USE OF INTERPERSONAL COMMUNICATION NETWORKS IN INFLUENCING EXCLUSIVE BREAST-FEEDING IN KOROGOCHO INFORMAL SETTLEMENT

by

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APPROVAL

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In accordance with Daystar University policies, this thesis is accepted in partial fulfillment of requirements for the Master of Arts degree.

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USE OF INTERPERSONAL COMMUNICATION NETWORKS IN INFLUENCING EXCLUSIVE BREAST-FEEDING IN KOROGOCHO INFORMAL SETTLEMENT

I declare that this thesis is my original work and has not been submitted to any other college or university for academic credit.

Signed: _____ Date: _____

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First, I thank the God Almighty for the far he has brought me and for giving me strength to successfully complete my studies. Secondly, I appreciate my family especially my parents, for the financial support throughout my education and also for the encouragement they gave me from the time I started my master's programme.

I cannot forget my brothers who encouraged me throughout this course. I also recognize my colleagues and friends for their prayers and encouragement. Finally, I thank my supervisors, Prof. Robert White and Dr. Jane Awiti, who guided me from the beginning to the completion of this study. May God bless you all.

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LIST OF ABBREVIATIONS AND ACRONYMS

APHRC	African Population and Health Research Centre
CHC	Community Health Strategy
CHW	Community Health Workers
EBF	Exclusive Breast Feeding
IPC	Interpersonal Communication Networks
IYCF	Infant and Young Child Feeding
KNBS	Kenya National Bureau of Statistics
UNICEF	United Nations Children's Fund
WHO	World Health Organization

ABSTRACT

This study sought to explore the use of interpersonal communication networks in influencing exclusive breastfeeding (EBF) among mothers in Korogocho informal settlement. The study was guided by the following objectives: to explore the relationship between interpersonal communication networks and EBF among women in Korogocho informal settlement, to explore factors that led breastfeeding mothers in Korogocho slums into interpersonal communication networks, to explore the challenges affecting the influence of interpersonal communication networks on EBF among mothers in Korogocho informal settlement, and to determine the interpersonal communication network mostly used by breastfeeding mothers in Korogocho informal settlement. Purposive and simple random sampling techniques were used to select 100 mothers living in Korogocho Slum and attending Korogocho Health Centre. The study used a descriptive research design and collected both qualitative and quantitative data. Questionnaire and interview guide were the data collection instruments used by the study. Descriptive statistics, including frequencies, percentages, means, standard deviation, and median were used in the analysis of data with the aid of the Statistical Package for the Social Sciences (SPSS), version 23. The study revealed that interpersonal communication networks influenced EBF, that mothers joined interpersonal networks in order to be enlightened on EBF, and that the most used networks were the health officers and community health workers. The study's recommendations included the need to empower and train family and friends in order to create a formal communication network, and the need to empower and train more Community health workers so that they can reach the mothers who do not often attend health clinics.

DEDICATION

I dedicate this work to my beloved parents. I am grateful for their love and passion for education, their financial support to me, and the encouragement they gave me until the completion of my master's studies.

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

Introduction

Exclusive breast-feeding (EBF) is recommended in order to promote good health, growth and development of children, and to reduce child deaths (Sankar et al., 2015). As asserted by Victora et al. (2016), reaching universal optimal breast-feeding could prevent 82,3000 annual deaths in children younger than five years. Despite the recommendation for promotion of health benefits and growth, the adoption of EBF has been stagnant since 2006 (United Nations Children's Fund [Unicef], 2014). "Optimal breastfeeding practices include exclusive breastfeeding (EBF) for 6 months and continuing thereafter with adequate complementary feeds until 2 years of age and beyond" (World Health Organization [WHO] as cited in Anyanwu, Ezeonu, Ezeanosike, & Okike, 2014, p. 55).

Encouraging and promoting the adoption and continued practice of EBF requires effective behavior change interventions. Behavior change communication intervention delivered in different settings is used to promote optimal breast-feeding (Imdad, Yakoob, & Bhutta, 2011). Interventions involving interpersonal communication networks have been shown to increase EBF (Bhutta et al., 2008; Britton, McCormick, Renfrew, Wade, & King, 2007). As pointed out by WHO (2010), in countries with limited resources, there exists a poor breast-feeding practice, which frequently results in child malnutrition, a major cause of more than half of children's global deaths.

This chapter brings out the study's background, problem statement, purpose, and objectives. In addition, the chapter provides the study's research

questions, justification, significance, assumptions, scope, limitations, delimitations, definition of terms, and finally the chapter summary.

Background to the Study

Health communication depends on strong interpersonal communications so as to influence health decisions and behaviour. According to Freimuth and Quinn (2004), the most important of these relationships are the connections and interactions between an individual and their healthcare provider, and an individual's social support system of family and friends. The effectiveness of a health campaign in which interpersonal communication networks have been used for enhancement of health education is determined by the following: the degree of audience reception, the quality and quantity of the message, the dissemination channels, and the larger communication environment. It is possible that an audience can be more receptive to some messages than others. The media channel and how the message is received by the audience can affect the effectiveness of the health campaign. However, the efforts and effects of health messages and communication are often counter affected by some factors such as culture, age, and sometimes interpersonal networks who include the family, friends, and the healthcare providers.

Effective interpersonal communication (IPC) is one of the most important elements for improving client satisfaction, compliance, and health outcomes. Negri, Brown, Hernandez, Rosenbaum, and Roter (2014) argued that patients who understand the nature of their illness and its treatment, and who believe the provider is concerned about their well-being, show greater satisfaction with the care received and are more likely to comply with treatment regimes. Marques et al. (as cited in Souza, Nespoli, & Zeitoune, 2016) established that breast-feeding women will have strong connections with their primary social networks. Such networks include mother,

partner, friends, and neighbors and play a role towards ensuring successful breast-feeding as well as increasing of breast-feeding duration. Additionally, a study by de Jesus et al. found out that:

> Breastfeeding women, in their own world, belong to a relational context. In this world, individuals' actions are always aimed at somebody, they do not live alone, but in relationships with other people, face to face relationships, I-you relationships, I-we relationships (Jesus et al. as cited in Souza, Nespoli, & Zeitoune, 2016, p. 2).

In spite of general acknowledgement of the significance of interpersonal communication, the subject is not always highlighted in medical training. In recognition of the essential role EBF plays on infants' survival strategies, numerous efforts have been made to increase the EBF rates in developing states where cases of child malnutrition and mortality are still high. Despite this, successes in increasing the levels of EBF have rather been uncertain. Cai, Wardlaw, and Brown (2012) noted that the prevalence of EBF across 140 countries witnessed an increase from 33% in 1995 to 39% in 2010 among infants aged zero to five months.

United Nations Children's Fund (2011) reported that the rates of EBF had improved over the recent past, with the global rate at 37%. Unicef however further noted that about one-fourth to one-half of all infant deaths in developing countries still occurred in the first week of life and that about four million babies died annually in the first four weeks of life, the neonatal period worldwide. According to the Kenya demographic and health survey 2008-09:

> Supplementation of breast milk starts early in Kenya, with 60 percent of children aged 4-5 months being given complementary food. Exclusive breastfeeding (breast milk only) is not common, as only 32

> percent of children under six months of age are exclusively breastfed. (Kenya National Bureau of Statistics [KNBS] & ICF Macro, 2010, p. 149)

The 2017 global breastfeeding scorecard recorded that worldwide, 44% of newborns are breastfed within the first hour after birth. This figure however fails to bring to light the clear inequalities in breastfeeding rates all over the world. The global rate of EBF for babies below six months of age is 40%, and only 23 countries have achieved at least 60% of infants less than six months being exclusively breastfed (Unicef, 2017). This is despite strong evidence that breastfeeding is the best practice for child health, development, and nutrition (UNICEF, 2018.).

As recommended by WHO and UNICEF (2018), breastfeeding should begin within one hour of birth, and "continue with no other foods or liquids for the first six months of life and be continued with complementary feeding (breastfeeding with other age-appropriate foods) until at least 24 months of age" (para 2). Immediate breast-feeding within the first hour, followed by early EBF, improves the health and survival of newborn babies (KNBS & ICF Macro, 2010). However, a 2012 Nairobi cross-sectional slums survey report indicated that in the urban slum of Korogocho in Nairobi County, EBF still remains very low, at 2% (African Population and Health Research Centre [APHRC], 2014). In an urban poor setting in Kenya, only 2% of children are exclusively breastfed for the first six months (Kimani-Murage et., 2015).

The question demanding attention from both scholars and practitioners would be in relation to what interpersonal communication methods would influence the practice of EBF. The majority of the studies in this area have been primarily in the medical spectrum (Kimani-Murage et al., 2011). There is therefore an apparent need for the connection between the communication approach and the occurrence of breast-

feeding. A study by Foss and Southwell (2006) examined infant feeding advertisements of 87 issues on *Parents* (a popular parenting magazine published in the United States of America (USA)) from the years 1971 through 1999 and found that as the advertisements for hand feeding increased, the rates of breast-feeding reported afterwards among women in the USA tended to decrease. Foss and Southwell's study exemplified the need for further studies on the role interpersonal communication plays on breast-feeding rates, as well as its influence on pregnant and nursing mothers.

One of the communication requirements of modern human life is the ability to create and maintain interpersonal relationships. Findings from a study undertaken by Alarcon in the United States of America (USA) in 2013, looking at the impact of interpersonal communication on breast-feeding, showed that women who were in constant communication with the new mothers helped in influencing EBF. The analysis offered in Alarcon's study extends the symbolic interactionist position that individuals develop, maintain, and change their self-concepts through communication with others. Although this view is generally held, it has been difficult to locate the precise source of this influence. Working within a "choice" framework and borrowing the sociological concept of significant others, Alarcon proposed that communication networks be viewed along two dimensions: The social networks in which an individual is embedded; and the smaller, more influential network of relational ties that develop from contacts within the social networks.

In 2006, the government of Kenya initiated a strategy that involved the utilization of interpersonal communication among healthcare providers and mothers directed at endorsing EBF in order to reduce nutrition-related mortalities (WHO, 2010). This was organized mainly through the community health strategy (CHC)

which urged the empowerment of communities so that they can manage their own health (training, volunteerism, participatory planning and implementation, motivation, governance structure, and linkage to existing health system). The strategy's objectives were to add to improved access to suitable information, timely management of malaria (within 24 hours), pneumonia, diarrhea, and, malnutrition in children age five years and younger; and the facilitation of assessment, management, and referral of newborns (WHO, 2010). The strategy was based on models from India, Iran, Ethiopia, Malawi, Rwanda, as well as other community initiatives proven to deliver community-level services.

An additional integrated strategy that includes social mobilization (ACSM), communication, and advocacy is currently favored to generate sustainable, social, and individual behavior change in acknowledgement of the fact that behavioral change is occasionally reliant on a wider social context. According to WHO (2010), advocacy mainly focuses on public leaders or decision makers; communication mostly focuses on people or subgroups in the public; and social mobilization targets to obtain patronage from the far-reaching population and particular communities.

The World Health Organization (2010) further noted that the CHC strategy aims at ensuring that at least 80% of newborns receive a home visit from a trained community health worker (CHW) within 48 hours of birth and that the CHW signs a checklist for the newborn and counsels the mother or refers if essential. Thus, the strategy is concentrated on interpersonal communication via face-to-face communication made workable through home visits by CHWs, health center visits by mothers, as well as community mobilization and training efforts. These are also accompanied by radio, television and print media campaigns and discussions (WHO, 2010).

Importance of Interpersonal Communication Networks in Influencing EBF

Anderson (2015) averred that communication competence is among the major factors influencing the well-being of breast-feeding mothers, and the success of both individuals in the communication. Anderson also noted that despite the vast amount of research in support of the claim that communication training is important, there does not seem to be substantial research on the types of communication skills that might be most appropriately incorporated in the curricula of particular fields.

Interpersonal communication networks involve friends, family, workgroups, and health providers. These networks can make EBF easier by providing emotional support and relevant personal experiences. On the other hand, such networks can make EBF more difficult by expressing displeasure that would counter the practice. As observed by Schiavo (2007), studies have shown that by the time a woman is ready to give birth, she is likely to be decided on the feeding method. It is strongly recommended that health providers discuss the benefits of EBF with expectant mothers during prenatal visits. Sanicola described Social network /interpersonal networks as "a set of interpersonal relationships that determine an individual's characteristics, such as: habits, customs, beliefs and values, with individuals possibly receiving emotional, material, service and information support from this network" (as cited in Souza et al., 2016, p. 1). These networks can see as either be primary or secondary. The primary category will include connections of family, friendship, or neighborhood, while the secondary category will include connections with establishments such as health, educational, and social care establishments (Sanicola as cited in Souza et al. 2016).

Mangasaryan et al. (2012) reviewed the EBF rates and trends of six countries: Bangladesh, Benin, Philippines, Sri Lanka, Uganda, and Uzbekistan, and identified

community-based promotion and support; and health workers' training on infant feeding support and counseling as particularly important approaches. Mangasaryan et al.'s study also highlighted the need for improvement of interpersonal counseling. Good communication leads to continuous dialogue, which helps patients open up about their health problems, and enables providers make more accurate diagnoses. Good communication also increases healthcare education, leading to further suitable treatment and improved patient compliance. In addition, effective interpersonal communication advances the health system at large by rendering it extra effective and economical. It is therefore clear that improved provider-client interaction requires the involvement of clients, health workers, family, and policy makers.

Intensive nutrition programming packages are established and favorable interventions and approaches. Such require dialogue and regular quality contact with mothers or direct caregivers and their families for nutrition specific services. As maintained by United States Agency for International Development (USAID, 2011), effective interpersonal communication with mothers, caregivers, and other family members is necessary for understanding and addressing underlying determinants of, and barriers to change.

In support of breast-feeding as a baby-friendly initiative, it is important to emphasize that though policies are important, positive and open interpersonal communication can enhance workplace breast-feeding support (Anderson, 2015). Interpersonal communication is important because it can drive behavior change. The personal touch that comes with interpersonal communication means that frontline workers can introduce priority feeding practices at just the right time.

According to a study by Alive and Thrive (2014), interpersonal approach on breast-feeding enhanced six distinctive important features in the society, one of the

features being that interpersonal communication approach helps in reaching large numbers through setting targets aimed at reaching millions, Interpersonal communication encourages concrete actions by family members and community leaders in support of mother's behavior. This involves shifting of social norms. Moreover, this kind of communication can systematically improve frontline workers reach and performance through workload allocation, incentives, meetings, supportive supervision, refresher training, monitoring, as well as ongoing use of data. It also encourages adoption and adaptation through broadly and openly sharing the model with other programs. Souza et al. (2016) reporting on a study that focused on the influence of the social network on breastfeeding observed that at times, breastfeeding women "sought the secondary network for professional health counseling on how to solve breastfeeding problems" (p. 4).

Lack of Interpersonal Communication in Urban Communities

As observed by Concern Worldwide Kenya (2014), in order to improve breast-feeding practices in the Nairobi informal settlements there is need to put several measures in place geared towards behavior change of the mothers or caregivers of the children. Concern Worldwide Kenya also indicated the need for intensive counseling (to mothers or caregivers) on infant and young child feeding during antenatal visits in the health facilities. According to the APHRC (2012) report of Nairobi cross-sectional slums survey, there was high prevalence of diarrhea accompanied by blood among infants below six months. APHRC noted that this was due to early introduction of solid foods and liquids which could be pathways for the causal pathogens. It was therefore recommended that programmes encouraging EBF in those settings would be timely and hence the need for strong information, education, and communication strategy on the management of diarrhea.

Kimani-Murage et al. (2015) stated that in spite of overwhelming evidence of the advantages of EBF, only about one in three African babies aged less than six months are exclusively breastfed. According to Kimani-Murage et al., this is attributed to the lack of understanding of optimal feeding practices, as well as the absence of backing from health service providers, community members, and families. Consequently, newborns who are not exclusively breastfed in their early months after birth have a greater risk of death particularly from infection (Martin, 2009). As articulated by Kimani-Murage et al., many women in poor urban settings do not access maternity care services at standard health facilities and hence often deliver at home. As a result, they do not access counseling and support on breast-feeding Inadequate social support at the house hold level is also a factor for instance in cases where some men have strong opinions that go against optimal breast-feeding practices, as well where women would listen to their husbands before anybody else (Kimani-Murage et al., 2015).

Effective interpersonal communication is important to discuss the difficulties of daily living, whether in your personal or professional life. Since people are complex and every person brings his or her own set of internal variables to every situation, the possibilities of interactional outcomes of any given communication can be exponential.

Statement of the Problem

It is important to understand what that influences a mother's choice practicing EBF through interpersonal communication networks. On the topic of health, some studies have indicated that interpersonal communication has a more powerful effect on an individual's choice and behavior. (Leigh, 2010), found the influence of laypersons in interpersonal communication to be at least as high as that of a healthcare

professional and that when health is the topic of inquiry, people are more inclined to go to a peer or trusted source for information. Studies conducted in Kenya showed that the rates of EBF for infants below six months old remain low; at 32% (Alarcon, 2013). Similarly, statistics by APHRC (2012) revealed that in Korogocho informal settlement, EBF was very low; at 2%.

Although available data has demonstrated the long-term effect of EBF on improvement of child's cognitive ability with the emphasis that greater effects are often seen with increased duration, children less than two years in Korogocho continue to face challenges stemming from early termination of breast-feeding by the mothers (APHRC, 2012). According to WHO (2010), based on research on better maternal, child and population-level health results, the present international view has recommended that newborns be exclusively breastfed during their first six months of life, followed by the introduction of age appropriate and nutritionally adequate, safe complementary foods with sustained breast-feeding until at least two years of age.

In 2006, the government of Kenya initiated a strategy that involved the utilization of interpersonal communication among healthcare providers and mothers aimed for the purpose of promoting EBF (WHO, 2010). Private stakeholders were also part of the strategy and became instrumental in encouraging interpersonal communication with the same aim of boosting EBF (Save the Children, 2012). Despite all these efforts, it is reported that about one-fourth to one-half of all infant deaths in Kenya's informal settlements occurs in the first week of life (UNICEF, 2011). The foregoing highlights the need for exploring the interpersonal communication networks in enhancing mothers' EBF in the Korogocho informal settlement.

Purpose of the Study

The main purpose of this study was to explore the use of interpersonal communication networks in influencing EBF among mothers in Korogocho informal settlement.

Objectives of the Study

1. To explore the relationship between interpersonal communication networks and EBF among women in Korogocho informal settlement.
2. To explore factors that led breastfeeding mothers in Korogocho slums into interpersonal communication networks.
3. To explore the challenges affecting the influence of interpersonal communication networks on EBF among mothers in Korogocho informal settlement.
4. To determine the interpersonal communication network mostly used by breastfeeding mothers in Korogocho informal settlement.

Research Questions

1. What was the relationship between interpersonal communication networks and EBF among women in Korogocho informal settlement?
2. What factors led breastfeeding mothers in Korogocho informal settlement into interpersonal communication networks?
3. What challenges affected interpersonal communication networks in influencing EBF among mothers in in Korogocho informal settlement?
4. Which interpersonal communication networks did breastfeeding mothers in Korogocho informal settlement use most?

Rationale of the Study

Exclusive breastfeeding has been a major issue globally as has been discussed in previous sections in this chapter for example as mentioned earlier, Private stakeholders were also part of the strategy and became instrumental in encouraging interpersonal communication with the same aim of boosting EBF (Save the Children, 2012). All infants should, where possible, enjoy the right to be exclusively breastfed for their first six months of life. Efforts towards identifying the best strategy for improving EBF have not been easy, especially in the urban slums. It is against this background that this study sought to explore the use of interpersonal communication networks in enhancing EBF in Korogocho; and to identify the best communication strategy, through interpersonal communication networks, for influencing EBF in Korogocho. By so doing, the researcher hoped to help in achieving Kenya's targets for the sustainable development goals in regard to child survival.

Significance of the Study

The findings of this study would:

Firstly, help organizations working towards influencing EBF in Korogocho informal settlement adopt the most convenient network of interpersonal communication and Secondly, it would help the Kenya government in its pursuit of reaching its sustainable development goals' target of EBF and reduced child mortality of less than five-year-old children. Third, provide information on how to manage the challenges that arise when using interpersonal communication in enhancing EBF and finally, Add to available knowledge on the role of interpersonal communication channels in influencing EBF. This could help other scholars with an interest in EBF.

Assumptions of the Study

This study made the following assumptions:

1. That mothers got involved in communication networks to talk about EBF. This was proven to be true because mothers attested that when they attended the clinics, health talks were conducted prior to the triage stage.
2. That breast feeding had a role to play towards the reduction of infant mortality rate.
3. That interpersonal communication networks gave invaluable support to mothers.

Scope of the Study

The research was carried out in Korogocho Health Centre where mothers visited for antenatal and postnatal clinics. Korogocho is one of the largest slums in Nairobi, is home to 20,0000 people pressed into 1.5 square kms and it is characterized by high fertility rates among women (Kimani-Murage et al., 2015). Based on this, the researcher considered Korogocho a good location for undertaking this study.

Limitations and Delimitations of the Study

The questionnaire was in English language and as such it would have been difficult for mothers in Korogocho to comprehend and respond to it objectively. To mitigate this, the researcher ensured that research assistants guided the mothers by translating each of the questions in the questionnaire for clarity.

The respondents may have been willing to open up on matters regarding breast-feeding. To mitigate this, the researcher explained the purpose of the study to the respondents and also assured them of confidentiality of the information given. The

researcher also explained to the respondents that the findings of the study would benefit them.

Definition of Terms

Interpersonal communication networks*:* This is defined as a health intervention strategy which involves face to face interaction between service providers and their clients and can be simulated through different channels (Storey, 2011). In this study, interpersonal networks include breast-feeding mothers, friends, health workers, CWHs, and family members.

Exclusive breast-feeding: WHO (2015) defined EBF as the act of a newborn feeding solely on breast milk, with no other liquids given with the exception of oral rehydration solution, drops or syrups of vitamins, minerals, or medicines. In this study, EBF is used to refer to feeding of infants of mothers attending Korogocho Health Centre exclusively on breast milk from birth up to six months without giving them any food or water.

Interpersonal communication*:* Exchange of information between two or more individuals. It is also the communication that takes place between people who are interdependent and have some knowledge of each other (Floyd, 2009). In this study, the term describes sharing of information among breast-feeding mothers and groups such as health workers, friends, and CHWs or amongst the mothers.

Community health workers*:* Frontline public health workers who are trusted members and with close understanding of the community they serve (Storey, 2011

Child mortality: This is the deaths of newborns and children under the age of five (WHO, 2015).

Summary

This chapter has highlighted the study's problem statement and justification and in so doing emphasized the need for this research. The need for this research has also been emphasized in the background and the significance of the study. Limitations and delimitations, objectives, purpose, research questions, and definition of terms have also been presented in this chapter. The next chapter will discuss the study's theoretical framework; provide a review of related general and empirical literature; and discuss the study's conceptual framework.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter presents the study's theoretical framework, general and empirical literature review, and conceptual framework.

Theoretical Framework

Communication network was outlined by Rogers (1986) as comprising of interrelated people who are connected by patterned communication flows. Interpersonal connections made through the distribution of information in the interpersonal communication structure are studied by communication network analysis. This study applied the convergence theory of communication in explaining the influence of interpersonal communication network on EBF.

Convergence Theory

In this study, convergence theory of communication was used in explaining the influence of interpersonal communication networks on EBF. This theory was put forward by Kincaid (1979). According to Kincaid, convergence is mainly focused on ideas. The whole array of ideas can be viewed as a group of opinions in an intricate space, at which their whereabouts define both their connection to the basic cognitive dimensions and their distances from each other. The definition of an idea is located in its association with other ideas, such that if a couple of ideas have the same definitions, such concepts are going to be linked in the space. Whenever a pair of ideas shift in the direction of each other, their definitions further become similar (Awad & Alhashemi, 2012). If the concepts are situated at a similar place, their definitions are alike, and they have fully joined.

Convergence model of communication is a nonlinear model of communication where a pair of communicators attempt to attain common understanding. So how does one use Kincaids model in facilitating participation through communication? The first point is developing a relationship/ understanding the local setting, the second way is working with the community to identify the problem, the third is identifying stakeholders, the fourth is identifying community needs, objectives and activities, the fifth is identifying appropriate communication tools, the sixth is preparing and pretesting communication content and materials, seventh is facilitating building of partnership, next is producing an implementation plan, lastly monitoring, evaluation and sharing the utilization of results

Convergence theory according to Kincaid presumes that as nations shift from the initial stages of industrialization towards becoming completely industrialized, they start to resemble other industrialized societies in terms of societal norms and technology. According to this strategy, the attention is on the whole group of ideas and the spaces among them. That is to say, on the arrangement of the group of ideas. The merging of two individuals would imply that dissimilarities amid their matrices (their conceptual configurations) turn minor or fade because the position of a group of ideas in an intricate space can be defined by its matrix of coordinates. The between-people's variance drops in a system that is connecting (Awad & Alhashemi, 2012). Communication is very important for forming and upholding connections and the capability to interact successfully. Research has shown that sharing ideas and information among breast-feeding mothers as well as explaining what one wants and working out differences with others makes individuals express their feelings (Scutari & Palomar, 2010). Based on this, the researcher's view was that if there is

communication among the mothers, and support from family members, CHWs, and health workers, EBF in Korogocho could be enhanced.

According to Dougherty, Kramer, Klatzke, and Rogers (2009), convergence theory provides an overall model of communication that overcomes disapprovals and inadequacies of predominant models, particularly information transmission models, for instance, the one employed in Shannon and Weaver's mathematical theory of communication. Dougherty et al. went further to explain that the theoretical insinuations of the convergence model became obvious, leading to theoretical propositions that could be verified empirically and that it also became obvious that convergence, the overall principle underlying the model, is vital to various explicit theories located in the communication area. The theory postulates that the members of the audience who notice the transformation in characters with whom they closely identify will be swayed to alter their behavior (Scutari & Palomar, 2010). Furthermore, Scutari and Palomar stated that the more two individuals interact together, their perceptions of the world become more alike. Specifically, information that is clear moves inside the borders of a fairly secure communication structure leading to a meeting of behavior, views, and principles to a position of better equality.

Glaser and Strauss (2009) maintained that as additional participants of an open system engage, the system is expected to grow into different groups which become individual in their own right. Convergence is mainly centered on individuals and their group connections (Glaser & Strauss, 2009). Once the situations of a pair of individuals converge, their theoretical alignments turn out to be additionally identical. Once a pair of people are situated at a similar location, their alignments are alike and hence it can be said that they have fully converged. After two people interact, their theoretical alignments turn out to be additionally identical. The concept-centered

method postulated that the more interactions amid a group of individuals, the quicker and additionally complete the changes amid their structures drop.

Heider's Theory of Cognitive Balance

Another theory that supports interpersonal networks although my study will use convergence theory is, Heider's theory of cognitive balance which states that a great degree of interpersonal behavior and social perception is established or to some degree co-established through straightforward cognitive configurations. Unbalanced configurations are unstable and include possible challenges. They lean towards being transformed to established "balanced" configurations by the initiation of developments which settle the challenges. These developments might need a positional change or the creation or termination of a connection alongside one more individual. Provided the communication configurations beside new individuals stay stable, the theoretical points will be attuned to take things towards stability.

As Stockley (2004) pointed out, the part of the extensive family, particularly spouses and maternal grandmothers, in both enlightening choices and assisting breast-feeding mothers is vital. Notably, sufficiently knowledgeable fathers are further expected to embolden and esteem breast-feeding and propose suitable backing as needed. Thorough backing, covering both the pre- and post-natal phases, has been recognized as highly efficient and can be supplied by either a healthcare team or lay support networks (Martens, 2002). In the USA, African American Breast-feeding Network (AABN) offers assistance to breast-feeding mothers and their families via monthly community breast-feeding gatherings with the aim of easing the transition from hospital to home (Martens, 2002).

According to Ochola (2008), various determinants have been reported to negatively influence EBF in urban slums in Kenya. These determinants include partial

information concerning EBF, pressure from family and friends to initiate complementary diets, and too many requirements on maternal time alongside additional opposing duties. Although there seems to be unlimited data on factors influencing EBF in Kenya, review of available literature did not reveal any study showing the influence of interpersonal communication networks on exclusive breast feeding. There is therefore the need to identify how these networks are influencing EBF in different setups in order to develop context specific interventions that promote EBF (Ochola, 2008).

Dupuis and Ellis (2011) observed that convergence has a characteristic of people having similar attitudes to those with whom they have stronger ties while other studies have shown views and outlooks of affiliates of dense networks to be better related compared to individuals of less dense networks. Further literature review validated this and suggested that the impact was sturdier in networks at which organizational activity is very much connected to the outlooks and views of their associates (Al-Sahab, Lanes, Feldman, & Tamim, 2010). There has been increased emphasis on the significance of common ground, knowledge distribution, as well as shared consensus on whichever joint or set action that could bear social change (Frost & Massagli, 2008). This is derived from the understanding that a person's views and behaviors are based upon members of the same group, such as family members and individuals in one's private networks, who could be peers, associates, and individual or professional colleagues (O'Sullivan, Yonkler, Morgan, & Merritt, 2003).

Convergence theory is applicable in creating conditions that help facilitate free discussions and dialogue that leads to collective adoption of preventive measures. The theory is characterized by three distinctive characteristics: knowledge is distributed through a collaborative procedure in which there is a sender and receiver, where each

person generates and distributes knowledge; communication highlights personal perceptions and understandings of the distributed knowledge, inspires continuing conversation, and promotes common ground on shared meanings which finally leads to appropriate action; and communication is horizontal, where it includes two or additional members. In all these, members are one and the same and target to reach a shared consensus that would encourage a collective action critical in preventive efforts (Kincaid, 1979).

General Literature Review

Research has revealed that the resolution to breastfeed is many-sided and is manipulated by socio-economic, individual, scholastic, traditional, and surrounding elements (Wambach & Riordan, 2010). According to Sasaki et al. (2010), researchers have depicted doubt concerning recent mothers who experience challenges in practicing EBF. Studies carried out by other researchers will help in carrying out the objectives of my study in showing exploring the relationship between interpersonal communication networks in enhancing EBF, factors/environment leading breastfeeding mothers into practicing EBF, the challenges and the common interpersonal communication network used which can be improved in enhancing EBF in Korogocho informal settlement.

Exploring Relationship Between Interpersonal Communication Networks

Breastfeeding provides mothers and newborns important health benefits both in the short-term and throughout their lives. From a health policy perspective, it is commonly established that the health benefits afforded by breast-feeding can result in major savings in the provision of healthcare (Drassmaku, 2012). Adopting strategies by developing a relationship within the community and identifying correct

appropriation tools that influence infant breast feeding is important for infants' survival and development. According to Vennemann, et al. (2009), breast feeding is protective against abrupt infant death syndrome as it reduces the jeopardy by 50% at every age throughout infancy; these advantages have been shown to display a dose-response association, in other words, health benefits increase with increases in duration and exclusivity. EBF is considered essential for the survival of infants. Out of 6.9 million children under five years who died worldwide in 2011, an estimated one million lives could have been saved by simple and accessible practices such as EBF (WHO, 2010).

León-Cava, Lutter, Ross, & Martin (2002) pointed out immediate health and survival of an infant as some of the greatest benefits of breastfeeding, adding that susceptibility to infections such as diarrhea, respiratory tract, and otitis media, are lower in breastfed infants compared to their non-breastfed counterparts. León-Cava et al. further observed that susceptibility to such infections is reduced for babies who are exclusively breastfed during the first six months, compared to those who are partially breastfed. According to Unicef - United Kingdom (2016), "There is overwhelming evidence that breastfeeding saves lives and protects the health of babies and mothers both in the short and long term …[and] gives them the best possible start in life. It is so much more than just food" (p. 2). According to Abigael et al. (2013):

> Despite the many benefits of breast feeding, it has been shown that there are barriers to the practice of optimal breast feeding. Some of these barriers include hospital practices, advertisement of breast milk substitutes and lack of support for the breastfeeding mother (p. 2).

Information relating to breast feeding, including its duration and benefits should be provided to would be mothers way before they have delivered their babies. By so doing, it is possible that positive results in this aspect will be achieved. According to WHO (2013), the conversation regarding breastfeeding should be initiated in the course of pregnancy by finding out the plans that the pregnant women have in relation to how they will feed their babies. By sticking to the basics, such as the advantages of breastfeeding to the baby and the mother (WHO, 2013), great strides can be achieved. Breastfeeding women need a lot of support and the kind of support needed may vary from woman to woman.

Challenges Facing Interpersonal Communication Networks

Constant follow-up on women who are at the early stages of breastfeeding is important for in most cases these women need support and encouragement especially after they have left the health facility where they delivered and are at home. As put forth by WHO (2013), some problems women who are breastfeeding may encounter include engorged breasts, cracked nipples, and family members pressuring them to supplement the baby's feeding with other foodstuffs. In these scenarios, the support of interpersonal networks such as health care professionals and CHWs becomes necessary. The World Health Organization and Unicef (2008) have maintained that health professionals are key when it comes to promotion of the practice of breastfeeding and pointed out in a number of surveys, most women had indicated health professionals as their principal source for information relating to breastfeeding. Additionally, according to WHO and UNICEF, CHWs are the focal "providers of community-based activities, including breastfeeding support" (p. 12) and they function as "a bridge between health care professionals and the community, help communities identify and address their own health needs, promote a wide range of

health-related behaviours, mobilize community resources, and act as advocates for the community" (p. 12).

Determining Interpersonal Communication Network in Influencing EBF

The World Health Organization (2013) identified the following as some of the ways through which health workers can help women overcome barriers to breastfeeding: dialoguing with family members on the value of EBF, assessing breastfeeding progress when the women visit the health centers after delivery, helping women form breastfeeding support groups where they "can share experiences and support each other" (p. 66), "contact women who have successfully breastfed and see if they would be available to support women after birth" (p. 157), and "help women to start breastfeeding soon after birth, ensure good attachment, and encourage unrestricted breastfeeding" (p. 158). Community health workers who are recognized by the communities that they serve have been found to be effective in their missions. Frankel and Doggett (as cited in WHO and Unicef, 2008) were of the view successful CWHs were those who were part of the communities where they operated, are identified by the communities, are accountable to the same communities and get backing from the health system.

According to Raffle, Ware, Borchardt, and Strickland, (2011), the most significant important interpersonal factor contributing towards successful breastfeeding was the backing of family and friends. Several women expressed that the backing of a family member, more so one with prior experience in breastfeeding experience played a crucial role in the choice to persistently breastfeed their babies. It is therefore important for family members such as spouses and friends to be equipped and supported so that they can be of great help in promoting exclusive breastfeeding. According to WHO (2013), Occasionally, spouses of breastfeeding mothers will feel left out from the breastfeeding process. At such times, these spouses can be encouraged to participate in the process by for example, "fetching the baby for the

feed, helping make the woman comfortable, or looking after the other children while she is feeding, massaging the baby, and humming to calm a crying baby" (p. 158). Spouses, other family members, and friends can be made to feel useful in the process of breastfeeding and by so doing, they will no longer be barriers but promoters of exclusive breastfeeding. Some studies have pointed out the necessity of taking interpersonal relationships among mothers, families, and health workers into consideration when putting in place actions for breastfeeding promotion (Souza et al., 2016).

The International Baby Food Action Network - Asia (2014) noted that "women need the support of evidence-based public health policies, health providers, employers, friends, family, the community, and particularly of other women and mothers in regard to preparation for breastfeeding" (p. 36). This support is necessary both in the course of pregnancy and after delivery. Relatively, less research has been done in developing countries to distinguish the obstacles to breast-feeding exclusivity amid mothers, while the accessible proof has not been thoroughly synthesized. This demands a review of literature observing elements that add to or work as obstacles to a mother's triumph in breast-feeding. Furthermore, healthcare professionals and policy makers would be notified on how best to assist mothers and improve the triumph of breast-feeding advancement interventions in developing countries. This study was done to systematically outline the impact of interpersonal communication on exclusive breast feeding.

Interpersonal approaches which involve interpersonal communication between health promoters, have been widely researched and recognized as one of the oldest forms of health interventions in breastfeeding. The approaches can occur in a health facility, in a home or another place, and amid minor groups with family or one on one

and have proved to promote child survival programs as observed in Madagascar, Benin, Mali and Nepal in improving breast-feeding (Storey, 2011).

Characteristics of Urban Slum Setting and EBF

While most people consider nursing newborns on colostrum in high regard, a few individuals postpone initiation and some do not offer colostrum to the newborn since they do not recognize its significance. Other mothers are still skeptical when it comes to breast milk, believing that it is just water. Such mothers therefore give babies pre-lacteal foods as they await the 'real' milk. In addition, in terms of the period of exclusively breast-feeding the child, some mothers in urban slums believe that a little water is good for the baby as this would protect it from stomach problems. Such myths often contribute to child's poor health and hence the need to have CHWs, friends, and sustained discussion forums amongst mothers (Kimani-Murage et al., 2015). In addition, EBF for the first six months of a child's life has been recognized to occur mainly when mothers consume enough food with proper balanced diet. By and large, in urban slums mothers do not get sufficient food to eat as there is inadequate food in the household and therefore are not able to produce sufficient milk (Kimani-Murage et al., 2015).

Wanjohi et al. (2016) conducted research on factors that affect breastfeeding practices in two Nairobi slums (Korogocho and Viwandani). The research uncovered several practices that affect breastfeeding in the slums, such as "considering colostrum as 'dirty' or 'curdled milk', a curse 'bad omen' associated with breastfeeding while engaging in extra marital affairs, a fear of the 'evil eye' (malevolent glare which is believed to be a curse associated with witchcraft)" (Wanjohi et al., 2016, p. 1). Positive views associated with breastfeeding were also uncovered, such as linking breast milk to intelligence and good health of the infant.

The myths surrounding breastfeeding in urban slums are mostly spread through relatives, friends, and colleagues and they greatly influence EBF either positively or negatively.

A study by Patrick, Judith, and Peter (2013) established that several issues such as lack of jobs, poor hygiene, poverty, and scarcity of resources, such as electricity and water affect EBF among women in Kibera slums. When the women were asked why they delayed breastfeeding, a "majority of the mothers (30.8%) admitted that they were sick, 21.8% had delayed milk secretion, 5.1% had post-partum haemorrhage, and 5.1% were advised by mother-in laws to delay breastfeeding initiation" (Patrick et al., 2013, p. 224). The infants were also introduced to complementary food such as "plain boiled water, water, sugar, and salt solution, thin porridge, and cow's milk and formula" (p. 224) before six months. Due to poverty in the slums, women are unable to afford household appliances such as refrigerators, hence are unable to extract and store breastmilk as they have to go to work.

Empirical Literature Review

A number of studies have been conducted on the importance of support to breast-feeding mothers (Whalen & Cramton, 2010). There is need for maternal and child health service providers to train themselves concerning predictors of, and obstacles to ideal breast-feeding so that they can assist mothers to meet their individual objectives and provide expert recommendation for breast-feeding practice (Whalen & Cramton, 2010). In numerous families, fathers play a great part in the decision on whether to breastfeed or not. They might be against breast-feeding due to worries on what their part would be in nursing; whether they would be capable to connect with their newborns if they were individually incapable to nurse the infant,

and how the mother would be capable to finish household duties if she is breast-feeding. African American families' studies, in which education on breast-feeding was aimed at the father discovered a 20% growth in breast-feeding rates, showing that paternal effects on maternal nursing procedures are gravely significant in primary decision making regarding breast-feeding (Leigh, 2010).

According to Alexander, Dowling, and Furman,

> In some families and cultures, the decision to breastfeed is not one that is made by the new mother, but instead, is heavily influenced by the baby's father. For some African American women, their decision to forgo breastfeeding is based on the fact that the baby's father discouraged it, even though the mother knew it was best for her baby. (as cited in Sriraman & Kellams, 2016, p. 716)

Even though they can be an obstacle to breast-feeding, fathers can also be a positive influence. A randomized controlled trial of a two-hour prenatal intervention conducted by Leigh (2010) with fathers on how to be supportive of breast-feeding established a significantly greater rate of breast-feeding commencement amid participants' partners (74%) compared to partners of controls (14%). In another trial, 25% of women whose partners took part in a program on how to avoid and tackle shared challenges with lactation (such as pain or fear of insufficient milk) were still breast-feeding at six months, compared with 15% of women whose partners were only notified regarding the advantages of breast-feeding (Leigh, 2010). In the midst of women who faced challenges with breast-feeding, the program influence was even stronger, with 24% of participants' partners' breast-feeding at six months versus less than 5% of partners in the comparison group Leigh, 2010).

According to Abbass-Dick, Stern, Nelson, Watson, and Dennis (2015), a team of researchers in Vietnam recorded a significant rise in breastfeeding when fathers were engaged utilizing breastfeeding education materials, counselling services at community health centers, and home visits. The rates of initial breastfeeding introduction and exclusive breastfeeding at 4 months were twice as high between families that obtained these services compared to those who did not (Abbas et al., 2015)

Fisher (2016) reported of a study where families in China were provided with information on how fathers can support breastfeeding, with the result being that EBF rose from 26% to 51% at 4 months, and 18% to 40% at 6 months. "A similar Turkish trial increased exclusive breastfeeding at 6 months from 33% to 56%. In Indonesia, the inclusion of fathers, grandmothers and community leaders resulted in a six-fold increase in exclusive breastfeeding at 5 months" (Fisher, 2016, para. 3)

Further studies have suggested that the prevalence of EBF among infants younger than six months in developing countries increased from 33% in 1995 to 39% in 2010, while more modest improvements were observed in South Asia (Mangasaryan et al., 2012). As stated by Mumo (2013), comparatively, there is still low levels of exclusive breast feeding. In Kenya, approximately 32% of children are exclusively breastfed meaning that a big percentage of the children are missing out on the nutrients they need in their first months of life. Despite the low levels, Kenya has taken drastic strides in boosting exclusive breast feeding, even passing a new law banning the promotion of infant formula. Drassmaku (2012) reported that in 2003, 32% of children under the age of six months were exclusively breastfed, growing from only 13% in 2003. The researcher found little research in Kenya showing how interpersonal communication networks influence the level of EBF. In 2006, the Kenya

Government launched a strategy between CHWs and mothers towards improving EBF through interpersonal communication (WHO, 2010).

Ogunba (2013) examined the influence of social network on the breastfeeding practices of lactating mothers in Osun State of Southwestern Nigeria. The study had a sample of 340 mothers. Breastfeeding procedures were assessed alongside introduction, time, conclusion of breast feeding, backing from many social networks, decision of mothers on breast feeding procedures and the impact of many social networks on breastfeeding. Ogunba's study identified nurses, doctors, mothers-in-law, grandmother of the baby, traditional midwives, and friends as the social network involved in breastfeeding decision and noted that every networks had different effects on decision for numerous breastfeeding procedures. According to Ogunba, the four main social networks established in order of impact on decision on breastfeeding procedures were nurses, grandmother of baby, mother in-law, and friends. The study further showed that mothers who acquired assistance from social networks have a tendency to introduce breastfeeding early, feed colostrums, fed expressed breast milk and breastfed exclusively. Ogunba concluded that suitable breastfeeding procedures can be enhanced once mothers are assisted from introduction throughout the breastfeeding stage via numerous social networks at the household, public, and place of work and hence interference programs on breastfeeding procedures should concentrate on the mother and many social networks for the approval of suitable exclusive breastfeeding procedures (Ogunba, 2013).

According to Jin (2016), healthcare providers such as doctors and nurses can provide assistance to breastfeeding mothers by "providing ways for them to get professional support (for example, from a lactation counselor), peer support (from a mother's support group), or formal education (from classes, videos, print materials)

on breastfeeding" (para. 2). Through such support systems, breast feeding mothers can acquire knowledge on the advantages of EBF, get psychological support and encouragement, and acquire assistance on how to breastfeed. Another study by Haviland, James, Killman, and Trbovich (2015) highlighted the importance of workplace support to breastfeeding women as they return to work, especially since breastfeeding becomes a challenge then. A work environment that is supportive should be able to assist mothers to keep on breastfeeding. This can be achieved through assigning a private area for breastfeeding women, providing a refrigerator for milk storage, allowing breaks and flexible schedules for the women to breastfeed, designating onsite childcare, and allowing the others to their bring babies to the workplace for breastfeeding. The administration and workplace colleagues should also support the breastfeeding women.

A study conducted by Agunbiade and Agunleye (2012) showed that grandmothers and mothers-in-law performed double parts in the forms and dominant breast-feeding practices noted amid the respondents. For example, a few grandmothers believed that the early initiation of complementary feeding and herbal concoctions would be better than only breast milk. Agunbiade and Agunleye reported that from the capabilities of players and traditional anticipations, grandmothers who did not practice EBF were expected to apply pressure on younger mothers to stop EBF, particularly with the existence of lactation challenges or persistent health problems influencing both the mother or the child.

A survey carried out in Korogocho by Kimani-Murage et al. (2015) showed that every two out of five children were handed something (other than the mothers' breast milk) to drink within three days after delivery. Living conditions in this settlement are deplorable, with inhabitants lacking one or more basic necessities, such

as access to clean water and sanitation facilities and sufficient living area (World Bank, 2008). Most of the houses in Korogocho informal settlement are semi-permanent with no electricity or tapwater. These structures are very congested, exposing dangers to both the mother and the child. Equally important is that most likely such conditions prevent mothers from practicing breastfeeding.

Tiwari, Mahajan, and Lahariya (2009) conducted a study on EBF in the slum area of Gwalior city, New Delhi. The study established that mothers were aware of the importance of EBF for their children. Nevertheless, as little as 3.8% of the mothers were aware that the duration of EBF should be six months. Most of the mothers were willing to breastfeed for three to four months exclusively then incorporate complementary food into their children's diet. Tiwari et al. also noted that a small number of infants began breastfeeding within 24 hours of their birth. Most of the newborns were introduced to breastmilk substitutes and complimentary food before four months. Only a small percentage (7.8%) were breastfed until they were six months. Since most of the women in the slum were ignorant and uneducated on the benefits of EBF and colostrum on infant health, the study recommended that efforts be made towards creating an EBF awareness in the urban slums in India.

Badejo-Oladoyinbo and Opadoyin (2015) conducted a cross-sectional study in seven primary health centers (PHC) in Ijebu-Ode, Nigeria, with a sample of 350 nursing mothers with children aged between 0-36 months. Badejo-Oladoyinbo and Opadoyin's study determined that91% of the mothers had adequate knowledge of EBF as well its benefits to the child. Nevertheless, the study's findings showed that only 19% of the mothers practiced EBF and that culture, tradition, and religion were the key factors identified as key barriers to mothers' practice of EBF.

Interpersonal communication networks, especially through face to face, which include personal selling and counseling can improve the target audience's behavior change and attitude (Schiavo, 2007). "Interpersonal communication involves face-to-face conversations and activities between frontline workers and mothers or family members. Workers personalize messages, demonstrate skills, and provide encouragement during home visits, support group meetings, and sessions at health centers" (Alive &Thrive, 2014, p. 1)

Interpersonal communication approaches have proved helpful to child survival programs, for instance, through client-provider interaction and counseling, frontline health workers, peer education, and home visits (Health Communication Capacity Collaborative, 2015). A study by Alive and Thrive (2014) in Bangladesh and Vietnam, on the other hand, showed that the use of interpersonal communication through face-to-face brought about dramatic changes in increasing the rate of EBF. Alarcon (2013) reported about a study carried out in Texas, the USA, with 13 mothers participating in a focus group discussion based on how long they had breastfed their youngest child. The discussions in the focus group centered on breastfeeding behavior and the communicative factors in the mothers' lives that had impacted them. The findings of the study, as reported by Alarcon, indicated that interpersonal communication among the caregivers increased mothers' breast-feeding behaviors, especially as they attended meetings aimed at improving their knowledge on the importance of breast-feeding.

Peritore (2016) carried out a study to that sought to understand the different social support levels which have an influence on African American breastfeeding women. Peritore noted that the mother is not solely responsible for the resolution to breastfeed. Rather, her decision is influenced by "interpersonal communication and

communication with community entities" (p. 3). The research used a social ecological model to assess the interaction "between an African American mother and her social network at the interpersonal level" (p. 41). The researcher also studied the interaction between a mother and her social network, paying special attention to the "communication between mother and grandmother regarding breastfeeding" (p. 10). The relationship between African American mothers and their grandmothers regarding breastfeeding, was not always positive despite any good intent and determination from the grandmother to help and support the mother.

By assessing the mother's different types of social support, Peritore (2016) was able to comprehend an African American mother's decision "of whether or not to breastfeed and if breastfeeding, sustaining or not sustaining that feeding choice" (p. 10). The study noted that there exists both "positive and negative social support" (p. 60) between an African American mother and relatives, friends and colleagues, doctors, nurses, and foreigners (Peritore, 2016). According to the study, "social support is constructed from emotional support (empathy, concern, caring, and love demonstrated to the mother), tangible support (money, time of actions that assist a mother), and informational support (the offering of facts, evidence, or stories and advice)" (p. 60-61). Some mothers felt like they lacked support and encouragement from their peers and family members. The research concluded the following:

> Healthcare providers and peers seemed to have the largest positive communication in regards to a mother's initiation and sustainment of breastfeeding; strangers had both positive and negative supportive interactions, and family members and grandmothers were reported to provide negative support (Peritore, 2016, p. 1).

According to Philavong (2012), a study conducted in New Delhi in 2006 found that increased breast-feeding campaigns through interpersonal communication, media, and different sources for message delivery to determine which network best suits the target audience helped raise breast-feeding within one hour from as low as 25% to 57.5%, and EBF from 46% to 55.9% for the recommended six months. Based on a study focusing on a community in Rio de Janeiro, Brazil, Marques et al. (as cited in Souza, Nespoli, & Zeitoune, 2016) concluded that breast-feeding women would have strong connections with their primary social networks. Such networks include mother, partner, friends, and neighbors and play a role towards ensuring successful breast-feeding as well as increasing of breast-feeding duration.

According to a study by Nguyen et al. (2016), breastfeeding duration is affected by several aspects such as postnatal depression, age of the mother, confidence, use of baby formula, and social support. Mothers need information on the significance of breastfeeding (colostrum), how to breastfeed their babies, and the negative effects of not breastfeeding on the baby's health. Offering support to breastfeeding mothers is important to boost their confidence and morale. This can be done by tackling any worries that mothers may have concerning breastfeeding, especially their age and physical appearance.

Additionally, Nguyen et al. (2016) noted that mass media and interpersonal counseling have a great influence on EBF. Mass media can be used to endorse the advantages of breastfeeding for the first six months and shed light on the downside of other substitutes for breastfeeding on the baby's health. By painting breastfeeding in a positive light, more expectant mothers will be encouraged to breastfeed. On the other hand, interpersonal counseling utilizes one on one communication between health care providers and breastfeeding mothers at an individual level. Counselling,

especially in cases whereby the mother is going through postnatal depression and requires support in order to breastfeed and suggestions from knowledgeable and supportive health care providers at an individual level, can impact a mother's decision to breastfeed and the duration of EBF. The study revealed a strong connection between interpersonal counseling and EBF.

McCann, Baydar, and Williams (2007) investigated Hispanic and African mothers in the USA, focusing on mother's EBF attitudes and the problems facing the goal of increasing breast-feeding initiatives. The study had a sample of 1095 mothers and interviewed 89% of the mothers during their postnatal period. According to the study findings, 70% of the mothers reported experiencing at least one out the following problems: problems with milk or not enough milk, sore nipples, infant chokes while breast-feeding, and either too full or infected breasts.

Thirty-four percent of the mothers mentioned that they had experienced a lack of enough breast milk for their newborn baby, while 10% said that they thought that something was wrong with their milk (McCann, Baydar, & Williams, 2007). Though there is considerable literature on knowledge on the levels of EBF among mothers, and on the efficiency of interpersonal communication networks, it is rare to find literature on the role of interpersonal communication on EBF in Kenya, hence a gap that this study sought to bridge.

Conceptual Framework

Figure 2.1 presents the conceptual framework of the study.

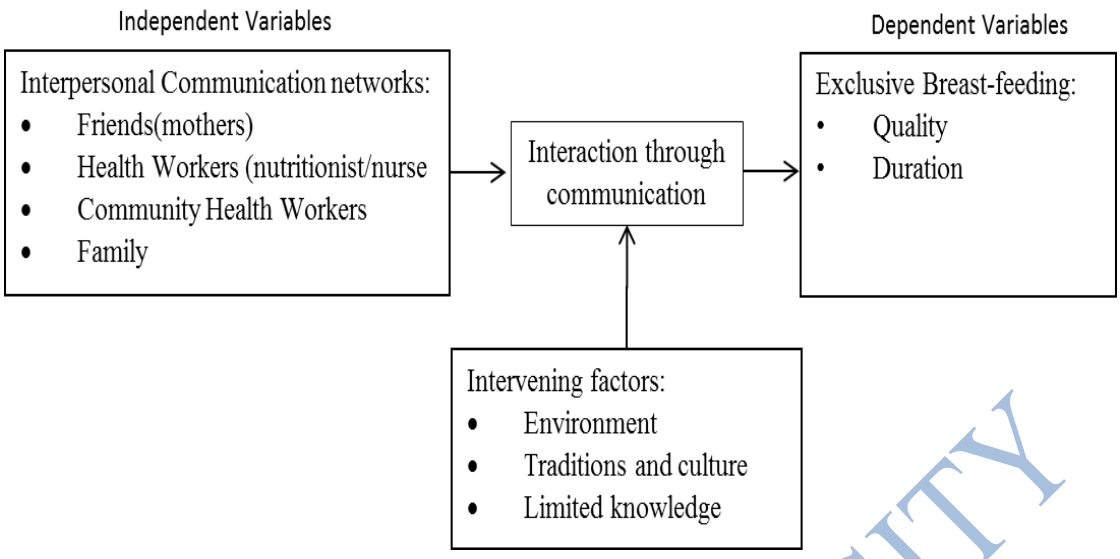

Figure 2.1: Conceptual Framework
Source: Author (2021)

Discussion

Women's decision-making to breastfeed can be highly influenced by their social, interpersonal networks. Those networks can either encourage or be a barrier to EBF through the mother's preferred choice of information. Advice from interpersonal networks such as friends, family, CHW, and health workers is commonly cited as a reason for a mother's decision about EBF. Mothers often identify support and information received from healthcare providers. The role of these healthcare providers is to give consistent and evidence-based advice and support to help mothers exclusively breastfeed to the optimum. However, few healthcare providers are adequately trained and experienced. Alarcon (2013), in a research carried out in the USA, asserted that women who were in constant communication with the new mothers helped in influencing the mothers' decisions towards EBF. On the other hand, the same advice with limited knowledge can also cause a barrier to optimum EBF.

The intervening factors, if not managed, can hinder the optimal adoption of EBF. Culture is a human-made model that assists in defining beliefs, values, attitudes, and customs of a collection of individuals that have likenesses to each other. According to Samovar, Poter, and McDaniel (2009), culture has a strong reliance on communication in that the communication helps provide the system of trading knowledge with the goal of transmitting notions and outlooks. Limited knowledge regarding EBF is sometimes seen as a factor that can hinder EBF.

Kimani-Murage et al. (2015) highlighted a case where some mothers, as well as some CHWs, believed that a little water is good for the baby as this would protect the baby from stomach problems. The environment can also be a hindrance to interpersonal communication networks' process of enhancing EBF. In this case, the environment is considered as the place in which communication takes place in return affecting the outcome of communication. Ackerson and Viswanath (2009) suggested that the environment would include the time and place as well as the background of the participants and that in regard to interpersonal communication, it refers to the formation and influence of official and casual interactions.

World breastfeeding trends 2014 showed women require the assistance of empirical public health policies, family, health benefactors, managers, support system, the public, and, especially, other women and mothers in regard to planning for breastfeeding that could arrive during the pregnancy and postpartum and following delivery. Arriving at the community level to offer suitable backing, community volunteers or health workers under the health systems could present and guarantee continued backing to mothers. Their education and abilities have to be of the maximum quality, and they must have acquired instructions for providing assistance.

It is important to acquire suitable counseling in the community for incentive and growing confidence in breastfeeding and home-based complementary nursing.

Further, the backing to mothers can be delivered at the doorsteps by the women's groups. Occasionally they are the mother support group who are made up of a few triumphant mothers and some of a similar society. Mother support groups are main constituents of women liberation. Through accurate information at community and outreach level, mothers can aid themselves by undertaking exclusive breastfeeding for six months. Peer backing in the society and mothers' support groups have revealed growing exclusive breastfeeding rates.

Summary

In this chapter, the convergence theory that guided the study has been discussed. General and empirical literature regarding interpersonal communication networks in other countries have also been covered. Finally, the conceptual framework showing the variables which helped in drawing the study's conclusions has been presented. The next chapter will discuss the study's research methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This chapter describes the research methodology that included the study's research design, population and target population, sample size and sampling technique, data collection instruments and procedures, pretesting, data analysis plan, and ethical considerations.

Research Design

Research design is the general approach selected to incorporate various constituents of a research in a clear and rational manner. It ensures that the evidence obtained enables a researcher to effectively address the research problem (Myers, Well, & Lorch, 2010). This study used a descriptive research design. The choice of the descriptive design was guided by the logic that it would allow the researcher to document conditions, attitudes, or characteristics of individuals or groups of individuals. Further, the study used qualitative and quantitative research methods where the qualitative method permitted a flexible and interactive approach. The quantitative approach helped in collecting and analyzing numerical data collected from the field as well analyzing the documented data.

Population

Population is a large collection of individuals that is the main focus of the research (Mugenda & Mugenda, 2003). The population for this study was breast-feeding mothers with children aged zero to six months living in Korogocho, an informal settlement in Nairobi County's Eastlands' area, and characterized by poverty and inadequate social amenities. The informal settlement is densely populated with a

majority of its inhabitants living below the poverty line. As gathered from the Korogocho Health Center's records, the population of the mothers who attended antenatal and postnatal care in the year 2016 on a daily basis for the period of three months: October, November, and December, was estimated to be 300.

Target Population

Target population is the group of people, individuals, or organizations that the researcher wants to be able to generalize the study findings to. The target population for this study was breast-feeding mothers with infants aged zero to six months who had either given birth in or were attending the Korogocho Health Center clinic. These mothers were identified through consultation with health workers and also from the teaching forum conducted at the health facility to educate the mothers on how to raise their babies. The study also targeted nutritionists and CHWs.

Sample Size

Sample size is determined by how many responses a researcher really needs. While a large sample can generate further precise results, too many replies can be costly (Smith, 2013). To maintain the quality and effectiveness of this research, the researcher chose to have a sample size of 100: Questionnaire was used for 90 mothers, interview for 10 mothers, who were all selected randomly one nutritionist, and one CHW. According to Mugenda and Mugenda (1999), at least 30% of the total target population is required for a study.

Sampling Techniques

Purposive sampling was used to select the health facility that was to be the focus of the study. The health facility selected was Korogocho Health Center because my area

of research was covered and the only public health facility where I could reach my target population.

To identify the part of the study sample comprising 100 mothers from whom data was collected by use of a questionnaire, simple random sampling was utilized. This represented 30% of the mothers who had infants aged zero to six months, had either given birth in or were attending the Korogocho Health Center, and were exclusively breast-feeding for the period under investigation. This approach was adopted because it gave study participants the chance to be selected from within the population when creating the sample.

The respondents for the interview were identified through purposive sampling and with the help of research assistants and CHWs in the clinic.

Data Collection Instruments

Data collection is the process by which the researcher collects the relevant data that will be used for the study (Donald & Emory, 1994). In this study, data collection was done through a questionnaire and interview guide. The questionnaire and interview guide was specifically used to get information from 100 breast-feeding mothers on the use of interpersonal communication networks in influencing EBF. The questions in the questionnaire were formulated based on the study's four objectives. The questionnaire had both open and closed-ended questions, which the respondents were required to respond to objectively. Interview schedules were employed to get in-depth data from one nutritionist, one CHW, and 10 mothers on the role of interpersonal communication networks in influencing EBF among mothers in informal settlements.

Data Collection Procedures

According to Kothari (2004), data collection procedures refer to the methods through which material evidence is acquired from the chosen research subjects. Data for this study was obtained from 100 breast-feeding mothers by use of a questionnaire and interview guide. Simple random sampling was utilized to choose the mothers to whom the questionnaire was administered. In addition, ten breast-feeding mothers were interviewed, and their responses recorded. Lastly, in-depth interview was conducted with one nutritionist and one CHW.

Data collection took place in Korogocho Health Center and was done for a period of two days to ensure that the data collected was representative enough. Before embarking on the data collection process, the researcher acquired a research permit from the Public Health County Hall and Ministry of Health in Ruaraka Sub-County. The researcher trained two research assistants a few days prior to the actual day of data collection. With the assistance of the two research assistants, the researcher began by appreciating the participation of the mothers and then proceeded to explain to them that their cooperation would be treated with total confidentiality.

The participants were also informed that the information gathered would only be used for academic purposes. The questions were translated from English to Kiswahili language with the help of the CHW as translators so that respondents (mothers) could understand and hence provide quality responses. The researcher guaranteed the participants that the information gathered would only be shared with the National Commission for Science, Technology and Innovation (NACOSTI) and Daystar University. The two research assistants assisted in recording by taking notes of responses from the interviewees.

Pretesting

In order to ensure the validity and reliability of the questionnaire, it was pretested on 10 mothers who, though attended Korogocho Health Centre, were not part of the sample for the actual data collection. I ensured that by carrying out the research two days earlier on mothers who had visited the hospital before the day of the clinic, The pretesting helped in detecting anomalies like avoiding the sensitive or private questions causing the respondents to hold back or hesitate to answer the questions in the questionnaire, finding the CHW who will help interpret the questions for the mothers in the language they can understand that could have compromised the quality of the data collected. The anomalies were corrected, and hence the instrument was modified accordingly.

Data Analysis Plan

Copies of the filled questionnaire were collected, checked, coded, cleaned, and entered into the Statistical Package for the Social Sciences (SPSS) version 23 for analysis. Descriptive summary statistics, including frequencies, percentages, means, standard deviation, and median, were employed to describe EBF rates. Analysis of the data was conducted through a seven-step analytic procedure outlined by Marshall and Rossman (2006). The process involves organizing the data, where the data was read through; coding the data; immersion in the data; generation of categories and themes; and provision of interpretations.

Ethical Considerations

In view of the fact that the study utilized human participants, the following ethical aspects were observed:

Permissions and authorizations: Before beginning to collect data, the researcher obtained the following: Approval from the Ethics Review Board of Daystar University; an introduction letter from Daystar University seeking approval to conduct the study; and research authorization from the National Commission for Science, Technology and Innovation (NACOSTI).

Disclosure: Before embarking on the data collection exercise, the researcher briefly explained to the respondents the importance of the research and that information obtained would only be used for academic purposes.

Voluntary participation: The researcher ensured voluntary participation by first seeking the participants' consent before collecting data from them.

Confidentiality: Participants were assured of confidentiality by being informed that their identities would be kept confidential.

Summary

This chapter has presented details regarding the study's research design, target population, sample and sampling procedures, description of research instruments, validity and reliability of instruments, data collection procedures, data analysis techniques, and ethical considerations. The next chapter dwells on data presentation, analysis, and interpretation.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

Introduction

This chapter aimed at presenting the findings from the research on the use of interpersonal communication networks on EBF in Korogocho informal settlement. The findings are presented in line with the study objectives. The instruments employed for data collection in this study were questionnaire and in-depth interview. In this chapter, each finding from the collected data is reported, analyzed, and interpreted. At the end of the chapter, a summary of the key findings is provided.

Analysis and Interpretation

Response Rate

One hundred copies of the questionnaire were administered, out of which 80 were fully filled and returned for analysis. This gave a response rate of 80%. Based on Mugenda and Mugenda's (2003) argument that a 50% response rate is adequate, 60% good, and above 70% is rated as very good, this study considered the response rate of 80% excellent for analysis. Ten respondents (breast-feeding mothers) were successfully interviewed.

Demographic Information of the Respondents

Age of the Respondents

The study sought to determine the age of the respondents. The findings were as presented in Table 4.1.

Table 4.1: Age of the Respondents

	Frequency	Percent
18-24 years	40	50
25-30 years	19	19
31-36 years	25	31
37 and above	0	0
Total	80	100

As the findings show, half (50%) of the respondents were in the 18-24 years age category, 31% were in the 31-36 years category, while those in the category of 25-30 years were 19%. None of the respondents was in the category of 37 years and above. With this, it can be deduced that a good number (50%) of the of mothers who took part in the study were below the age of 25 years.

Marital Status

The study sought to establish the marital status of the respondents. The findings were as shown in Table 4.2.

Table 4.2: Marital Status

	Frequency	Percent
Married	56	70
Divorced	8	10
Single	8	10
Separated	8	10
Total	80	100

As per the results presented in Table 4.2, a high number of the respondents (70%) were married, 10% were divorced, 10% were single. Another 10% indicated that they were separated from their spouses. This is seen as an indication that most of the respondents (at 70%) were living with their husbands.

Respondents' Occupation

The results regarding the occupation of the respondents are outlined in Table 4.3.

Table 4.3: Respondents' Occupation

	Frequency	Percent
Housewife	56	70
Employment	8	10
Others	16	20
Total	80	100

As presented in Table 4.3, most of the respondents (70%) were housewives, 10% were employed, while 20% cited that they were doing something else (such as business) to earn a living. This could imply that most of the mothers (at 70%) had enough time to practice EBF since they were housewives, and hence it can be assumed that they spend enough time with their babies.

Age of the Child

The study was also interested in getting the age of breast-feeding babies. The results were as displayed in Table 4.4.

Table 4.4: Age of the Child

Age	Frequency	Percent
3-6 months	30	37
1-3 months	20	25
3-4 weeks	20	25
1-2 weeks	6	5
1-7 days	4	8
Total	80	100

According to the findings outlined in Table 4.4, 37% of the breast-feeding babies were aged three to six months, 25% were one to three months old, 25% were three to four weeks, 5% were one to two weeks old, while 8% were one to seven days old. This means that these children fell in the category within which exclusive breast-feeding is recommended indicating that the results obtained from this study would be generalizable to the whole population.

Knowledge of EBF

When asked about their knowledge regarding EBF, the respondents responded as presented in Table 4.5.

Table 4.5: Knowledge of EBF

Response	Frequency	Percent
Had the idea	48	60
Little idea	16	20
No idea	16	20
Total	80	100

As the findings in Table 4.5 reveal, a good number of the respondents (at 60%) had an idea of what EBF was, 20% had some little idea, while 20% had never heard of EBF. Based on these results, it can be drawn that the majority of the respondents may have exclusively fed their babies on breast milk for the first six months, considering that they had an idea of what EBF was about. Further responses indicated that those who did not practice EBF for the first six months of their children's lives introduced food to the children at an early stage. Such respondents gave their reason for not practicing EBF as that they were busy at work or in their businesses.

Whether Mothers Practiced EBF

The study sought to determine whether the respondents practiced EBF. The results were as shown in Table 4.6.

Table 4.6: Respondents' Practice of EBF

	Frequency	Percent
Yes	50	62.5
No	30	37.5
Total	80	100.0

According to the findings displayed in Table 4.6, 62.5% of the respondents agreed that they exclusively fed their children breast milk for the first six months,

while 37.5% disagreed. This shows that most of the respondents (at 62.5%) exclusively breastfed their babies for the first six months. It is possible that that the mothers who exclusively breastfed their babies spent most of the time with the babies. On the other hand, it is possible that the mothers who did not exclusively feed their babies on breast milk either lacked enough time because they were either at work or doing business, did not have enough milk, were influenced by friends, or were ignorant of the fact that EBF was healthy. Other respondents thought that breast milk on its own was not enough for the baby and because of this the baby was crying a lot. Others were encouraged by their husbands to give food to the infants.

Motivation for EBF

The study further sought to understand what motivated EBF on the part of the respondents who did so. The findings are outlined in Table 4.7.

Table 4.7: Motivation for Practicing EBF

Information	Frequency	Percent
CHW	40	50
Nurses	30	37
Family	6	7
Friends	4	5
Total	80	100

As the findings in Table 4.7 reveal, half of the respondents (at 50%) indicated that they were encouraged to practice EBF by CHWs, 37% were encouraged by nurses, 7% were motivated by family members, while 4% indicated that they were influenced by their friends. This could be indicative that EBF was not an individual responsibility but a collective one in society with the aim of ensuring good health for babies. CHWs visited the respondents in their homes, where they encouraged them on EBF for babies aged up to six months.

Interpersonal Communication Networks

Frequently Used Mode

When asked to indicate the forms of interpersonal communication networks frequently used when lobbying for EBF, the respondents' feedback was as shown in Table 4.8.

Table 4.8: Mode of Interpersonal Communication

	Frequency	Percent
CHW	75	93.75
Health worker	3	3.75
Family	1	1.25
Friend	1	1.25
Total	80	100.00

The findings, as indicated in Table 4.8 point out that the mothers highly depended on CWHs (at 93.75%) to deliver information to them on EBF. The mothers' dependency on health workers was at 3.75%, while friends and family members were each dependent on at 1.25%. Based on this, it can be deduced that CHWs were the most effective in sensitizing mothers on the need for EBF.

Interaction and Trust

The study further sought to determine the sources that respondents trusted to pass information to them on EBF. The findings are presented in Table 4.9.

Table 4.9: Trusted Source of Information

Networks	Frequency	Percent
CHW	65	81
Health worker	11	13.75
Friends	2	2.5
Family	2	2.5
Total	80	100

The study results (as shown in Table 4.9) indicate that CWHs were the most trusted as a source of sensitization on EBF (at 81%), health workers were relied upon at 13.75%, while friends and family were each trusted at 2.5%. It could be argued that CHWs were the most relied upon in influencing EBF because they worked within the

community and hence had close interaction with the mothers. The mothers could also have perceived the CHWs as more knowledgeable on matters of health compared to family members and friends hence the more trust in them.

Desire to Know about EBF

The study endeavored to understand whether breast-feeding mothers constantly made inquiries at healthy facilities on the importance of EBF. The findings were as shown in Table 4.10.

Table 4.10: Constant Communication on EBF

	F	Percent
Yes	70	87.5
No	10	12.5
Total	80	100

As outlined in Table 4.10, the majority of the respondents (at 87.5%) agreed that they sought more information on EBF at the clinics, while 12.5% indicated that they did not seek such information. This could imply that the majority of the mothers were enthusiastic about getting more information on the need to practice EBF for the good health of their babies.

Interaction of Networks on EBF

Regarding how they rated the different social networks when it came to interactions on EBF, the respondents' feedback was as shown in Table 4.11.

Table 4.11: Rating of Interaction of the Networks on EBF

	Extremely important	Percent	Very important	Important	Percent	Least important	Not important
Health Worker	15	18.75	0	0		0	0
Friends	0	0	0	2	2.5	0	0
CHW	60	75	0	1	1.25	0	0
Family	0	0	0	2	2.5	0	0
Total	75	93.75	0	5	6.25	0	0

The findings summarized in Table 4.11 indicate that the interaction with the CHWs was extremely important as supported by 75% of the respondents. Health

workers were considered extremely important at 18.75%. Friends and family interaction were each rated as important at 2.5%. These results could be indicative that CHWs were pivotal in sensitizing mothers on EBF. The explanation could be that the CHWs operated within the community and, as such, had created relationships with the mothers due to frequent interactions.

Constant Communication

The study sought to determine whether the respondents were in constant communication among themselves or with health workers regarding EBF. The findings were as demonstrated in Table 4.12.

Table 4.12: Constant Communication on EBF

	Frequency	Percent
Yes	70	87.5
No	10	12.5
Total	80	100.0

As exhibited in Table 4.12, the majority of the respondents (87.5%) indicated that they were in constant communication among themselves or with health workers regardless of whether they visited the clinic or not. However, 12.5% of the respondents indicated that they did not maintain constant communication on EBF, only doing so when they visited clinics and forgot about it once they left. Based on this finding, it can be inferred that a majority of the mothers were assertive and committed to learning more about EBF. This would have made them yearn to learn more and practice EBF for the better health of their babies, thus constantly communicating with other mothers, family members, friends, CHW, and other health practitioners.

Interview Findings

The study successfully administered in-depth interview guides to ten breastfeeding mothers and to one CHW, and one health worker.

Health Workers and CWHs Involvement in Changing Perceptions Regarding EBF

On whether health workers and CHWs were directly involved in changing perceptions of mothers on EBF during the first six months of lactation, a majority of the respondents agreed, stating that the health and CHWs managed to influence perceptions of mothers in a positive way. This was evidenced by the fact that most of the mothers who came to the clinics had an idea on what EBF was and practiced it. Additionally, when mothers took babies to the clinic for immunization, weight and height measurements were taken during the triage. However, other networks, such as friends and family, sometimes posed a challenge when it came to communicating to mothers on EBF.

Reasons for Mothers' Involvement in Interpersonal Communication Networks

On why mothers involved themselves in communication networks, one breast-feeding mother with a three-month-old baby had this to say, "mothers engage in communication networks so as to learn more about EBF and practice it as recommended by nutritionists. It was only through such that we share information when the CHWs visit us at our homes". The study hence revealed that it was through such communication networks that mothers discussed and learnt more about EBF. Moreover, mothers were encouraged at health facilities to form communication networks to share and talk about EBF. This emphasized the role of the health workers and the CHWs in the area.

Another respondent noted the reason for her being in the network as that sometimes after visiting the clinic, the mothers usually shared their experiences. According to Drassmaku (2012), sharing experiences was important in managing post-natal stress. When people share the same ideologies, they always end up forming a relationship which brings them together. Still, another respondent stated that, "the information we share usually is about what revolves around women such as how to feed a child. Such experience can only be obtained from other experienced mothers". One more respondent added that, "I found myself in the communication network unconsciously since they are comprised of community members and friends thus I get time to listen to the ideas shared on how to breastfeed. Such gatherings provide us with an opportunity to be enlightened and empowered on EBF".

Challenges Mothers Faced in the Communication Networks

The study also sought to identify the challenges faced by the mothers who were members of the communication networks. The challenges identified through the respondents (mothers) included the following:

1. Advice from some members encouraging others to breastfeed but also give food to their infants.
2. Encouragement to the respondents by their fellow mothers to supplement mother's milk with dairy or pasteurized milk.
3. The argument by some mothers that those who practiced EBF were financially challenged and thus could not afford to supplement breast milk with other foods.
4. Some CWHs as well as some health workers misled mothers that if the baby was not satisfied after breast-feeding and there was no milk left in the breast, it

was okay to give formula milk to the baby so that it would get satisfied. This shows that some CHWs had inadequate knowledge of EBF.

5. The environment in which mothers met to discuss about EBF was not conducive. This was because they mostly met in an open ground, and information shared could be distorted due to noise and other forms of distraction.
6. Mothers lacked enough time to meet and deliberate on EBF. This was because the meetings being informal were not properly scheduled and coordinated.
7. The mothers lacked formal communication and leadership as no individual was entrusted with the responsibility of organizing and scheduling such meetings.
8. All the Ten mothers and one nutritionist interviewed cited the issue of beliefs and myths as a major challenge. According to them, some mothers in the period of EBF believed that a little water was good for the baby as this would protect it from stomach problems. Such myths were widely shared among the mothers, consequently resulting in conflicting views and information on child-rearing during the first six months of the babies' lives.

The challenges mentioned by CHWs were different from those that the mothers mentioned. The CWHs argued that they were challenged by the issue of the coverage. This was due to the fact that the CHWs in the area were few and hence could not cover the whole of Korogocho. As such, the only appropriate time they would be able to interact with all mothers was when the mothers visited the clinics.

Suggestions for Overcoming the Challenges Faced When Communication about EBF

The CHWs suggested the following as measures for mitigating or overcoming challenges that were identified when communicating to the mothers on EBF:

1. That the whole community be educated on EBF.
2. That at least those who lived with the mothers could support the mothers by visiting the clinics with them so that they too could get to learn the correct information on EBF.
3. That the government could train and employ more CHWs who would be able to reach all the breast-feeding mothers.

Summary of Key Findings

1. Interpersonal communication networks were available for and among breast-feeding mothers in Korogocho.
2. Interpersonal communication networks played a great role in influencing exclusive breastfeeding among mothers in Korogocho.
3. Community health workers and the health workers were greatly involved and engaged in enhancing EBF in Korogocho.
4. Though friends and family members played a role in influencing EBF among mothers in Korogocho, their role, to a larger extent, contributed to the low uptake of the practice. This was due to limited knowledge on exclusive breastfeeding, upholding of backward cultural aspects, and having negative attitudes toward the practice of exclusive breastfeeding.
5. Mothers involved themselves in interpersonal communication networks through various avenues.
6. The overseers of the interpersonal communication networks, if trained, helped in encouraging the optimal practice of exclusive breastfeeding.

Summary

This chapter has presented, analyzed, and interpreted this study's quantitative and qualitative data. Chapter five will provide a discussion of the study's findings, conclusions, recommendations, and suggestions for further research.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS, AND RECOMMMENDATIONS

Introduction

This chapter discusses the overall findings and the implications of the same based on the study's theoretical framework. The research questions are used to draw conclusions based on the research topic. Finally, recommendations are drawn from the findings and areas of further research suggested. The purpose of this study was to explore the use of interpersonal communication networks in influencing EBF in Korogocho. The objectives of the study were: To explore the relationship between interpersonal communication networks and EBF among women in Korogocho informal settlement; to explore factors that led mothers into interpersonal communication networks; to explore the challenges affecting interpersonal communication networks on EBF by mothers in Korogocho informal settlement, and to determine the most used interpersonal communication networks in Korogocho informal settlement.

Discussions of Key Findings

Based on the study's objectives, several inferences were made and linked to existing literature.

Relationship between Interpersonal Communication Networks and EBF

The study revealed that:

Interpersonal communication networks were available and were used to a great extent to influence EBF in Korogocho. However, it was determined that the use of these networks was not to the optimum level due to some drawbacks such as

limited knowledge, culture, traditions and myths among others which interfered with full adoption of the practice. The connection and interaction of the relationships through communication could either positively or negatively influence the mother's decision to practice EBF. This finding was in agreement with that of Glaser and Strauss (2009) that the use of interpersonal communication networks through face to face brought about dramatic changes in increasing the rates of EBF.

Interpersonal communication among caregivers increased a mother's breast-feeding behavior especially through attending meetings aimed at improving their knowledge on importance of breast-feeding. This is however in contrast with Agunleye's (2012) argument that interpersonal networks like family played dual roles where those who did not practice EBF exerted pressure on younger mothers to discontinue breast-feeding. This shows that the availability of interpersonal communication networks can to some extent pose a challenge to the practice of optimum EBF. For example, the study found that through interpersonal communication networks mothers encouraged each other to supplement breast milk with either dairy or packed pasteurized milk.

Available interpersonal communication networks used to influence EBF were those including health workers and the CHWs. Findings from the EBF mothers suggested that mothers interacted with CHWs from whom they got information on EBF. In addition, the mothers revealed that they interacted with their friends and families from whom they got information that was either similar or contradictory that which they got from the CHWs. This finding is in tandem with that of Kimani-Murage et al. (2015) who observed that every two out of five children were given something to drink other than the mother's breast milk within three days of delivery out of pressure from family members, especially mothers-in-law. Similarly,

Agunbiade and Agunleye (2012) determined that some grandmothers and mothers-in-law believed that early introduction of supplementary feeding and herbal concoctions would be better only breast milk.

Information obtained through interpersonal networks, especially from the CHWs encouraged mothers to practice EBF. Such information was taken seriously as the mothers viewed the CHWs as experts. This notion motivated the mothers to exclusively feed their infants exclusively on breast milk to a great extent thus in a way achieving optimum EBF. As the respondents indicated, CHWs were available in the clinics and made home visitations.

Friends and family also supported mothers though their support influenced EBF to a lesser extent. The mothers expressed that their friends encouraged them to introduce water and food to early in the infants' lives. This finding was in line with that of Mumo (2013), who opined that IPC networks and their convergence had played a strong role in the practice of optimum EBF. The findings also revealed that some interpersonal communication networks such as friends posed a challenge.

In-depth interview findings indicated that interpersonal communication networks gave invaluable support to mothers. For example, CHWs encouraged mothers to breastfeed for six months. Mothers were convinced that EBF was sufficient and had all nutrients, and therefore, no supplements were needed during the first six months. The mothers were also informed that EBF was important for the growth and health of the baby

Health workers had a great responsibility in influencing EBF. Their part was to encourage and support breast-feeding in the Korogocho. This could be achieved if the healthcare system coordinated with community networks to provide breast-feeding support to ensure that mothers had access to breast-feeding assistance after

they returned home. An important part of this assistance was having access to trained individuals who had established relationships with members in the community, for example, fellow mothers and family who were flexible enough to meet mothers' needs outside of the hospitals and provide consistent information.

Factors Leading Mothers into Joining Interpersonal Communication Networks

The study revealed that:

Interpersonal communication networks were formed by an individual with similar perceptions and behaviors, for example, family members, peers, friends, personal or professional acquaintances. The study further revealed that mothers who were members of interpersonal communication networks or groups were in constant communication with other members of their networks even when they were not in clinics. This finding indicates the significance of distributing knowledge, common ground, and shared consensus on whichever joint or set action that may deliver social change. According to Dupuis and Ellis (2011), once a pair of ideas shift in the direction of each other, their definitions turn out to be additionally similar, if they are situated at a similar location, their definitions are alike, and they fully converge. Dupuis and Ellis further observed that convergence has a characteristic of people having similar attitudes to those with whom they have stronger ties.

Interpersonal communication networks were also formed during clinic visits when health talks involving CHWs and mothers were held. Mothers formed networks to interact and deliberate about EBF because of various reasons, including wanting to know more on how to practice EBF, share information when CHWs did home visits, to encourage each other at the clinics or at home, and to share different experiences and as well as what was learnt. These reasons indicated why mothers were involved in the networks. This is supported by Massagli's (2008) assertion that people with the

same needs created networks to engage in communication-related to their needs. It can therefore be concluded that communication networks were formed both at the clinics and at homes.

Although the interpersonal communication networks were informal, and at times lacked leadership and organization, leading to a lack of achievement of goals, a majority of the mothers agreed that they got involved in the networks since through them, they got valuable information on breast-feeding and routine prenatal care. The findings also indicated that through the interpersonal communication networks, mothers obtained information from clinicians who expanded their knowledge on correct infant breast-feeding and care.

Challenges Affecting Interpersonal Communication Networks on EBF

Though interpersonal communication networks were available and were used to influence EBF, the study determined that factors posed challenges to the effectiveness of the interpersonal communication networks. These factors included:

Some of the CHWs had inadequate knowledge and training on sensitizing the mothers on EBF. The consequence of this was that wrong information was shared with the mothers resulting in less than expected practice of EBF by the mothers.

Culture, myths, tradition, and religion. During the breast-feeding phase, a few mothers believed that a bit of water was beneficial for the infant as this would protect it from stomach challenges. They also believed that giving some traditional concoction to infants when they experienced stomach pains was the best cure. Such myths often gave conflicting views resulting in counter effects out of the efforts made towards communicating health messages on EBF.

The mothers' living environment. The study findings suggested that the environment posed a great barrier to interpersonal communication networks.

Korogocho being an informal settlement where congestion and noise were the order of the day created an unconducive atmosphere to talk about EBF. There was interruption because of noise, distractions of passing people and vehicles, and even inadequate space. According to Kimani-Murage et al. (2015), living conditions in urban slums posed a great challenge to the practice of EBF. A good example was insufficient living areas.

The interview findings revealed that advice given by the friends and family members was at times contradictory to that information given by CHWs. This probably arose due to inadequate knowledge on EBF among family members. As a result, some mothers who did not have the correct knowledge regarding EBF could end up sharing negative information on EBF resulting in a low uptake of the practice.

The Most Used Interpersonal Communication Networks

According to the findings:

The majority of the mothers agreed that they trusted the CHWs as the most effective in handling matters concerning EBF. This demonstrated that CHWs had a great role to play and positively influenced the adoption of EBF. Results from the in-depth interview involving CHWs revealed that the most available networks used to discuss EBF were health workers and CHWs, family, and friends.

Conclusion

Based on its findings, the study drew the following conclusions:

Firstly, interpersonal communication networks were available for and among mothers in Korogocho, Secondly, Interpersonal communication networks played a great role in influencing EBF. That, community health workers and the health workers were greatly involved and engaged in enhancing EBF, thirdly, That, though friends

and family members played a role in influencing EBF, their role to a larger extent contributed to low uptake of EBF. This was due to limited knowledge of the practice, upholding of backward cultural aspects, and having negative attitudes towards the practice of EBF. Fourthly, that, Mothers involved themselves in interpersonal communication networks through various avenues, and lastly, the overseers of the interpersonal communication networks, if trained, helped in encouraging optimal practice of EBF.

Recommendations

The study made the following recommendations:

1. Mothers could be encouraged to have their spouses, family, or friends accompany them as they visit the clinic. This would provide an opportunity for the spouses, family, and friends to also get the correct information which could contribute positively towards the practice of EBF.
2. There is a need to empower and train family and friends so as to be able to create a formal communication network. This could help avoid barriers such as poor environment and limited knowledge and hence improve communication on EBF at home, away from the clinics.
3. The need to empower and train more CHWs so that they can reach the mothers who do not often attend the health clinics.
4. There is a need to create formal venues and spaces where mothers can share information without any interruptions.
5. The need to include family members of breast-feeding mothers in education and support programmes. This is for the purpose of ensuring that such family members get to play a better role in enhancing EBF.

Recommendations for Further Research

The researcher proposes the following as possible areas for further research:

1. A study on the impact of culture, attitudes, and myths in communicating information on EBF in urban informal settlements.
2. An examination of the role of the family in communicating information on EBF in urban informal settlements.

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APPENDICES

Appendix A: Questionnaire for Mothers

I thank all the participants for accepting to take part in this research which will be helpful in determining use of interpersonal communication network in influence of interpersonal communication regarding exclusive breast-feeding in this area. I kindly request your honest opinion, all your opinion will be confidential and for academic purposes only.

Please mark ✓ in the appropriate box or fill in the blank where necessary

1. How old are you?

18 – 23 ( ) 25-30 ( ) 31-35 ( ) 36 and above ( )

2. What is your marital status?

Married () Divorced ()

Single () Separated ()

3. Mother's occupation

Housewife () Employment ()

Other (specify) _____

4. How old is your child? _____

Knowledge, Enhancement and practice of exclusive breast-feeding

What is exclusive breast-feeding? _____

5. a) Do you practise exclusive breast-feeding YES ( ) NO ( )

   b) If the answer above is NO why?

6. Choose one of the following; what encouraged you to practise exclusive breast-feeding?

   ( ) information I received from the nurses

   ( ) information I received from the community health workers

( ) information I received from friends

( ) information I received from my family members

7. What leads you to practice exclusive breast-feeding?_____

Interpersonal communication networks

8. Who encourages you to practise exclusive breast-feeding? _____

9. What kind of support in regard to exclusive breast-feeding does the a) health worker give you? _____

b) Community health worker_____

c) Family _____

d) Fellow mother/ friend _____

10. Which of the following interpersonal communication networks do you interact with when talking about exclusive breast-feeding? Health workers( ) friends ( ) CHW( ) family ( )

11. How did you come to know about exclusive breast-feeding?

From friends ( ) from families ( ) from community health workers ( ) from the health workers ( )

12. From whom do you interact with the most and trust to talk about exclusive breast-feeding?

From friends ( ) from families ( ) from community health workers ( ) from the health workers ( )

13. Are you in communication on EBF aside from when you come to the clinics YES ( ) NO( )

14. If YES why do you involve yourself in those networks?

_____

15. What are the challenges that you face when you are in those networks?

_____

16. How do you rate interaction of the networks on exclusive breast feeding? (Please tick only one answer from the options given below)

	Extremely important	Very Important	Important	Least Important	Not Important
a. Health Workers					
b. Friends					
c. Community Health Workers					
d. Family					

Thank you for your co-operation.

Signature of Researcher: _____

Appendix B: Interview Guide for Mothers

Date_____

Health facility_____

1. What do you understand by exclusive breast-feeding?
2. Do you practise exclusive breast-feeding?
3. Who motivated you to practice exclusive breast-feeding?
4. What are the challenges that you face when practising exclusive breast-feeding?
5. Does your family, friends, CHW, nurse talk to you about exclusive breast-feeding?
6. What do they tell you in regard to exclusive breast-feeding?

Appendix C: Interview Schedule for Health Workers/nutritionist and Community Health Workers

Date_____

Health facility_____

1. What position do you hold in this area or facility?
2. What are the available and most efficient interpersonal communication networks that are used here to communicate on exclusive breast-feeding to the mothers?
3. What challenges do you face when communicating to the mothers on exclusive breast-feeding?
4. What do you think should be done to prevent the challenges that you experience?
5. Do you think the interpersonal networks have changed the mothers' perception on exclusive breast-feeding? And In what way?

Appendix D: Ethical Clearance

Daystar University Ethics Review Board
Our Ref. DU-ERB/ERB/OCT2016/025
27TH October 2016.
Cynthia Mwamba,
Daystar University.

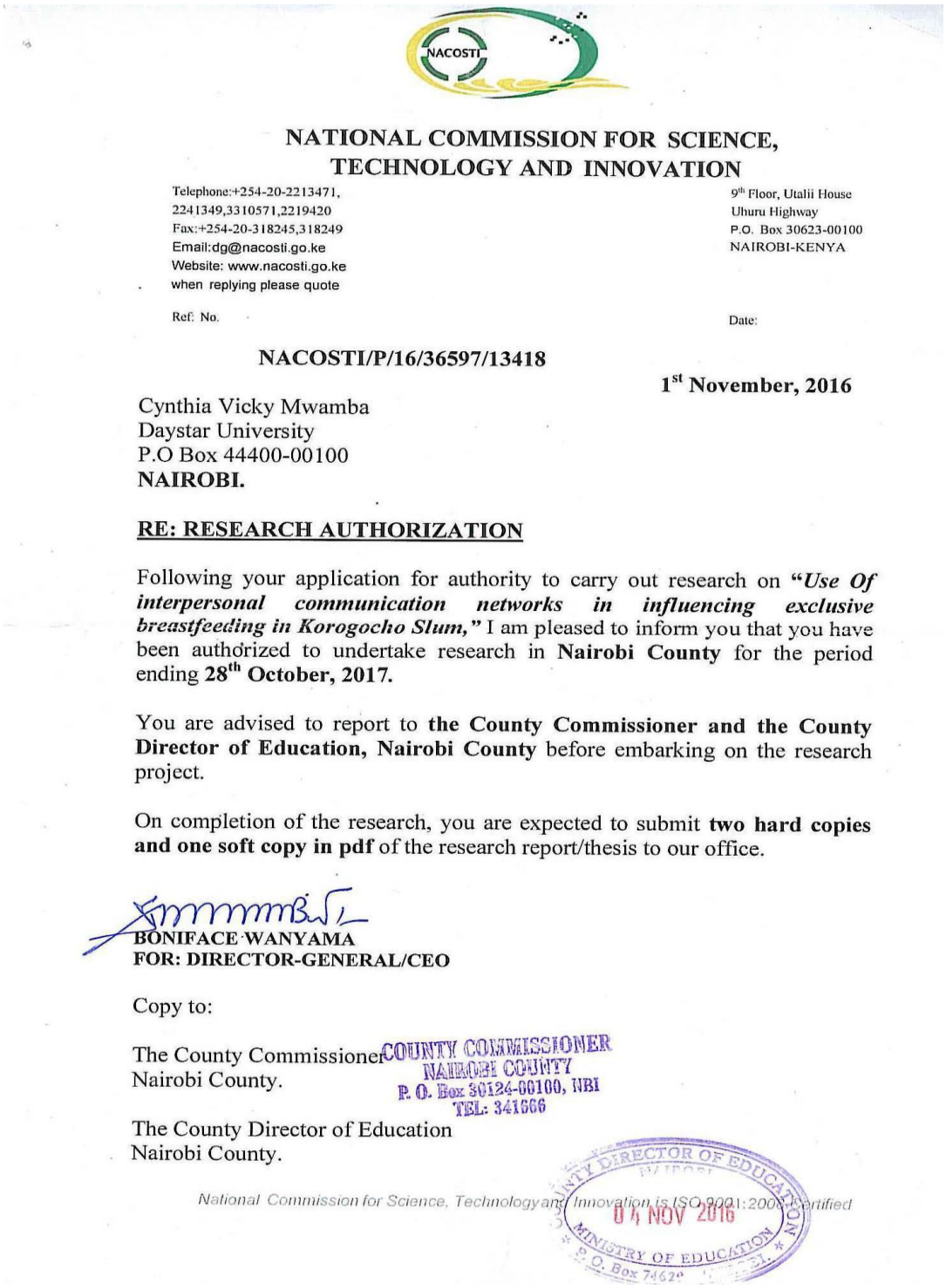
Dear Cynthia,

RE: USE OF INTERPERSONAL COMMUNICATION NETWORKS IN INFLUENCING EXCLUSIVE BREASTFEEDING IN KOROGOCHO INFORMAL SETTLEMENT

Reference is made to your proposal dated 12th October 2016 requesting for ethical approval by Daystar University Ethics Review Board.
We are pleased to inform you that ethical review has been done and approval granted. In line with the research projects Policy, you will be required to submit a copy of the final research findings to the Board for records.
You will also be required to seek for a research permit from the National Commission for Science, Technology and Innovation (NACOSTI).
Yours sincerely,

Dr. George Kimathi,
Secretary, DU – ERB.

Appendix E: Research Permit



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NAIROBI-KENYA

Ref: No. NACOSTI/P/16/36597/13418

Date: 1st November, 2016

Cynthia Vicky Mwamba
Daystar University
P.O Box 44400-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Use Of interpersonal communication networks in influencing exclusive breastfeeding in Korogocho Slum,"*** I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **28th October, 2017.**

You are advised to report to **the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

COUNTY COMMISSIONER
NAIROBI COUNTY
P. O. Box 30124-00100, NBI
TEL: 341666

The County Director of Education
Nairobi County.

COUNTY DIRECTOR OF EDUCATION
04 NOV 2016
MINISTRY OF EDUCATION
P. O. Box 7462

National Commission for Science, Technology and Innovation is ISO 9001:2008 Certified

Appendix F: Authorization From Nairobi County

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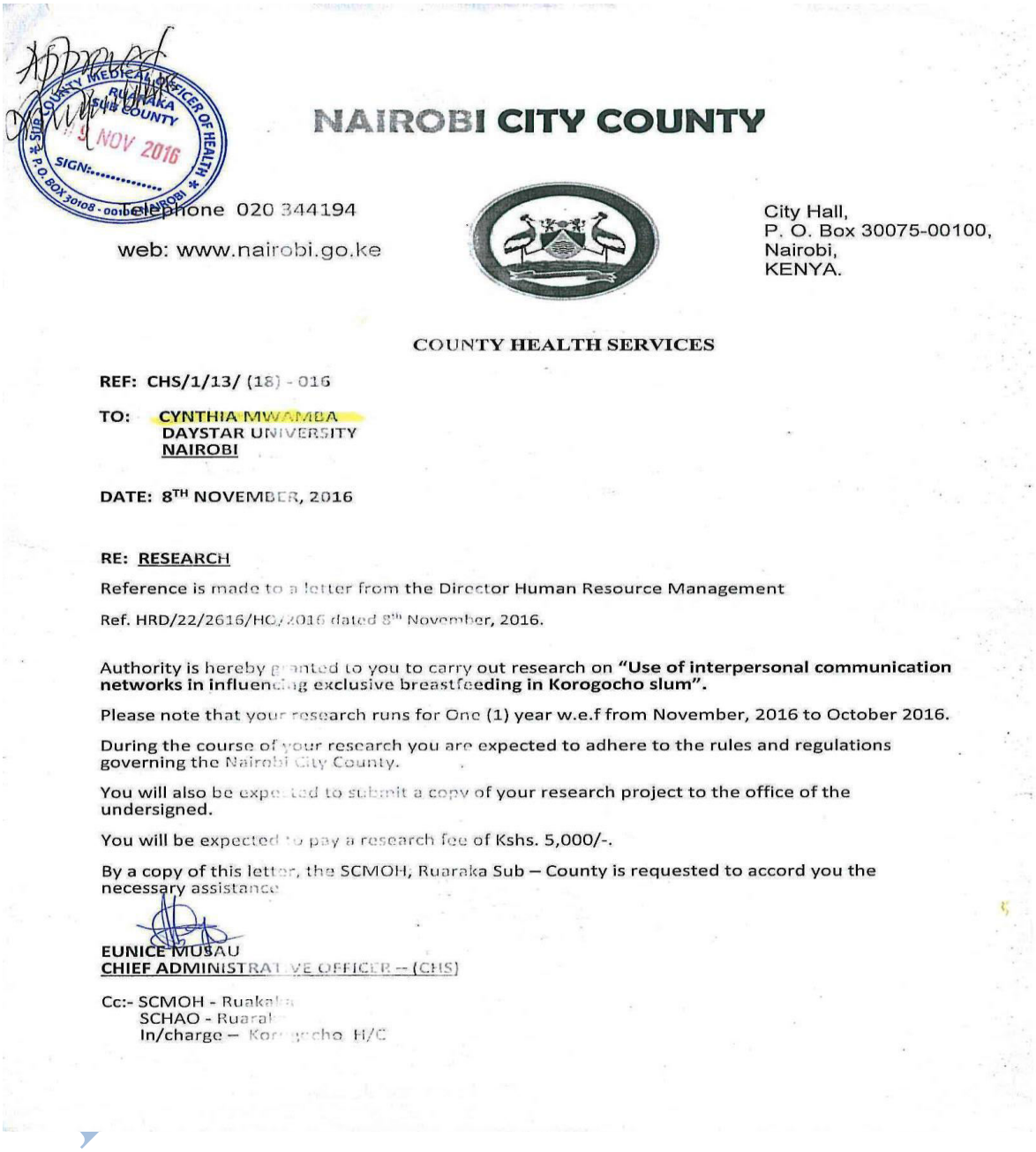


NAIROBI CITY COUNTY

SUB COUNTY MEDICAL OFFICER OF HEALTH RUARAKA SUB COUNTY P.O. BOX 30108 - 00100 NAIROBI
9 NOV 2016
SIGN:.....

Telephone 020 344194
web: www.nairobi.go.ke

City Hall,
P. O. Box 30075-00100,
Nairobi,
KENYA.

COUNTY HEALTH SERVICES

REF: CHS/1/13/ (18) - 016

TO: CYNTHIA MWAMBA
DAYSTAR UNIVERSITY
NAIROBI

DATE: 8TH NOVEMBER, 2016

RE: RESEARCH

Reference is made to a letter from the Director Human Resource Management

Ref. HRD/22/2616/HC/2016 dated 8th November, 2016.

Authority is hereby granted to you to carry out research on **"Use of interpersonal communication networks in influencing exclusive breastfeeding in Korogocho slum".**

Please note that your research runs for One (1) year w.e.f from November, 2016 to October 2016.

During the course of your research you are expected to adhere to the rules and regulations governing the Nairobi City County.

You will also be expected to submit a copy of your research project to the office of the undersigned.

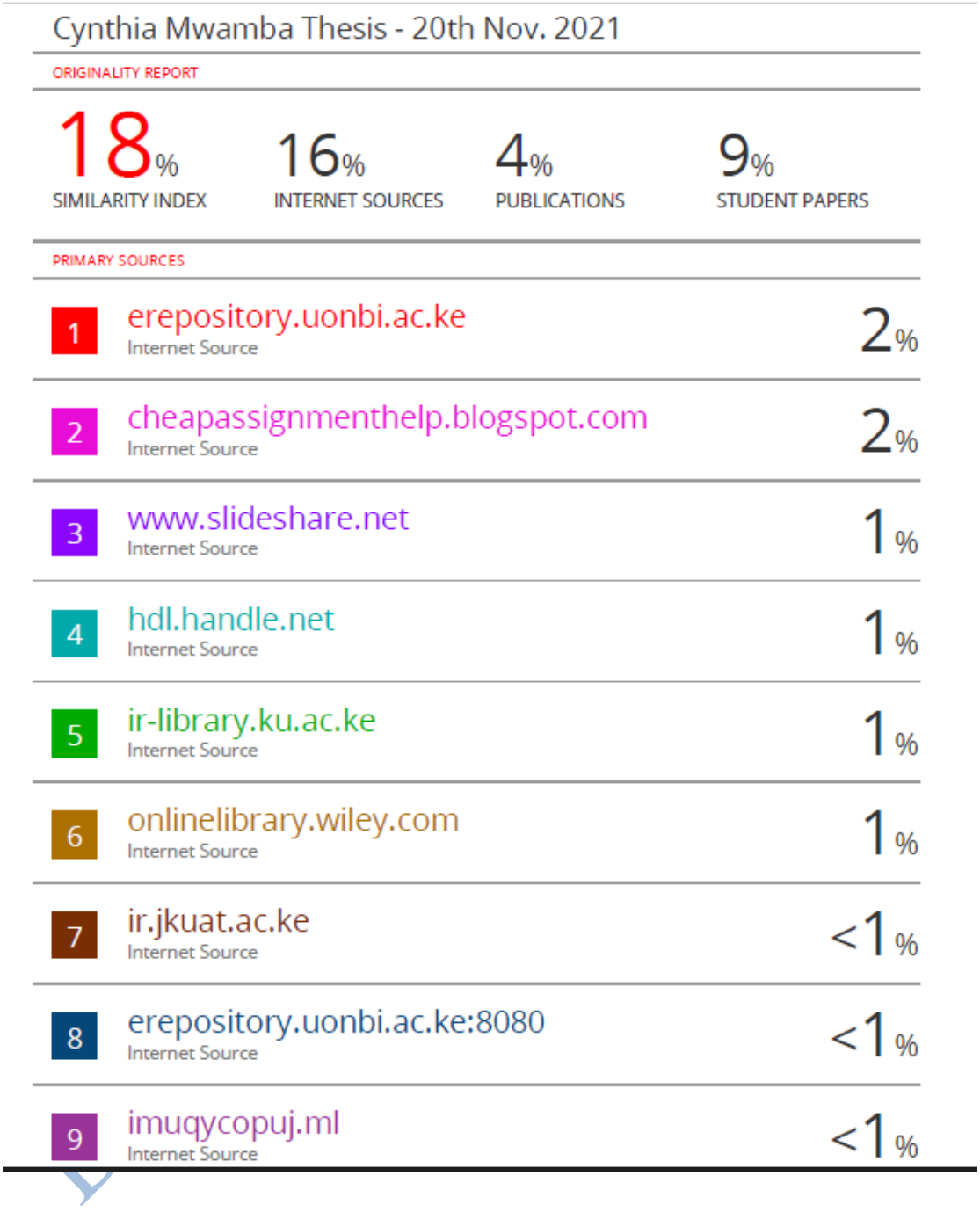
You will be expected to pay a research fee of Kshs. 5,000/-.

By a copy of this letter, the SCMOH, Ruaraka Sub – County is requested to accord you the necessary assistance

EUNICE MUSAU
CHIEF ADMINISTRATIVE OFFICER – (CHS)

Cc:- SCMOH - Ruaraka
SCHAO - Ruaraka
In/charge – Korogocho H/C

Appendix G: Plagiarism Report



Cynthia Mwamba Thesis - 20th Nov. 2021

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