 Mar 7; 10 (10). Doi 10.1186/s13006-015-0036-7.
- Lincoln, Y. & Guba, E. (1985). *Naturalistic Inquiry.* California: Sage publications
- Lutter, C. K., Perez-Escamilla, R., Segall, A., Sanghvi, T., Teruya, K., & Wickham, C. (1997). The Effectiveness of a Hospital-based Program to Promote Exclusive Breastfeeding among low-income Women in Brazil. *American Journal of Public Health.* 1997 Apr;87(4):659-63. doi: 10.2105/ajph.87.4.659. PMID: 9146449; PMCID: PMC1380850.
- Mangasaryan, N., Martin, L., Brownlee, A., Ogunlade, A., Rudert, C., & Cai, X. (2012). Breastfeeding Promotion, Support and Protection: Review of Six Country Programmes. *Nutrients.* 2012 Aug 14;4(8):990-1014. doi: 10.3390/nu4080990.

Maonga, A., Mahande, M., Damian, D. & Msuya, S. (2016). Factors affecting Exclusive Breastfeeding among Women in Muheza District, Tanga northeastern Tanzania: A Mixed Method Community based study. *Maternal and child health journal*. 2016 Jan;20(1):77-87. doi: 10.1007/s10995-015-1805-z.

Marinda, P., Chibwe, N., Tambo, E., Lulanga, S., & Khayeka-Wandabwe, C.(2017). Challenges and opportunities of optimal breastfeeding in the context of HIV option B+ guidelines. *BMC Public Health*. 2017 Jun 02; **17**, 541. <https://doi.org/10.1186/s12889-017-4457-7>

Miles, B. & Huberman, M. (1994). *Qualitative Data Analysis* (2nd edition). Thousand Oaks, CA: Sage Publications.

Ministry of Health. (2016). *Annual Report for Mpika District*. Mpika: Mpika District Health Office.

Ministry of Health. (2017). *Annual Report for Mpika District*. Mpika: Mpika District Health Office.

Morgan, D. (1997). *Qualitative Research Methods: Focus Groups as Qualitative Research*. Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781412984287

Morrow, L., Guerrero, L., Shults, J., Calva, J., Lutter, C., Bravo, J., Ruiz-Palacios, G., Morrow, C., & Butterfish, D (1999). Efficacy of Home-based Peer-counselling to Promote Exclusive Breastfeeding: A Randomized Controlled Trial. *The Lancet*. 1999 Apr 10;353(9160):1226-31. doi: 10.1016/S0140-6736(98)08037-4.

Nankunda, J., Tumwine, J., Soltvedt, Å., Semiyaga, G. & Tylleskar. (2006). Community Based Peer Counsellors for Support of Exclusive Breastfeeding: Experiences from Rural Uganda. *International Breastfeed Journal*.2006 Oct 20; **1**, 19 . <https://doi.org/10.1186/1746-4358-1-19>

Nankunda, J., Tylleskär, T., Ndeezi, G., Semiyaga, N., & Tumwine, K. (2010). Establishing Individual Peer Counselling for Exclusive Breastfeeding in Uganda: Implications for Scaling-Up. *Maternal Child Nutrition Journal*. 2010 Jan;6(1):53-66. doi: 10.1111/j.1740-8709.2009.00187.x.

National Food and Nutrition Commission. (2014). *The First 1000 Most Critical Days Programme. Communication Strategy and Implementation Plan*. Lusaka: National Food and Nutrition Commission.

Nguyen, H., Kim, S., Nguyen, T., Hajeerhoy, N., Tran, M., Alayon, S., et al. (2016). Exposure to Mass Media and Interpersonal Counseling has Additive Effects on Exclusive Breastfeeding and its Psychosocial Determinants among Vietnamese Mothers. *Maternal & Child Nutrition*. 2016 Oct;12(4):713-25. doi: 10.1111/mcn.12330.

Ochola, S., Labadarios, D., & Nduati, R. (2013). Impact of Counselling on Exclusive Breastfeeding Practices in a Poor Urban Setting in Kenya: A Randomised Controlled Trial. *Public Health Nutrition*. 2013 Oct;16(10):1732-40. doi: 10.1017/S1368980012004405.

Otoo, G., Lartey, A., & Pérez-Escamilla, R. (2009). Perceived Incentives and Barriers to Exclusive Breastfeeding among Periurban Ghanaian Women. *Journal of Human Lactation*. 2009 Feb;25(1):34-41. doi: 10.1177/0890334408325072.

Patton, M. & Cochran, M. (2002). *A Guide to Using Qualitative Research Methodology*. Medecins San Frontiers.

Penny, M. E., Creed-Kanashiro, M., Robert, C., Narro, R., Caulfield, E., & Black, R. (2005). Effectiveness of an Educational Intervention delivered through the Health Services to Improve Nutrition in Young Children: A Cluster-Randomized Controlled Trial. *The Lancet*. 2005 May 28-Jun 3;365(9474):1863-72. doi: 10.1016/S0140-6736(05)66426-4.

Phommachanh, S., Essink, D., Wright, P., Broerse, J., & Mayxay, M. (2019). Do Health Care Providers give Sufficient Information and Good Counseling during Ante-Natal Care in Lao PDR? An Observational Study. *BMC health services research*. 2019 July 4; 19(1), 449. <https://doi.org/10.1186/s12913-019-4258-z>

Quinn, V., Guyon, A., Schubert, J., Stone-Jiménez, M., Hainsworth, M. & Martin, L. (2005). Improving Breastfeeding Practices on a Broad Scale at the Community Level: Success Stories from Africa and Latin America. *Journal Human Lactation*. 2005 Aug 5;21(3): 345-54. doi: 10.1177/0890334405278383.

Rice, P. L., & Ezzy, D. (1999). *Qualitative Research Methods: A Health Focus*. South Melbourne (Australia): *Oxford University Press*.

Rossouw, E., Cornell, M., Cotton, F., & Esser, M. (2016). Feeding practices and nutritional status of HIV-exposed and HIV-unexposed infants in the Western Cape. *South African Journal of HIV Medicine*. 2016 May 13;17(1), 398. doi: 10.4102/sajhivmed.v17i1.398.

Sandelowski, M. (1983). The Problem of Rigor in Qualitative Research. *Advances in Nursing Science*. 1986;8(3):27-37

Sankar MJ, Sinha B, Chowdhury R, Bhandari N, Taneja S, Martines J, et al. (2015). Optimal Breastfeeding Practices and Infant and Child mortality: A Systematic Review and Meta-analysis. *Acta Paediatr*. 2015 Dec;104 (467):3-13. doi: 10.1111/apa.13147. PMID: 26249674.

Shakya, P., Kunieda, K., Koyama, M., Rai, S., Miyaguchi, M., Dhakal, S., et al. (2017). Effectiveness of Community-Based Peer Support for Mothers to Improve their Breastfeeding Practices: A Systematic Review and Meta-Analysis. *PloS one*. 2017 May 17;12(5), e0177434. <https://doi.org/10.1371/journal.pone.0177434>

Tadele, N., Habta, F., Akmel, D. & Deges, E. (2016). Knowledge, Attitude and Practice towards Exclusive Breastfeeding among Lactating Mothers in Mizan Aman Town, Southwestern Ethiopia: Descriptive Cross-Sectional Study. *International Breastfeed Journal*. 2016 Feb 27; 11 (3). <https://doi.org/10.1186/s13006-016-0062-0>

Tariku, A., Alemu, K., Gizaw, Z., Muchie, K., Derso, T., Abebe, S.M., et al. (2017). Mothers' Education and ANC Visit Improved Exclusive Breastfeeding in Dabat Health And Demographic Surveillance System Site, Northwest Ethiopia. *PLoS ONE*. 2017 June 28; 12(6): e0179056. <https://doi.org/10.1371/journal.pone.0179056>

Tawiah-Agyemang, C., Kirkwood, B., Edmond, K., Bazzano, A., & Hill, Z. (2008). Early Initiation of Breastfeeding in Ghana: Barriers and Facilitators. *Journal of Perinatology*. 2008 Dec; 28, S46–S52 (2008). <https://doi.org/10.1038/jp.2008.173>

Tylleskär, T., Jackson, D., Meda, N., Engebretsan, I., Chopra, M., Diallo, A. et al. (2011). Exclusive Breastfeeding Promotion by Peer Counsellors in Sub-Saharan Africa (PROMISE-EBF): A Cluster-Randomised Trial. *The Lancet*. 2011 July 30;378: 420–427. doi: 10.1016/S0140-6736(11)60738-1

Ukegbu A., Ebenebe, E., Ukegbu, P. & Onyeonoro, U. (2011). Determinants Of Breastfeeding Pattern among Nursing Mothers in Anambra State, Nigeria. *East African Journal of Public Health*. 2011 Sep;8(3):226-31. PMID: 23120962.

UNICEF, (2017). *Breastfeeding*. [Online]. Available: https://www.unicef.org/nutrition/index_24824.html. [Accessed: 19.07.2017]

USAID (2010). *Formative Assessment of Infant and Young Child Feeding Practices at the Community Level in Zambia*. http://iycn.wpengine.netdna-cdn.com/files/IYCN_Zambia_country_brief_042911.pdf

WHO. (2017). *Breastfeeding*. [Online]. Available: <https://www.who.int/topics/breastfeeding/en/>. [accessed:19.07.2017]

Vaahtera, M., Kulmala, T., Hietanen, A., Ndekha, M., Cullinan, T., Salin, M., Ashorn, P. (2001). Breastfeeding and Complementary feeding Practices in Rural Malawi. *Acta paediatrica* (Oslo, Norway: 1992 Mar ; 90. 328-32. 10.1111/j.1651-2227.2001.tb00313.x

Vaughn, S., Schumm, J. S., & Sinagub, J. M. (1996). Focus Group Interviews in Education and Psychology. *Sage Publications, Inc*. <https://doi.org/10.4135/9781452243641>

Vazquez-Vazquez, A., Dib, S., Rougeaux, E., Wells, J. C., & Fewtrell, M. S. (2021). The impact of the Covid-19 lockdown on the experiences and feeding practices of new mothers in the UK: Preliminary data from the COVID-19 New Mum Study. *Appetite*. 2021 Jan 01;156, 104985. <https://doi.org/10.1016/j.appet.2020.104985>

Zambia Statistics Agency, Ministry of Health (MOH) Zambia, and ICF. (2019). *Zambia Demographic and Health Survey 2018*. Lusaka, Zambia, and Rockville, Maryland, USA: Zambia Statistics Agency, Ministry of Health, and ICF.

ZICTA (2018). *National Survey on Access and Usage of Information and Communication Technologies by Households and Individuals. A Demand Side Assessment of Access and Usage of ICTs in Zambia*. Zambia Information and Communication and Technology Authority (ZICTA).[Online].Available:<https://www.zicta.zm/Downloads/publications/2018%20ICT%20Survey%20%20Preliminary%20Report.pdf>

Ziyane, S. (1999). The relationship between infant feeding practices and diarrhoeal infections. *Journal for Advanced Nursing*. 1999 Mar;29 (3):721-726. doi:10.1046/j.1365-2648.1999.00942.x

APPENDICES

Appendix. 1.

UWC Ethical clearance



31 July 2019

Mr. B.
Ng'ambi

School of Public Health
Faculty of Community and Health Science

Ethics Reference Number: BM19/6/2

Project Title: An exploration of Mothers' experiences, perceptions and attitudes towards existing Behavioral change communication interventions on exclusive breastfeeding in Mpika District, Zambia

Approval Period: 31 July 2019 – 31 July 2020

I hereby certify that the Biomedical Science Research Ethics Committee of the University of the Western Cape approved the scientific methodology and ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report in good time for annual renewal.

The Committee must be informed of any serious adverse event and/or termination of the study.

*Ms Patricia
Josias*

*Research Ethics Committee
Officer
University of the Western
Cape*

Appendix. 2. UNZA BREC Approval

**BMREC REGISTRATION
NUMBER -130416-050**



UNIVERSITY OF ZAMBIA BIOMEDICAL RESEARCH ETHICS COMMITTEE

Telephone: 260-1-256067
Campus
Telegrams: UNZA, LUSAKA
50110
Telex: UNZALU ZA 44370
Zambia Fax: + 260-1-250753
unzarec@unza.zm Federal Assurance No. FWA00000338
IRB00001131 of IORG0000774

Ridgeway
P.O. Box
Lusaka,
E-mail:

16th October, 2019.

Your **REF. No. 407-2019.**

Mr. Baleke Ng'ambi,
University of the Western Cape,
Faculty of Community Health Sciences,
South Africa.

Dear Mr. Ng'ambi,

REF. No. 407-2019.

**RE: "AN EXPLORATION OF MOTHER' EXPERIENCES, PERCEPTIONS AND
ATTITUDES TOWARDS EXISITING BEHAVIORAL CHANGE COMMUNICATION
INTERVENTIONS ON EXCLUSIVE BREASTFEEDING IN MPIKA DISTRICT,
ZAMBIA"
(Ref. No. 407-2019)**

The above-mentioned research proposal was presented to the Biomedical Research Ethics Committee on 25th September, 2019. The proposal is **approved**. The approval is based on the following documents that were submitted for review:

- a) **Study proposal**
 - b) **Questionnaires**
 - c) **Participant Consent Form**
- APPROVAL NUMBER**

: REF. No. 407-2019

This number should be used on all correspondence, consent forms and documents as appropriate.

✓ **APPROVAL DATE: 16th October 2019**

✓ **TYPE OF APPROVAL: Standard**

✓ **EXPIRATION DATE OF APPROVAL: 15th October 2020**

After this date, this project may only continue upon renewal. For purposes of renewal, a progress report on a standard form obtainable from the UNZABREC Offices should be submitted one month before the expiration date for continuing review.

✓ **SERIOUS ADVERSE EVENT REPORTING:** All SAEs and any other serious challenges/problems having to do with participant welfare, participant safety and study integrity must be reported to UNZABREC within 3 working days using standard forms obtainable from UNZABREC.

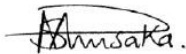
MODIFICATIONS: Prior UNZABREC approval using standard forms obtainable from the UNZABREC Offices is required before implementing any changes in the Protocol (including changes in the consent documents).

✓ **TERMINATION OF STUDY:** On termination of a study, a report has to be submitted to the UNZABREC using standard forms obtainable from the UNZABREC Offices.

✓ **NHRA:** You are advised to obtain final study clearance and approval to conduct research in Zambia from the National Health Research Authority (NHRA) before commencing the research project.

✓ **QUESTIONS:** Please contact the UNZABREC on Telephone No.256067 or by e-mail on unzarec@unza.zm.

✓ **OTHER:** Please be reminded to send in copies of your research findings/results for our records. You're also required to submit electronic copies of your publications in peer-reviewed journals that may emanate from this study. Use the online portal: unza.rhinno.net for further submissions.



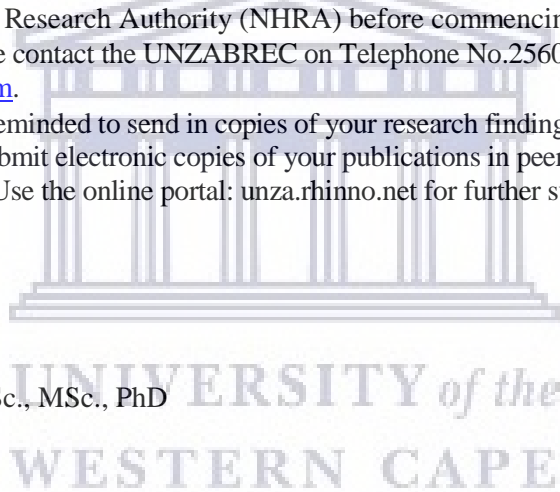
Yours sincerely,

Sody Mweetwa Munsaka, BSc., MSc., PhD

CHAIRPERSON

Tel: +260977925304

E-mail: s.munsaka@unza.zm



Appendix 3. NHRA Clearance

NATIONAL HEALTH RESEARCH AUTHORITY

Paediatric Centre of Excellence, University Teaching Hospital, P.O. Box 30075, LUSAKA

Tell: +260211 250309 | Email: znhrasec@gmail.com | www.nhra.org.zm

NATIONAL HEALTH RESEARCH AUTHORITY



Ref No:.....

Date: 13th November, 2019

The Principal Investigator

Mr. Baleke Ng'ambi

University of Western Cape

Faculty of Community Health Sciences

SOUTH AFRICA.

Dear Mr. Ng'ambi,

Re: Request for Authority to Conduct Research

The National Health Research Authority is in receipt of your request for authority to conduct research titled “**An exploration of Mothers’ experiences, perceptions and attitudes towards existing behavioral change communication interventions on exclusive breastfeeding in Mpika District, Zambia.**” I wish to inform you that following submission of your request to the Authority, our review of the same and in view of the ethical clearance, this study has been **approved** on condition that:

1. The relevant Provincial and District Medical Officers where the study is being conducted are fully appraised;
2. Progress updates are provided to NHRA quarterly from the date of commencement of the study;
3. The final study report is cleared by the NHRA before any publication or dissemination within or outside the country;
4. After clearance for publication or dissemination by the NHRA, the final study report is shared with all relevant Provincial and District Directors of Health where the study was being conducted, University leadership, and all key respondents.

Yours sincerely,

Dr. Godfrey Biemba

Director/CEO

National Health Research Authority

All correspondences should be addressed to the Director/CEO National Health Research Authority

Appendix. 4. Mpika DHO Permission

All correspondence should be addressed
to the District Medical Officer
Telefax: +260 - 214 - 370261



In reply quote:

No.:.....

REPUBLIC OF ZAMBIA MINISTRY OF HEALTH

MPIKA DISTRICT HEALTH OFFICE
P.O. BOX 450046
Mpika - Zambia

28th August, 2019

Baleke Bryan Ng'ambi
C/o Save the Children
Plot 16794 Mass Media, off Alick Nkhata Road,
Lusaka'

Dear Mr. Ng'ambi

Re: **Letter of Permission to Carry out a Study - An exploration of Mothers' experiences, perceptions and attitudes towards existing Behavioral change communication interventions on exclusive breastfeeding in Mpika District, Zambia**

Mpika District Health Office is in receipt of your request to carry out a study "An exploration of Mothers' experiences, perceptions and attitudes towards existing Behavioral change communication interventions on exclusive breastfeeding in Chilonga and Tazara of Mpika District" as part of the fulfillment of the requirement for the degree of Master of Public Health at the School of Public Health, University of the Western Cape, South Africa.

The purpose of your study will be to explore mother's experiences, perceptions and attitudes towards existing BCC interventions and how they influenced the adoption of EBF among mothers of infants under six months. This study will try to fill the gap in knowledge and generate knowledge that will be used by Programme managers and policy makers to design BCC strategies and materials that will be context specific and responsive to the needs of mothers of infants less six months in Zambia.

Appendix.5.

FGD Guides for Breast feeding Mothers of children less than six months

Introduction:

My name is _____ I am a Masters student in Public Health at the University of the Western Cape. As part of our curriculum requirement, we are supposed to conduct a mini-thesis. I request you to kindly take part by giving your valuable suggestions as answers to the research project

Thank you for agreeing to participate in this discussion. We really appreciate your participation. We are trying to learn about your perceptions, experiences and attitudes towards existing Behavioral change communication interventions on exclusive breast feeding in Mpika We will be discussing many questions and you can decide to respond or not. You don't have to answer all questions, this is voluntary. Overall, your responses will help us understand your perceptions, experiences and attitudes towards existing Behavioral change communication interventions on exclusive breast feeding and provide us with information to guide the design of future Behavioral change communication interventions on Exclusive breast feeding.

We will be recording the discussion, while at the same time take notes just to make sure we do not miss anything. For the sake of confidentiality and to protect your identity, each of you will be given a number and we will address you by generic terms such as Mama or Mum, not by your name. Thank you.

Do you have any questions?

Introduction

I will start by defining what we mean by Behavioral change communication. Behavioral change communication is use of communication to promote positive health outcomes such as increasing breast feeding among mothers of children less six months. BCC uses various channels such as mass media (which include radio and television), interpersonal channels (such as client-health

provider interaction, group counselling or talk) and community mobilization (through community meetings, home visits, community drama/theatre) to achieve desired behaviors

Section A: Mothers' s experience with existing Behavioral change communication interventions on exclusive breast feeding.

1. What Behavioral change communication (BCC) interventions for promoting exclusive breast feeding among mothers are currently being implemented in your community or at the health centre. could you list/name them.....

Probe: (For each intervention) Please tell me more about that intervention

2. How are these BCC interventions offered, who offers, where and how often?
3. What has been your experience with these BCC interventions? In your own opinion have they influenced you to practice exclusive breast feeding? To what extent does it affect mothers thinking/understanding of Exclusive Breast Feeding.

Probe: Could you explain how you have rated them that way

4. What are your thoughts about the personnel/cadres who you have interacted with around the issues of exclusive breast feeding?

Probe: Are the personnel/Cadres that provide BCC intervention adequately trained and knowledgeable in exclusive breast feeding, could you please explain

5. What existing BCC interventions have helped you to adopt and practice exclusive breastfeeding during the six months of life of your baby in your community. **Probe:** could you please explain why you have chosen those interventions?
6. Have existing BCC interventions been involving breast feeding mothers in the promotion of exclusive breast feeding. If yes in what ways, can you give examples
 - If they have not, how best could they be done.

Section B: Mothers' s perception and Attitudes held by mothers towards the various Behavioral change communications interventions on exclusive breast feeding implemented at health facility and community level

1. What are your views/opinion on the current BCC interventions for promoting exclusive breast feeding?
 - a. Do you see them as appropriate for promotion of exclusive breast feeding?

Probe: If yes, could you explain why they are seen as appropriate? If they are not; could you explain why they are not seen appropriate?
2. Do you think the current BCC interventions are accessible and meets the information needs of mothers of children less six months, if yes how?
 - a. **Probe:** Could you explain how accessible these BCC interventions are?
 - b. What makes you say these interventions meets the information needs of mothers of children less six months.
 - c. If the answer is no, could you explain
 - i. Why these interventions not accessible to mothers
 - ii. Why do these interventions not meet the information needs of mothers?
3. What has been your response to BCC interventions on promotion of exclusive breast feeding. What changes have you noticed from time you were exposed to these BCC interventions
 - a. **Probe:** Have you been able to adopt and practice exclusive breast feeding as a result of you being subjected to BCC interventions.
4. What are some of the challenges that you experience with the implementation of these BCC interventions?
5. In your opinion, is there anything that can be done to make BCC interventions effective and appropriate in increasing the adoption and practices of exclusive breast feeding among mothers of children less six months.
 - a. Probe: If the answer is yes: could you suggest can be done.
6. What other strategies could be employed to promote the practice of exclusive breast feeding among mothers of children less six months of age in your community.
7. What are your views on the health Centre's efforts in promoting exclusive breast feeding among children less six months?

Probe - Is the health centre doing enough through the use of BCC to educate the mothers on exclusive breast feeding if so how.

- What would you recommend to Ministry of Health, partners and Health Facilities to continue or do differently in relation to implementation of Behavioral change communication interventions in the future?

Closing remarks: Is there anything else you would like to share with us?

Thank you very much for your time



Appendix 6.

FGD Guides for Breast feeding Mothers of children less than six months

Intendekelo:

Ishina lyandi nine_____Sambilila pa University of the Western Cape. Isukulu lyesu nalitwipusha ukulemba mini-thesis nelyo research projekiti. Ndemilomba ukuti musendemo ulubali muli iyi research projekiti kabili mukuitemenwa mwasuke amepusho mikwatile

Natotela sana pa kusumina ukusendamo ulubali muli ukukulashanya. Tulemutashangansi. Tuleesha na maka ukufwikisha imimwene yenu, ifyo mupitamo nefyo mutontonkanya pali behavioral change communication interventions atemwa inshila sha kusabakanishishamo ilyashi pa konsha kwafikapo kuli banamayo abaleonsha abana abali ne myeshi mutanda (6) no kucepako muno mu mpika district. Twakulabomfya amepusho pakulashanya kabili muli bantungwa ukwasuka ayo amepusho nelyo ukukana. Muitemenwe fye ukulashanya na ifwe, eico tatwamipatikishe ukwasuka amepusho yonse. Nangu cingabe fyo, ifyasuko fyenu fyalatwafwa ukufwikisha ifyo mupitamo, imimwene yenu, ne fyo mutontonkanya pali behavioral change communication interventions atemwa inshila sha kusabakanishishamo ilyashi pa konsha kwafikapo kuli banamayo abaleonsha abana abali ne myeshi mutanda (6) no kucepako kabili nefyo twingawamyako imisabankanishishe sha nshila shibomba bwino.

Pali kuno kulashanya twakulabomfya ka recorder ka mashiwifye. Pa nshita imbi nakulalembako utufyebo utunono pakuti nishapo nangu cimo pa fyo mwalanjeba. Umo umo alapelwa inabala yakumwitalapo ukucila ukubomfya ishina lyakwe. Mukucitefyo, tamwakeshibikwe ku bantu bambi abashili pano. Eico twakulabomfya aya manambala atemwa mayo pakuitana. Natotela.

Bushe namukwata amepusho pano twafika?

Intendekelo

Nalabalilapo ukulondolola ubupilibulo bwa behavioral change communication. Ngatwalanda ati Behavioral change communication ninshi tulelanda pa busuma bwafumamo pa mulandu wakonsha kwafikapo kuli banamayo baleonsha abana abali ne myeshi mutanda (6) nelyo ukucepako. Ubu

busuma kuti bwaba kufula kwa banamayo baleonsha mukufikapo pa mulandu wakulashanya kusuma pakati kabo. Behavioural change communication nelyo BCC mukwipifya, ilabomfya inshila shapusanapusana ukusabankanya ilyashi kuli banamayo pa nshila shibomba bwino ukonsha mukufikapo pamo nge milabasa (ama TV nelyo ama radio), ukulashanya kwa banamayo baleonsha na babomfi ba pa fipatala, counselling, ama meeting mu mishi aya banamayo baleonsha atemwa amangalo nelyo ama drama yacitwa mu mishi.

Section A: Mothers' experience with existing Behavioral change communication interventions on exclusive breast feeding.

1. Ninshila nshi shimo shimo BCC ibomfya pa kutungilila nelyo ukusabankanya ilyashi pakonsha kusuma muno mushi atemwa pa fipatala? Bushe kuti mwashilumbula?

Probe: (pa nshila imo imo) Ndemilomba ukulondololako nafimbi pali iyi nshila

2. Bushe ninshila nshi BCC ibomfya ukufika banamayo abaleonsha kabili nibani bacite fyo? Nikwisa bacitile fyo kabili miku Inga?
3. Finshi fyacitwa na BCC ifyo mwapitamo? Bushe fyamwafwile shani ukonsha mukufikapo? Kuti mwalanda ukuti fya afwa shani ukuwamyako imimwene ne mitontonkanishishe sha bana mayo palwa konsha kwafikapo? Probe: Bushe kuti mwandondolwelako umulandu mwalandile fyo?
4. Finshi mutontonkanya pa bantu mwalashanyapo nabo pa lwa konsha kwafikapo? Probe: Bushe kuti mwatila aba bantu basabankanya inshila BCC ibomfya balifikapo bwino bwino mu misambilishishe shabo pa konsha kwafikapo? Londololeni mukwai.
5. Ninshila nshi shimo shimo isha BCC shaafwa banamayo bamuno mushi ukonsha abana babo mukufikapo ilyo bali ne myeshi mutanda (6) no kucepako? Probe: Mulandu nshi mwasalila isho inshila? Londololeni.
6. Bushe kuti mwatila inshila sha bikwa na BCC ukufika banamayo pe lyashi lyakonsha kwafikapo shalisanshamo banamayo bonse abaleonsha? Mushila nshi? (Kuti mwapelako ifyakumwenako).

Nga tefye cili, nshila nshi shingabomba bwino?

Section B: Mothers' perception and Attitudes held by mothers towards the various Behavioral change communications interventions on exclusive breast feeding implemented at health facility and community level

1. Mukumona kwenu, finshi mwingalanda pa nshila BCC ibomfya mukungilila no kusabankanya lyashi lya konsha kwafikapo?

a. Bushe mumona ukuti ishi nshila kuti sha bomba bwino ukusabankanya no kutungilila ukonsha kwafikapo?

Probe: Mulandu nshi mwasosela ati Ee? Nga tefyo cili, bushe kuti mwandondolwelako umulanduabela ifyo?

2. Bushe mutontokanya ukuti inshila BCC ibomfya ukufika banamayo abaleonsha shalikwanisha ukufikilisha ifikabila bana mayo abaleonsha abana abali ne myeshi mutanda (6) no kucepako? If yes, Munshila nshi?

b. Mulandu nshi mwalandila ukuti ishi nshila shilabomba bwino ukufika banamayo kabili bushe shila fishapo fyonse ifyo bakabila?

Nga tefyo cili (if the answer is no), bushe kuti mwandondolwelako umulandu mwalandile fyo? Mulandu nshi ishi nshila tashifikila bana mayo bonse?

i. Mulandu nshi ishi nshila tashafishishapo fyonse ifikabilwa banamayo abaleonsha?

3. Mwaankulako shani ku nshila BCC ibomfya mu kutungilila no kusabankanya ilyashi pakonsha kwafikapo? **Probe:** Bushe mwalibomfyako inshila shimo BCC yamwafwile ukubomfya? Bushe kuti mwatila ni pa mulandu wa kusongwa na BCC mwacitile fyo?

4. Mafya nshi yamo yamo mukwata apo BCC yaishila muno mushi?

5. Mukumona kwenu, bushe kuliko ishila shimbi shalundwapo BCC ingabofya ukusalanganya ilyashi lya konsha kwafikapo ne mibomfeshe sha isho ishila?

Probe: If the answer is yes: could you suggest can be done? **Probe:** Nga eko shili, nishila nshi isho shine?

6. Nishila nshi shimbi shingabomfiwa ukukoselesha bana mayo muno mushi ukonsha abana abali ne myeshi mutanda (6) no kushepako mukufikapo?

7. Finshi mwingalandapo pa mibombele ya fipatala nama clinic mukutungilila ukonsha kwafikapo ukwa bana bali ne myeshi mutanda no kucepako?

Probe: Bushe ifipatala nelyo ama clinic balebomfya BCC ukusambilisha banamayo pa konsha kwafikapo?

- Finshi mwingakoselesha Ministry of Health na ma partners bambi ukubombelapo pa kwebati BCC ikabombe bwino kuntashi?

Closing remarks: Bushe kuliko fimbi mwingatemwa ukulandapo?

Natotela paku patulako inshita yenu



UNIVERSITY *of the*
WESTERN CAPE

Appendix 7



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2809 Fax: 27 21-959 2872

E-mail: soph-comm@uwc.ac.za

INFORMATION SHEET

Project Title: An exploration of Mothers' experiences, perceptions and attitudes towards existing Behavioral change communication interventions for exclusive breast feeding in Mpika District, Zambia

What is this study about?

This is a research project being conducted by Baleke Bryan Ng'ambi at the University of the Western Cape. We are inviting you to participate in this research project because you are breast feeding mothers of children under the age of six months. The purpose of this research project is to gain insights into Mothers' experiences, perceptions and attitudes towards existing Behavioral change communication interventions for exclusive breast feeding in Mpika District. It is hoped that with your participation, an understanding of how mothers experience and perceived the current Behavioral change communication interventions on exclusive breast feeding such as radio and Television advertisements or programmes, group education sessions, home visits, one on one counselling sessions, community meeting and theatre, and their influence on adoption of exclusive breast feeding will be elicited which will help us inform the design of future Behavioral change communication interventions.

What will I be asked to do if I agree to participate?

The study will be done in the community preferably at the health centre, school or church. The focus group discussion will not take more than two (2) hours. You will be asked questions to share your experience, perceptions and attitudes towards existing Behavioral change communication interventions on exclusive breast feeding being implemented at health facility and community level. The interview will be audio recorded with your permission, so that I can listen to it afterwards to make sure I have remembered everything you said

Would my participation in this study be kept confidential?

We will do our best to keep your personal information confidential. To help protect your confidentiality, we will not put your name on the data forms/questionnaires but instead we shall use codes (pseudonyms). The identification key will be used by the researcher to link the survey to your identity and no one other than the researcher will have access to the identification key. The data forms or questionnaires will be kept in a lockable filing cabinet and we shall use password protected computer files. The research will also involve audio-taping. The audio-tapes will solely be used during the data analysis process. The audio-tapes will be kept under lock and key no one other than the researcher will have access to them. If we write a report or article about this research project, your identity will be protected to the maximum extent possible.

This study will use focus groups therefore the extent to which your identity will remain confidential is dependent on participants' in the Focus Group maintaining confidentiality. However, each participant will be requested to sign the FGD confidentiality binding form that will bind them from disclosing the identity of participants and whatever will be discussed in the FDGs

What are the risks of this research?

There may be some risks from participating in this research study such as feeling uneasy or embarrassed to respond to some questions. All human interactions and talking about self or others carry some amount of risk. We will nevertheless minimize such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance and intervention

What are the benefits of this research?

The research is not designed to help you personally but results may help the investigator learn more about the experiences and perceptions of mothers on the existing Behavioral change communication interventions on Exclusive breast feeding and their influence on the adoption and practice of exclusive

breast feeding among mothers of children less six months in the district. We hope that, in the future, other people might benefit from this study through improved design of Behavioral change communication interventions on exclusive breast feeding. The anticipated benefit to science is knowledge on the current gaps with the existing BCC interventions on exclusive breast feeding and how they have affected the adoption of exclusive breast feeding among mothers in the district

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify

What if I have questions?

This research is being conducted by Baleke Bryan Ng’ambi, School of Public Health at the University of the Western Cape.

If you have any questions about the research study itself, please contact

Baleke Bryan Ng’ambi, at C/o CARE International Zambia, Plot 9. Chitemwiko Road, Kabulonga, Lusaka, Zambia

Mobile: +260 966 788542 / +260 979 577 906

Email: 3418019@myuwc.ac.za or bryangambi@gmail.com

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Prof Uta Lehmann

School of Public Health

Head of Department

University of the Western Cape

Private Bag X17

Bellville 7535

soph-comm@uwc.ac.za

Prof Anthea Rhoda

Dean of the Faculty of Community and Health Sciences

University of the Western Cape

Private Bag X17

Bellville 7535

chs-deansoffice@uwc.ac.za

BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office

University of the Western Cape

Private Bag X17

Bellville 7535

research-ethics@uwc.ac.za

Tel: +27 21 959 2988



Appendix. 8



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-959 2809 Fax: 27 21-959 2872

E-mail: soph-comm@uwc.ac.za

INFORMATION SHEET

Umutwe wa projekiti: Ukufwayafwaya ifipitamo bana mayo ne mimwene yabo kwi lyashi lya konsha Kwafikapo mu Mpika district, Muchinga Province, Zambia.

Finshi study ino ilelandapo?

Ukukufwalikisha nelyo study ino ilecitwa naba Baleke Bryan Ng'ambi abapa Western Cape University. Natumita ukusendamo ulubali muli ukukufwalikisha pa mulandu wakuti mulipe bumba lya bana mayo abaleonsha abana abali ne myeshi mutanda (6) no kucepako. Ubufwayo bwa ino projekiti bwa kufwaya ukwishiba imimwene ya bana mayo baleonsha abana abali ne myeshi mutanda no kucepako muno mu Mpika district. Tuleenekele kuti ukuisashamo kwenu kwalatwafwa ukwishiba ifyo bana mayo bamona ama program ya behavioural change communication interventions ayasabankanishiwa pa filimaba, pa ma t.v ne nshila shimbi pamo nga ma counselling sessions, ukulongana kwa bekalamushi nelyo ukutandalilwa kwa ku nganda ne nganda no kusongwa kwacitwa.

Finshi mwalanjipusha nga nasumina ukusendamo ulubali?

Ino study ikacitwa pa cipatala nelyo pa clinic, pa sukulu atemwa pa calici ya muno mushi. Uku kulashanya nge bumba kukaposa amaawala yabili nelyo kucepako. Mukepushiwa amepusho yakumine ubwishibilo bwenu nemimwene yenu ukukuma behavioural change communication interventions ukwa bana mayo abaleonsha abana abali ne myaka mutanda (6) nelyo kucepako iyabikwa pa fipatala na mu kati ka mushi. Pa numa yakupoka ulusa kuli imwe, ino interview ikaba recorded pa kushinikisho ukuti ifikalandwa nafyumfkwika.

Tukabombesha nganshi ukukana mishibisha kubantu bambi abashakasangwepo. Yonse information mukatupela ikaba ni nkama yesu. Pa kusungilila iyi nkama, tatwakabikepo amashina yenu pama data forms nelyo pama questionnaire lelo tukalabomfya ama codes nelyo ama nambala. Iyi nambala nelyo code

yakwafwa ba researcher ukwikatanya survey ino ku muntu umo umo. Ba researcher tabakebeko umutu umbi iyi number nelyo code. Muli ino study ka recorder kamashiwi fye kakabomfiwa ukupanga amatepu. Aya ma tepu ya mashiwi fye yakabomfiwa fye muli data analysis epela. Kabili aya ma tape yakaba mu mininwe yaba researcher abakayakomena pakuti umuntu umbi ekomfwako. ID yenu ikasungililwa mu nkama kabili tayakalembwe muli report.

Ino study ikabomfya ibumba Iya bakasendamo ulubuli ilinono ekuti ama focus groups. Cikashalila umo umo mwi bumba ukukana sokolola umunakwe. Lelo nangu cibe fyo cila muntu akasaina FGD confidentiality form iikalacilikila aba kasendamo ulubali ukwebako abantu bambi ifikalashanishiwa.

Busanso nshi bwinga fumamo nga nasumina ukusendamo ulubali muli iyi research?

Takwakabe amasanso ayali yonse nga cakuti mwasumina ukusendamo ulubali muli ino study. Mu nshila imbi, takwakabe amepusho ayakalaufwisha isoni ukwasuka. Ukulanda pa bantu bambi nelyo ukuilubilikisha nakalimo kuti kwa kwatako ubusanso panono. Eico takulesuminishiwa. Pakucefyanyako ayamasanso, tulemicincisha ukulanda bwangu nga Pa fili fyonse ifingamyumfwisha isoni munshila iliyonse.

Busuma nshi buli mukusendamo ulubali muli kuno kufwaikilisha?

Ino study tayapangilwe ukuti mwinganonkelamo pa kwenu. Lelo ifikafuma mu kufwailikisha fikaafwa ba researcher ukufwikisha bwino bwino ifipitamo ne fitontonkanya bana mayo abaleonsha abana abali ne myeshi mutanda (6) no kucepako abamuno munshi apo behavioural change communication intervention yaishila no busuma bwafumamo. Tuleenekela ukuti ukulunduluka kwa behavioral change communication interventions kuntashi kuti kwa afwa abantu nabambi ukusambililako ku fyo bamona ukonsha kwafikapo.

Bushe mfwile fye ukusumina ukusendamo ulubali muli ino research kabili bushe kuti naleka ukusendamo ulubali panshita ili yonse ndefwaya?

Ukusendamo ulubali muli ino research kwakuitemenwa fye. Ngatamulefwaya, muli bantungwa ukukana. Kuti mwaleka ukusendamo ulubali pa nshita ili yonse mulefwaya. Tatwaka milipilishe iyo.

Nga cakuti nakwata amepusho?

Ino research iletungululwa na ba Baleke Bryan Ng'ambi, School of Public Health Pa University of the Western Cape.

Nga cakuti mwakwata amepusho pali ino research twapapata landeni naba

Baleke Bryan Ng'ambi, at C/o Save the Children Zambia, Plot 16794 Mass Media, off Alick Nkhata Road,
Lusaka, Zambia

Mobile: +260 966 788542 / +260 979 577 906

Email: 3418019@myuwc.ac.za or bryanngambi@gmail.com

Nga cakuti mwakwata amepusho nayambi nelyo amafya ayakumine ino study kabili nge sambu shenu nga
balesendamo ulubali, twapapata landeni naba:

Prof Uta Lehmann

School of Public Health

Head of Department

University of the Western Cape

Private Bag X17

Bellville 7535

soph-comm@uwc.ac.za

Prof Anthea Rhoda

Dean of the Faculty of Community and Health Sciences

University of the Western Cape

Private Bag X17

Bellville 7535

chs-deansoffice@uwc.ac.za

BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office

University of the Western Cape

Private Bag X17

Bellville 7535

research-ethics@uwc.ac.za

Tel: +27 21 959 2988



Appendix. 9



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel : +27 21-959 2809, Fax : 27 21-959 2872

E-mail: soph-comm@uwc.ac.za

CONSENT FORM

Title of Research Project: An exploration of Mothers' experiences, perceptions and attitudes towards existing Behavioral change communication interventions for exclusive breast feeding in Mpika District, Zambia

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

I agree to be [videotaped/audiotaped/photographed] during my participation in this study.

I do not agree to be [videotaped/audiotaped/photographed] during my participation in this study.

Participant's name.....

Participant's signature.....

Date.....

Appendix. 10



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel : +27 21-959 2809, Fax : 27 21-959 2872

E-mail: soph-comm@uwc.ac.za

CONSENT FORM

Umutwe wa research project: Ukufwailikisha iflpitamo ne mimenwe ya bana mayo ba mu Mpika Distict mu Muchinga province, Zambia pa lwa konsha kwafikapo ukukuma ama behavioural change interventions yabikwa.

Ndesuminisha ukuti ino study nailondololwa mu lulimi nanda no kufwa. Amepusho yandi yonse ukukuma ino study nayasukwa mukufikapo. Nigufwikisha ifisanshiwemo mu kusumina kwandi ukuti ningasendamo ulubali kabili nokuti imfwile ukuipelesha fye ne mwine. Nijishiba no kuti ndimutungwa ukuleka ukusendamo ulubali pa nshita ili yonse ukwabula mwenso.

Isina lya balesendamo ulubali:

Signature yabalesendamo ulubali.....

Ubushiku.....

Appendix.11. FGD confidentiality binding form



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel : +27 21-959 2809, Fax : 27 21-959 2872

E-mail: soph-comm@uwc.ac.za

FOCUS GROUP CONFIDENTIALITY BINDING FORM

Title of Research Project: An exploration of Mother's experiences, perceptions and attitudes towards existing Behavioral change communication interventions for exclusive breast feeding in Mpika District of Muchinga Province, Zambia

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone by the researchers. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits. I understand that confidentiality is dependent on participants' in the Focus Group maintaining confidentiality.

I hereby agree to uphold the confidentiality of the discussions in the focus group by not disclosing the identity of other participants or any aspects of their contributions to members outside of the group.

Participant's name.....

Participant's signature.....

Date.....

BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office

New Arts Building,

C-Block, Top Floor, Room 28

University of the Western Cape

Private Bag X17

Bellville 7535



UNIVERSITY *of the*
WESTERN CAPE

Appendix. 12



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel : +27 21-959 2809, Fax : 27 21-959 2872

E-mail: soph-comm@uwc.ac.za

FOCUS GROUP CONFIDENTIALITY BINDING FORM

Umutwe wa research project: Ukufwailikisha iflipitamo ne mimenwe ya bana mayo ba mu mpika Distict, Zambia pa lwa konsha kwafikapo ukukukama ama behavioural change interventions yabikwa.

Ndesuminisha ukuti ino study nailondololwa mu lulimi nanda no kufwa. Amepusho yandi yonse ukukuma ino study nayasukwa mukufikapo. Ningufwikisha ifisanshiwemo mu kusumina kwandi ukuti ningasendamo ulubali kabili nokuti mfwile ukuipelesha fye ne mwine. Nijishiba no kuti ndimuntungwa ukuleka ukusendamo ulubali pa nshita ili yonse ukwabula mwenso.

Ndelaya kuti shakasokolole ku muntu umbi fyonse ifyalalashanishiwa pano. Kabili shakeshibishe umuntu uli onse ulipano ku bantu bambi abashili pano.

Participant's name.....

Participant's signature.....

Date.....

BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office

New Arts Building,

C-Block, Top Floor, Room 28

University of the Western Cape

Private Bag X17

Bellville 7535