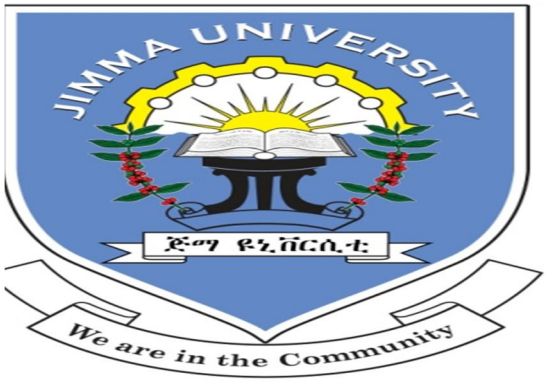

INSTITUTE OF HEALTH

DEPARTMENT OF POPULATION AND FAMILY HEALTH

EFFECT OF BREASTFEEDING EDUCATION AND SUPPORT PROVIDED TO MALE PARTNERS ON OPTIMAL BREASTFEEDING PRACTICE IN HADIYA ZONE, SOUTHERN ETHIOPIA: A *cluster-randomized controlled trial.*

By

MULATU ABAGEDA (MSc)

A PhD RESEARCH PROPOSAL SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF JIMMA UNIVERSITY FOR THE FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY (PhD) IN REPRODUCTIVE HEALTH.

DECEMBER, 2021

JIMMA, ETHIOPIA

Effect of breastfeeding education and support provided to male partner on optimal breastfeeding Practice in Hadiya Zone, southern Ethiopia: *A cluster-randomized controlled trial.*

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DECEMBER, 2021

JIMMA, ETHIOPIA

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Abbreviations

BF	Breastfeeding
EBF	Exclusive Breastfeeding
BSE	Breastfeeding Self-Efficacy
EDHS	Ethiopia Demographic and Health Survey
WHO	World Health Organization
SNNP	Southern Nations, Nationalities, and Peoples
BFESI	Breastfeeding education and support intervention
SPSS	Statistical Package for Social Science
HCF	Health care facilities
OBFP	Optimal breastfeeding practices
OBF	Optimal breastfeeding
HC	Health centre
IYCF	Infant and Young Child Feeding
FGD	Focus Gourp Discussion

Proposal summary

Background: Optimal breastfeeding is essential for the survival, growth, and development of children, as well as the health of mothers. Globally, optimal breastfeeding practices are still low: only 42% of newborns start breastfeeding within the first hour of birth, 41% of infants less than 6 months of age are exclusively breastfed, and only 45% of mother's breastfeed for at least two years. Every year, it is estimated that optimal breastfeeding practices might avoid 823,000 child deaths. However, breastfeeding practices are not optimal in Ethiopia. Male partners play a vital but frequently neglected role in the promotion of breastfeeding practices, and they are currently not included in health-care providers' breastfeeding education. The effect of breastfeeding interventions delivered to male partners on optimal breastfeeding has not been studied in the Ethiopian context.

Objectives: To evaluate the effect of breastfeeding education and support provided to male partners on optimal breastfeeding practice in Hadiya Zone, southern Ethiopia.

Methods: A cluster-randomized controlled trial will be conducted to evaluate the effect of breastfeeding education and support provided to male partners on optimal breastfeeding practice compared to routine care at the community level. The intervention will be provided to the mothers and male partners by trained village health workers. The mothers and male partners in the Intervention Group (IG) will receive postnatal breastfeeding education and support, but those in the Control Group (CG) will receive routine care. The breastfeeding education and support intervention is comprised of four components: 1) Antnatal BF education on their 3rd trimester of pregnancy, 2) providing specific take-home print materials, 3) Telephone call counseling and 4) Individual home visit**.** A total of **408** couples in their third trimenster pregnancy will be recruited to either the intervention group (204) or a control group (204) from 16 clusters (Kebeles) and the duration of the intervention is 6 months. Epi-data version 3.1 will be used to enter data, and STATA version 14.0 will be used to analyze it. The analysis will be done by intention to treat approach. Generalized Estimating Equation (GEE) model will be used to dteremine the effect of the intervention on optimal breastfeeding practice. P values < 0.05 will be used to declare statistical significance.

Expected outcomes: Improved optimal breastfeeding practice

Work plan and Budget: the total duration of the research from proposal development to completion is from September 2020 to May 2023 and is stated on the work plan. A total of **310,864 ETB** budget is proposed to conduct the research

Keywords: optimal breastfeeding practice, male partner, education and support, Ethiopia

ACKNOWLEDGMENTS

I would like to thank my promoters **Professor Tefera Belachew** and **Dr. Mubarek Abera** for the valuable advice and comments they have provided during the whole course of the project proposal writing.

I would also like to extend my thanks to Jimma University institute of health college of public health, and the department of population and family health for providing me the opportunity to carry out this study.

I would also like to acknowledge my home institution Wachemo University for its material support and for providing me all the necessary facilities needed during the study period.

CHAPTER ONE: INTRODUCTION

1.1. Background

Breastfeeding is an unrivalled means of delivering appropriate nutrition for infants' healthy growth and development; it's also a crucial element of the reproductive process, with significant implications for mothers' health. As a global public health recommendation, infants should be exclusively breastfed for the first six months of life to obtain optimal growth, development, and health. Subsequently, to meet their evolving nutritional requirements, infants should receive nutritionally adequate and safe complementary foods with breastfeeding continues for up to 2 years of age or beyond (1).

Breastfeeding is one amongst foundations of child health, development, and survival. For these reasons, the World Health Organization (WHO) recommends that breastfeeding should be initiated within the first hour after birth and that infants should exclusively breastfeed for the first 6 months; complementary foods should then be introduced, with continuing breastfeeding till twenty four months of age or older (2).

Even though it’s a natural act, breastfeeding practice is also a learned behavior. Nearly all mothers can breastfeed provided they have accurate information, and support within their families and communities and from the health care system. They should also have access to skilled practical help from trained health workers, lay and peer counselors, and qualified lactation consultants, who can help to make mothers’ confidence, improve feeding techniques, and resolve breastfeeding problems (1).

Supporting mothers to breastfeed is everyone’s responsibility, inclusive of governments, donors, global organizations and civil society. Legislators and policymakers want to create an enabling environment that allows mother to be informed of their options and supported throughout the whole breastfeeding experience, starting from the first hour of a newborn’s life. When governments endorse policies that protect, promote, and support breastfeeding, women will be enabled to make an knowledgeable decision on feeding their children and the health of women and children everywhere will be improved (3).

Some of the vital elements affecting the duration of breastfeeding are reported to be psychosocial factors including mothers’ determination to breastfeed, male partners’ support on this issue, and mothers’ self-confidence. Given the role of male partners in the family

concerning decision-making, it is important to include male partners in training programs so that they support their wives in breastfeeding (4).

Male partners' beliefs on whether their partners should breastfeed, strongly predict maternal intention to breastfeed. Additionally, mothers who perceive that their partners choose breastfeeding are less likely to cease breastfeeding at any time compared to those who perceive their partners choose bottle-feeding, or are unsure about how their child is fed (5).

Mother's satisfaction with male partner involvement also improves breastfeeding outcomes at six months postpartum and relationship satisfaction up to 24 months postpartum and mother's early satisfaction with male partner involvement is an important predictor of breastfeeding duration up to six months postpartum and relationship satisfaction up to 24 months postpartum (6). The paternal intervention aims at strengthening breastfeeding knowledge, positive attitudes, and supportive involvement of male partners in providing practical, physical, and emotional support to the mother, which may improve breastfeeding practices (7).

Termination of EBF earlier than six months of age was associated with increased incidence of diarrhea, fever, and ARIs. The earlier termination of EBF was also associated with an increased occurrence of childhood wasting or being underweight. EBF cessation time had an effect on the incidence of childhood morbidity and adverse nutritional outcomes. It should be stressed on promotion of effective implementation of exclusive breastfeeding for the first six months of childhood life to reduce childhood morbidities and improve child growth (8).

Breastfeeding interventions aiming on male partner from LMIC are limited. More research is required to investigate the effectiveness of male partners' involvement in breastfeeding education on breastfeeding outcomes, particularly in low-income countries. Therefore this study aims to evaluate an community-based educational intervention program in South Ethiopia, Hadiya Zone, targeting male partners at 3rd trimnester of pregnancy to stimulate their engagement and to establish male partner contribution in supporting optimal breastfeeding practices.

1.2 Statement of the problem

Globally, breastfeeding rates are far lower than is needed to optimally protect the health of children and women. Less than half(42%) of newborns begin breastfeeding in the first hour after birth. 41% of infants less than 6 months of age are exclusively breastfed, far small of the 2030 global target of 70%. While over two-thirds of mothers continue breastfeeding for at least one year, by two years of age, breastfeeding rates drop to 45% (3).

Globally, 60% of infant and young child deaths occur as result of inappropriate infant feeding practices and infectious diseases. In which two-thirds of these deaths are attributable to sub-optimal breastfeeding practices (1).

In 2006 an estimated 9.5 million children died before their 5^{th} birthday, and two-thirds of these deaths happened in the first year of life. It is estimated that sub-optimal BF, mainly non-exclusive breastfeeding in the first six months of life, results in 10% of the disease burden in children younger than five years and 1.4 million deaths (9).

Contrary to the WHO recommendation only 59% of infants under age 6 months are exclusively breastfed in Ethiopia, 14% of infants 0-5 months also consume plain water, 1% of them consume non-milk liquids, 8% consume other milk, and 13% consume complementary foods in addition to breast milk and 9% of infants under 6 months use a bottle with a nipple, a practice that is discouraged because of the risk of exposing the child to illness. Exclusively breastfeeding decreases sharply with age from 73% of infants-age 0-1 month to 68% of those age 2-3 months and further, to 40% of infants-age 4-5 months. Continuing to breastfeed until age 2 is currently decreases from 85% among children age 12-17 months to 76% among children age 18-23 months (10).

Based on data from the 2011 and 2016 Ethiopian Demographic and Health Surveys (EDHS), termination of EBF before six months was associated with increased occurrence of diarrhea, fever, and ARIs. Exclusive breastfeeding can avert 27% of ARI, 42% of diarrhea, 21% of fever (8).

The WHO has underlined that more scientific evidences are needed across different regions, countries, population groups and contexts, to adequately and sensitively protect, promote and support breastfeeding (11). The involvement of family in education, counseling, and information efforts about the benefits and management of breastfeeding is also understudied (11).

Promotion of breastfeeding needs multilevel supportive measures with interventions being applied through several channels. Male partners have been named as one recommended target in promoting breastfeeding (7). Yet, the literature suggests that male partners have not been given adequate emphasis in the promotion of breastfeeding (12). Male partners' attitude and support affect breastfeeding outcomes. However they are not currently targeted in breastfeeding support and care provided by health care professionals. Breastfeeding interventions delivered to Male partners have been shown to increase breastfeeding exclusivity and duration (12).

Including male partners as key players in the promotion of breastfeeding is a feasible and innovative strategy that should be scaled up and replicated. Mobilizing male partners' support for breastfeeding through an educational intervention makes a positive impact on early initiation and reduces the use of prelactal feeding. Male partners have an important but often neglected role in the promotion of healthy breastfeeding practices (13).

Male partners want to be involved and support their partners in breastfeeding but many feel left out and helpless. They also wants specific and accessible information about the benefits of breastfeeding, strategies to encourage and support their partner. Male partners have a clear interest to be involved with and support their partners through the breastfeeding experience. However, they felt they lack the knowledge, understanding, and ability to do this and called for more education and support to be directed towards them, instead of their partner alone (7).

The role of male partners in supporting EBF has been included in the global strategy for breastfeeding promotion issued by the WHO (1), but the role of the father was not mentioned or addressed explicitly in the revised version of the Ten Steps of successeful bereastfeeding (3).

Male partners recognized the benefits of breastfeeding and needed their children to breastfeed but were unsure of their place in the feeding practice because they felt it was not their body. Even though they were aware of the benefits of breast milk for infants, fathers felt less informed of the practicalities of breastfeeding and the potential challenges they and their partner might have to overcome to breastfeed successfully for the recommended 6 month period (14).

Breastfeeding interventions focusing on male partners from LMIC are limited. Breastfeeding interventions targeting male partners in low and middle income countries (LMIC) increase the level of early breastfeeding initiation, exclusive breastfeeding, and continued breastfeeding. More research is required to investigate the effectiveness of male partners' involvement in breastfeeding education on breastfeeding outcomes, particularly in low-income countries (15).

To continue exclusive breastfeeding, and increase its duration, the help of family members is more important than education and peer support. Support that is only offered reactively in which mothers are expected to initiate the contact is unlikely to be effective. Therefore, women should be offered ongoing support so they can predict that support will be available (16).

Modifiable factors that influence mother's breastfeeding decisions are breastfeeding intention, breastfeeding self-efficacy, and social support. The modifiable factors that are positively associated with breastfeeding duration are the mother's breastfeeding intention, her breastfeeding self-efficacy, and her social support. Intervention studies to date have focussed on modifying these factors individually with variable results. Existing breastfeeding promotion strategies often do not adequately attempt to modify breastfeeding three factors. No interventional studies have been conducted to positively modify all three factors simultaneously (17).

The role of practical and emotional support from male partners is an essential ingredient to successful breastfeeding, increasing the mother's confidence and enabling her to maintain an adequate milk supply. Male partner want to be part of the parenting role and need information and knowledge. This would allow them to synthesize the information and apply the knowledge to feel confident and competent in their new role as an involved parent (18).

Results from several publications suggest that male partners can serve as resources for child care and as active supporters for breastfeeding in the family and BF education interventions could be developed to promote paternal involvement in supporting breastfeeding (19). Male partners have been educated at antenatal classes where they learn how to support the breastfeeding practices of the mothers. Programs designed to promote paternal involvement in supporting breastfeeding through educational interventions have been implemented mostly in developed countries (20, 21).

Except quasi-experimental study design conducted in Hawassa city in that trial, the intervention consisted of only one prenatal educational session, none of the interventions were provided during pregnancy as well as the postnatal period, and none of the projects used control groups in Ethiopia (22).

A lot has been said and done about breastfeeding and mothers. Breastfeeding advice is given during prenatal, immediately after birth then throughout puerperium. Most pictures on breastfeeding show mothers and babies but not men. Therefore this study aims to evaluate an community-based educational intervention program in South Ethiopia, Hadiya Zone, targeting fathers at 3rd trimnester of pregnancy to stimulate their engagement and to establish male partner contribution in supporting optimal breastfeeding practices.

Chapter Two: Literature review

The male partners intervention aims at strengthening breastfeeding knowledge, attitudes, and supportive practice of male partners in providing practical, physical, and emotional support to the mother, which may improve optimal breastfeeding practices. Breastfeeding interventions delivered to male partners have been shown to increase exclusive breastfeeding and duration. There are a large number of studies of education and support intervention in breastfeeding practices. However, the focus of this research is on the effect of breastfeeding education and support provided to the male partners in optimal breastfeeding practices.

Reviewed literature themes for this study included: Prevalence of optimal breastfeeding practices, previous studies to determine paternal knowledge, attitude and supportive practice of breastfeeding, effect of male partner involvement in breastfeeding practices, previous studies to determine maternal breastfeeding self-efficacy**,** maternal perceptions on male partners' breastfeeding support and breastfeeding promotion intervention and child morbidity.

2.1 Overview of Prevalence of optimal breastfeeding practices

Prospective cohort study done in Nigeria, showed that approximately 48.2% of the mothers initiated breastfeeding immediately (<1 hour) after delivery. Breastfeeding the baby on demand was more common than timed breastfeeding 92.5% vs. 7.5%. 82.5% of mother gave their babies colostrums, and 25.9% gave prelactal feeds, 37.3% breastfed exclusively for 6 months (23). In other cross-sectional study done in Lao PDR, almost all, 98.8%, of the mothers had ever breastfed; 19.4% were EBF at 6 months, 61.2% continued breastfeeding at 1 year of age, 18.6% continued at 2 years of age and 68.0% were still breastfeeding at the time of the survey, 31.1% had stopped completely. Approximately half of the mothers initiated breastfeeding immediately after delivery (24).

According to a cross-sectional study conducted in Goba district, South East Ethiopia revealed that the prevalence of exclusive breastfeeding in the last 24 hours prior to survey was 71.3 percent. The average duration of exclusive breastfeeding was three months and with a mean frequency of breastfeeding of six times per day (25).

Sub-optimal breastfeeding practices were found to be high, with a prevalence of 56.9% of infants receiving sub-optimally breastfeeding (26). More than three-fourth (87.93%) of mothers sub-optimally breast-fed their children. It were significantly associated

with not utilization of family planning, lack of knowledge about the duration of exclusive breastfeeding, and not attending health-education sessions (27). In Northwest Ethiopia, four out of ten newborns were exposed to sub-optimal breastfeeding practices (28). These studies reveal that there is a high prevalence of sub-optimal breastfeeding behaviors, which need intervention.

In Southern Ethiopia, studies were conducted to determine the prevalence of optimal breastfeeding practices. About 42.1% of mother's practiced optimal breastfeeding (29) and another study done in South Ethiopia, Hadiya Zone also reveals that the prevalence of OBF was found that 37.3% (30). A multilevel analysis from a national survey study of Ethiopia, only 45.4% of children are optimally breastfed (31). In these studies, the prevalence of OBF is very low specifically in South Ethiopia which needs intervention to increase optimal breastfeeding practice.

2.2 Paternal knowledge, attitude, and Supportive practice of breastfeeding

According to a study done in India, a mother's infant feeding attitude score was significantly correlated with her husband's score and fathers' attitudes do support breastfeeding but do not influence the time duration of exclusive breastfeeding and mother's and partner's IIFAS scores were highly correlated, and higher scores were significantly associated with their intentions to breastfeed. However, further study on breastfeeding attitudes and interventions are needed to see if improving partners' attitudes toward breastfeeding will also improve mothers' attitudes and thereby enhances breastfeeding initiation and duration of (32, 33).

According to a research in India, 58.1% of male partners knew about breastfeeding before the baby was born, and 73.1% wanted to learn more after the baby was born. Only 36.6 percent of male partners had received education from health care providers, despite the fact that 96.8% of male partners felt they had obtained the required knowledge. A positive attitude toward breastfeeding was found in male partners with more knowledge, but this did not influence the duration of exclusive breastfeeding (34). However, this study indicates that male partners' complete participation in postnatal breastfeeding education has an impact on the duration of exclusive breastfeeding.

According to the findings of the Bangladeshi study, a father's knowledge of EBF can, in one way, significantly enhance a mother's knowledge by sharing it, and, in another way,

can improve his attitude toward offering different types of support to his partner/wife, thereby increasing the chance of EBF practices by mothers. A mother's increased EBF knowledge improves her willingness to practice EBF, which is also influenced by the father's attitude (35).

According to findings from Turkey, 92.1% of participants reported a wish to breastfeed their infants; however, only 58.6 % discussed this with their partners. It was revealed that 88.7% of male partners were willing to help with housework so that their wife could breastfeed, and that 57.6% believed that breastfeeding would benefit both the mother and the infant psychologically. Approximately 48.8% of participants showed an interest in attending a breastfeeding educational program for fathers (36).

According to a study conducted in Taiwan, the partner’s initial support of breastfeeding, encouragement to use the lactation room and a sense of a partner’s support for baby care were both significant predictors of the employed mother’s intention to use the lactation room and to continue breastfeeding after returning to work, implying a positive influence (37).

Studies from low-income countries have also shown the effects of psychosocial factors on maternal behavior to exclusively breastfeed for six months and to continue breastfeeding for two years. These findings showed that mothers with higher breastfeeding self-efficacy are knowledgeable and have positive attitudes about breastfeeding and those who have access to support are more likely to breastfeed exclusively for six months (38, 39). Breastfeeding intention, confidence, knowledge, attitude, and social support are modifiable factors through interventions focussed on breastfeeding education and promotion (17, 40, 41).

Breastfeeding practice is also dependent on the father’s attitudes as well as their infant feeding preferences and beliefs (5, 42).

According to a study conducted in UK, fathers knew the health benefits of breastfeeding and wanted their child to breastfeed but were unsure of their place in the feeding process because they felt it was not their body and fathers felt less informed of the practicalities of breastfeeding and the potential challenges they and their partner might have to overcome to breastfeed successfully for the recommended six month period (14) and they felt they lack the knowledge, understanding, and skill to do this and demanded that more education and support be focused towards them, rather than their partner alone (7). Because the majority of

the participants in these researches came from middle and upper socioeconomic backgrounds, the fathers' perspectives do not reflect of the regions with lower-income populations.

The study discovered that there are numerious social, beliefs, and traditions that the mothers consider important for their breastfeeding and EBF practices. The themes that were not in favor of the practice of EBF were as follows: breast milk is very light, breastfeeding could affect mothers appearance, breastfeeding is tiring, breast milk has a bad odor, there is fear of the evil eye, breast milk may become unclean, and burping causes pain to the breasts. When establishing interventions to improve breastfeeding practices, it is critical to examine the beliefs that obstruct the practice (43).

According to the researchers, Increased male partner support for breastfeeding should include multiple components to improve knowledge, empower men to be more involved in the breastfeeding decision, provide specific tips on how men can be involved in breastfeeding, and increase comfort with breastfeeding in public (44) and to increase men's and women's awareness and internalize the message that the practice of breastfeeding should be centered on the conjugality and completeness of all members of the family, thereby involving the father in the breastfeeding process(45). Both studies suggest that an intervention is very important to increase male partner support on breastfeeding practices.

According to finding of the study, mothers perceived male partners play an important role in the breastfeeding process by emotionally and physically supporting the mother and are a critical component to breastfeeding success. In addition, mothers perceived male partners may benefit from more peer and professional support, lactation consultant service, and breastfeeding education. Many women mentioned emotional support as being one of the key ways that their male partners supported breastfeeding (46) and in other way, love between partners can be a powerful motivator and enabler for men's practical support for maternal and child health. The improved couple relationships are identified by men and women as a key positive outcome following male partner involvement intervention(47).

Male partners' positive attitude and supportive involvement greatly influenced breastfeeding decision and commitment among mothers and were associated with increased breastfeeding rates and duration. The exclusion of male partners from breastfeeding support and preparation may result in decreased quality of life and self-efficacy among fathers. However, there is lack of clear evidence regarding what exactly defines the nature of male partners' support (48).

The study in Mekelle, Ethiopia has shown that mothers and fathers have poor knowledge of but reasonably favorable attitudes towards breastfeeding that are aligned and do not vary significantly. However, there are differences in the perceptions of intention to support breastfeeding, with fathers indicating a higher level of intention to support but mothers having lower expectations(49).

The formative qualitative study conducted in Mekelle, Ethiopia, identifies four key themes related to breastfeeding. The strength of a scientific approach, the positive influence of healthcare, and alterations in gender roles that maximized the possible support from male partners were all mentioned by parents as chances for breastfeeding. However, there still a confilct between the beliefs of older generations and current best-practice. Parents continue to need ongoing support to practice optimal breastfeeding. Therefore, interventions that are easily accessible and provide messages to all family members need be developed (50).

2.3 Effect of male partner involvement in breastfeeding practices

In a quasi-experimental study done in China, the prevalence rates of EBF at 4 months and 6 months of the intervention group (51.4%) were significantly higher than there were in the control group (26.4%). Women in the intervention group were less likely to use infant formula at 1 and 6 months postpartum (5.6% vs 23.5%). In the process of breastfeeding partners in the intervention group supported their partners by taking care of the infant, doing housework, and providing emotional support (51). But the sampling of this study is convenient consisting and there is no randomization. This study, it is a small sample size to explain the intervention effect of male partners' support on their partner’s breastfeeding practices.

In a clinical trial performed in Brazil, postpartum advice increases the breastfeeding knowledge of mothers and fathers. The fathers' knowledge also significantly influence breastfeeding rates. The children whose fathers knew more had a 1.76 times higher chance of being exclusively breastfed at the end of the first month, and a 1.91 times higher chance of receiving maternal milk at the end of the third month. Offering broader interventions in the prenatal and postnatal period potentially have greater impact, especially if the fathers are included in these interventions (52). But this clinical trial was performed university hospital which does not include community participants.

In controlled clinical trial conducted in southern Brazil, with only mothers exposed to the intervention, and in the group with mothers and male partners exposed to the intervention show that paternal inclusion significantly increased the rates of EBF but not the rates of any breastfeeding. This study was conducted in a single hospital environment, and individuals were assigned to sample sizes in a sequential rather than random order. Therefore, it would be of interest to test this intervention in our culture and settings with random allocation of the participants (53).

In a study conducted in Western Australia, mothers in the intervention group (77 %) reported enjoying breastfeeding more than mothers in the control group (69 %) whose partner did not receive the antenatal education session intervention. This paper recommended more research to explore the efficacy of antenatal education versus postnatal education and support is required to determine the most cost-effective way of enhancing male partners' support (21).

The need to involve male partners in breastfeeding also supported by the study done in the United States; in which mother who stated that the male partner's opinion was not at all important were more likely to never breastfeed and early cease breastfeeding compared to women who stated that the male partner's opinion was very important for their breastfeeding decisions. This study highlights the importance of interventions aimed at raising breastfeeding initiation and duration rates among a broader variety of people in a social support network (54).

In the United States, there has been an educational intervention that was designed to encourage fathers to advocate for breastfeeding and to assist his partner if she chooses to breastfeed in which expectant fathers were assigned randomly to attend either a 2-hour intervention class on infant care and breastfeeding promotion or a class on infant care only. Overall, 74% of women whose partners attended the intervention class initiated breastfeeding, compared to 41% of women whose partners attended the control class. Again, the study emphasized the importance of fathers' involvement as breastfeeding advocates in encouraging a woman to breastfeed her new-born infant (55).

From 2003 to 2013, a descriptive review of 28 projects in 20 low and medium income countries was conducted; looked for patterns by intensity and geography and described strategies used to engage men in different places; 75% areas where a statistically significant increase in EBF which observed between the beginning and end of the project. A variety of

high and low intensity male engagement strategies was used in areas with an increase in EBF prevalence and across all geographic regions. In these project areas, male engagement strategies took many forms. We found no consistent associations between increases in EBF proportions and the intensity or types of male involvement methods. Understanding how gender norms may influence male involvement in women's health practices is lacking. Specifically, more studies about the effect of male partner engagement on breastfeeding practices are required, including formative research about male involvement in decisions regarding infant feeding and women's desire for male partner involvement in breastfeeding promotion and support (56).

In Toronto, Canada, a large teaching hospital conducted a randomized controlled trial, to evaluate the effectiveness of a co-parenting intervention on exclusive breastfeeding among primiparous mothers and fathers. Significantly more mothers in the intervention group (96.2%) than in the control group (87.6%) continued to breastfeed at 12 weeks postpartum. Although the intervention group had a higher proportion of mothers exclusively breastfeed at 6 and 12 weeks, the differences were not significant. This study only measures the effect of the co-parenting intervention on exclusive breastfeeding practice up to 12 weeks but WHO recommendation for exclusively breastfeeding is 6 months and the intervention should be delivered both in the prenatal and postnatal period to allow couples sufficient time to review the co-parenting and breastfeeding (12).

According to the randomized controlled trial study in Ahvaz, Iran, to determine the effect of educational programs on Breastfeeding self-efficacy and the duration of exclusive breastfeeding in pregnant women: the results showed a significant difference between the duration and continuation of exclusive breastfeeding in the intervention and control groups. About 73.3% of the women in the intervention group continued their exclusive breastfeeding up to six months compared to 26.6% in the control group. However, this study could not consider a combination of prenatal intervention with postnatal intervention and the effect of educating both partners (57).

The findings of a study done in Kisumu East Sub County, Kisumu County, revealed no significant differences in fathers' breastfeeding awareness levels in the intervention and control groups prior to intervention. After the intervention, there were significant variations in knowledge levels about starting breastfeeding within an hour of delivery, continuing breastfeeding for at least two years, and exclusively breastfeeding. From this study, we consider that fathers should be included in education sessions on infant feeding at the health

facility and community levels, all of these things could be a crucial step in infant feeding practices. When fathers are provided with knowledge on infant feeding, they are well equipped to play a more supportive role in infant feeding(58).

An interventional study conducted in Kenya, to examine the effect of nutrition education on fathers in improving early initiation of breastfeeding and exclusive breastfeeding in the first three months of the infant's life. The result demonstrates that in the intervention group, 97.1% of babies started breastfeeding within an hour of birth, compared to 52.1%t in the control group. This study only examines the effect of the intervention for the first 3 months so that there is a need for other study to examine the effect as WHO recommended in 6 months (59).

Based on quasi-experimental study done in Vietnam, mothers in the intervention group were more likely to initiate early breastfeeding 49.2 and 35.8% in the intervention and control group respectively. Exclusively breastfeeding were 34.8, 18.7, and 1.9% of the mothers in the intervention group their children compared with 5.7, 4.0, and 0.0% of those in the control group at 1, 4, and 6 months after birth respectively. In other situations, cluster randomized controlled trials are required, which should examine the capacity and function of health workers at the peripheral level, consider issues involving fathers social networks and barriers to becoming effectively involved in child care (60).

The study in first time mothers, shows that 45.9% of mothers received helped from their partners with breastfeeding in the hospital, while 54.1% of mothers did not receive support from their partners. First-time mothers who identified as having breastfeeding support from their partners, during the early post-partum period were more likely to initiate breastfeeding and had longer breastfeeding durations. However, more research on male partners' continued involvement and perspectives on breastfeeding should be conducted (61).

Systematic literature conducted to identify all studies that evaluated the impact of breastfeeding promotional strategies on any breastfeeding and EBF rates at 4-6 weeks and 6 months. Breastfeeding promotion interventions raised EBF rates significantly at 4-6 weeks and 6 months after delivery, with a higher effect in developing countries. Prenatal counseling was found to be more important for breastfeeding at 4-6 weeks, whereas prenatal and postnatal counseling combined was found to be beneficial for EBF at 6 months. But in this systematic literature review all studies in which the education or support is given primarily to mothers through counselors (be they doctors, nurses, midwives, lactation consultants, or peer

counselors) fathers, or other family members like grandparents were excluded even if the impact of partner and family members high (62).

In the transversal cohort study conducted in Salvador, Brazil to evaluate the father's knowledge about breastfeeding, 10.3% believed that breastfeeding can be substituted. All male partners interviewed replied that they support breastfeeding for their children and believe in its benefits and 39.7% reported that their opinion could interfere with their partner's decision. Lastly, the male partners request for more guidance from the health institutions and health care professionals. However, there is a need for more studies about the subject in other regions, to formulate guidelines to highlight the importance of the male partner in the child's and mother's haelth (63).

According to a randomized controlled trial done in Perth, Western Australia, to investigate the effects of an antenatal education session and postnatal support targeted to fathers: any breastfeeding rate was significantly greater at 6 weeks in the intervention group (81.6%) compared to in the control group (75.2%). After adjustment for age and hospital, the odds ratio for any breastfeeding in the intervention group was 1.58 and for socioeconomic status 1.56 compared to in the control group. The fathers with infants of older were more likely to be breastfed at 6 weeks compared to infants of younger fathers, and fathers of infants with high socioeconomic status were more likely than fathers of infants with low socioeconomic status (64).

The experimental study conducted in the Turkish Republic of North Cyprus to determine the effect of breastfeeding education provided to male partners on breastfeeding rates and paternal-infant attachment. Exclusive breastfeeding rates were 56.4%, 33.3%, and 12.8%, while mean Paternal-Infant Attachment Scale scores were 89.51, 82.37 and 73.38 respectively, were highest in the group both mother and father where provided education. This finding demonstrates that educating both mother and fathers about breastfeeding is more helpful in increasing exclusive breastfeeding rates and strengthening paternal connection (65).

Full breastfeeding prevalence was 25% in the intervention group and 15% in the control group at 6 months, and any breastfeeding was 19% and 11% at 12 months, respectively. Breastfeeding interruption in the intervention group and the control group because of problems with lactation was 18% vs 4%. Furthermore, significantly more women in the intervention group reported receiving support and relevant help with infant feeding management from their partners (91%) compare to control group (34%). The prevalence of

full breastfeeding in the intervention and control groups at 6 months was 24% and 4.5%, respectively, among the women who had reported lactation difficulties in the intervention and control groups 69% and 64%, respectively (66).

A study from the Bloomington Area Birth Services (BABS) in Monroe County, Indiana 45.9% of mothers received helped from their husband or partner with breastfeeding while in the hospital, while 54.1% of mothers reported that their partners did not support them. Early postpartum breastfeeding support increased the likelihood of mothers continuing to breastfeed after leaving the hospital. However, because this study focuses solely on first-time mothers, more research into the continuous engagement of fathers and their perspectives on breastfeeding should be conducted (61).

2.3. Breastfeeding education and maternal breastfeeding self-efficacy

An experimental investigation done to evaluate the role of nursing intervention on a mother's breastfeeding self-efficacy the result shows the breastfeeding self-efficacy during pregnancy and following two months of delivery in the experimental group was significantly higher. In addition, the mothers who breastfed exclusively had a higher level of postnatal self-efficacy in both experimental and control groups compared to formula feeding women 52.00 vs. 39.45 in the control and 57.69 vs. 36.00 in the experimental subjects. According to this study, antenatal breastfeeding education is an effective way to increase breastfeeding self-efficacy, which leads to more exclusive breastfeeding (67). This type of study could consider effect of male partners education on breastfeeding self-efficacy and its effect on maternal breastfeeding practice.

According to study done on Chinese mothers in the antenatal period in China, Expectant mothers' perceived social support, the perceived attitude of significant others, including husbands, mothers, and friends, towards breastfeeding are correlated with breastfeeding self-efficacy (68). In another study done in the postpartum period mothers reported a moderate level of breastfeeding self-efficacy in the immediate postpartum period and they were supported from husband, support from nurses/midwives, attending antenatal breastfeeding classes, time from childbirth to initiate breastfeeding, and previous breastfeeding experience. In this study to increase maternal breastfeeding self-efficacy level, mothers and fathers should be facilitated to attend antenatal classes on breastfeeding (69).

The study was conducted in Shanghai, China, with the goal of describing parturient women's breastfeeding self-efficacy and identifying socio-demographic characteristics associated with

mothers' breastfeeding self-efficacy. Chinese mothers reported a moderate level of breastfeeding self-efficacy; with an item mean score of 3.67. Whether or not encountering breastfeeding problems, infant feeding pattern in the previous 24 hours, whether or not perceiving insufficient milk, and main caregiver's positive attitude toward breastfeeding were correlated with participants' breastfeeding self-efficacy score (70). Since it is a cross-sectional retrospective descriptive study it does not identify cause-effect relationship and due to the convenience sampling method generalizability is questionable

A descriptive correlation study that has conducted in the postnatal Chinese women shows women with a high level of breastfeeding self-efficacy are significant contributing factors for exclusive breastfeeding. Breastfeeding duration and exclusivity are strongly influenced by maternal breastfeeding confidence and newborn breastfeeding behaviour (71).

Male partners play an important role in supporting their breastfeeding partner and their self-efficacy that may also influence breastfeeding outcomes. Paternal BSES-SF scores were significantly correlated with maternal BSES-SF scores, fathers' breastfeeding attitude, importance fathers place on breastfeeding, breastfeeding level and exclusivity, and perception of breastfeeding progress (72). However, it is unclear if the BSES-SF is a valid and reliable measure of self-efficacy among Ethiopian mothers.

A cross-sectional study done on mothers of infants visiting Bungmati Nepal, 94% of the mothers reported being confident on breastfeeding, while 95% of their male partners were supportive of breastfeeding. The male partners' support scale and breastfeeding self-efficacy were found to have a significant relationship. Mothers who received support from male partners were 10 times more likely to report confidence in breastfeeding than those who did not (73). A causal association between breastfeeding self-efficacy and male partners' support could not be established because the study was cross-sectional. Furthermore, recall bias could be a drawback in this study since mothers may have forgotten their husbands' level of support.

A descriptive cross-sectional study done in community health clinics in Calgary, Alberta to address perceptions of male partner support and the Breastfeeding Self-Efficacy Scale (BSES) that measures maternal confidence. When we controlled for previous breastfeeding experience and infant age, mothers who reported active/positive partner support scored higher on the BSES than those who stated ambivalent/negative partner support (74). Since it is a cross-sectional descriptive study it does not identify cause-effect relationships with

convenience sampling which is subject to selection bias and threatens the internal validity of our study and with limited generalizability by the small sample size. More research should done on the functions that are perceived as most supportive by mothers and male partners are willing to perform.

Breastfeeding self-efficacy in the intervention group increased significantly compared to the control group one month after birth (123.6 versus 101.7), according to a study conducted in Ahvaz, Iran. The intervention group had a significantly higher duration of exclusive breastfeeding (5.03 months vs. 2.7 months). There was also a significant relationship between breastfeeding self-efficacy and the duration of exclusive breastfeeding practices. The educational program could increase the self-efficacy and exclusive breastfeeding duration of mothers. These findings may help authorities recognize the value of educational programs for women about exclusive breastfeeding but this intervention study did not consider male partner who might have effect on breastfeeding practices(57) .

2.4. Maternal Perceptions on husbands' breastfeeding Support

A longitudinal, prospective and multicenter cohort study done in, Ontario, Canada revealed that Multiparous breastfeeding mothers were the most dissatisfied with FI. Mothers' satisfaction with FI at six months also predicted increased RS at 24 months through increased RS at 12 months, but not through FI at 18 months and high dissatisfaction with FI at 6 months was the only significant predictor for the discontinuation of breastfeeding from 3 to 6 months postpartum. Multiparous breastfeeding women may be more dissatisfied with FI in caregiving than non-breastfeeding mothers and primiparous breastfeeding mothers, according to the findings. Furthermore, regardless of parity, mothers' satisfaction with FI appears to be a strong predictor of overall RS up to 24 months postpartum and breastfeeding continuation from 3 to 6 months postpartum (6).

A randomized controlled trial conducted in a large teaching hospital in Toronto, Canada, significantly more mothers in the intervention group (71%) than in the control group (52%) reported that their partners provided them with breastfeeding help in the first 6 weeks and mothers were satisfied with their partners' involvement with breastfeeding 89% and 78.1% in intervention group and control group, respectively. Eighty one percent of mothers in the intervention group were satisfied with the breastfeeding information they got, compared to 62.5% of mothers in the control group (12).

Mothers were asked if the newborn's father helped with breastfeeding during the first 72 hours after the birth of the child. At 87.6%, mothers who reported receiving support from the father were significantly higher among the intervention group compared to 37.2% in the control group. Majority (74.5%) of those who initiated breastfeeding within an hour had received support from the father. At 74.5%, mothers who reported receiving support from the father were significantly higher among the intervention group compared to 36.1% in the control group (59).

2.5. Breastfeeding promotion intervention and child morbidity

Based on data from the 2011 and 2016 Ethiopian Demographic and Health Survey. discontinuing EBF at 0–3 months and 4–6 months increased diarrhea occurrence compared to children who continued EBF up to 6 months. Fever and acute respiratory infections were more common in children who stopped EBF at 4–6 months. Cessation of EBF before than 4 months or between 4–6 months was associated with increased odds of having at least one childhood morbidity (8) and infants exclusively breastfed for the first 6 months derived the most benefit with around 43% reduction in ever acute otitis media (AOM) during the first 2 years (75).

Findings from this large-scale prospective study show that infants exclusively breastfed for 6 months as per WHO recommendations presented with fewer infectious episodes than their partially breastfed or non-breastfed peers and this protective effect persisted after adjustment for potential confounders. Prolonged exclusive breastfeeding was associated with fewer infectious episodes and fewer admissions to hospital for infection in the first year of life (76).

Breastfeeding history was linked to a lower risk of acute otitis media, non-specific gastroenteritis, severe lower respiratory tract infections, atopic dermatitis, asthma (young children), obesity, and type 1 and 2 diabetes, according to a review of the evidence on the effects of breastfeeding on short- and long-term infant and maternal health outcomes in developed countries, childhood leukemia, sudden infant death syndrome (SIDS), and necrotizing enterocolitis (77) and Suboptimal breastfeeding practice elevated the risk of pneumonia morbidity and mortality outcomes across age groups (78).

According to UK Millennium Cohort Study, EBF was not associated with the ear infection, but was associated with chest infection and diarrhoea. EBF for less than 4 months was associated with a significantly increased risk of chest infection and diarrhoea. There was

an excess risk of the chest infection and diarrhoea among infants EBF for 4-6 months, but who stopped breastfeeding by 6 months (79) and exclusive breastfeeding, compared with not breastfeeding, protects against hospitalization for diarrhea and lower respiratory tract infection (80). Other cluster randomized controlled trial in a rural district of Burkina Faso found no significant differences in child morbidity between study arms (81).

Literature Review Summary

Many qualitative research show that male partner desire to be involved with breastfeeding and encourage their partners. However many feel left out and helpless; felt they lack the knowledge, understanding, and skill to do this; and called for more education and support to be directed towards them, rather than their partner alone. Putting all of your attention on the dyad isn't going to get you the outcomes you need to make breastfeeding the cultural norm in baby feeding. Expanding the “breastfeeding dyad” to a “breastfeeding triad” recognizes the importance of the male partner in supporting and strengthening breastfeeding efforts and the impact that the informal support structure can have in promoting breastfeeding.

Even if the impact of partners and family members is high fathers or other family members like grandparents were excluded from breastfeeding education or support intervention. But in most studies breastfeeding education or support interventions were given primarily to mothers through counselors (be the doctors, nurses, midwives, lactation consultants, or peer counselors).

A majority of the studies that investigated breastfeeding in Ethiopia have assessed the effect of socio-demographic characteristics of mothers on breastfeeding. There are limited studies involve fathers through interventions focussed on breastfeeding education and promotion

Breastfeeding interventions studies were done in developed countries that have included fathers have provided preliminary evidence that fathers’ involvement can positively impact breastfeeding practices. None of the studies to date have used the randomized control trial design, with an adequately powered sample size on breastfeeding education and support intervention study targeting male partners in low-income countries including Ethiopia.

This study will describe a cluster-randomized controlled trial assessing the breastfeeding education and support intervention package in Hadiya Zone, south Ethiopia. The interventions will target male partners and mothers to create an enabling environment that would support postnatal mothers to adopt optimal breastfeeding feeding practices.

2.2. Conceptual Framework

Figure1. Shows the framework for improving optimal breastfeeding practices by involving a male partners in optimal breastfeeding promotion

Paternal support for breastfeeding is part of the mother's direct experiences. In the community and within the family is the father of the child who is a major decision-maker and influence on the mothers' breastfeeding intention.

Over targeting male partners in breastfeeding education, this study focused on raising positive paternal attitudes towards optimal breastfeeding practices, providing information on optimal breastfeeding benefits and involvement in supporting, increasing maternal breastfeeding confidence (Breastfeeding Self-efficacy) ¸ and enhancing the mothers' ability to act on her breastfeeding choices due to increased support from her partner/ husband. This will influence mothers' optimal breastfeeding practices that will result in improved infants' optimal growth.

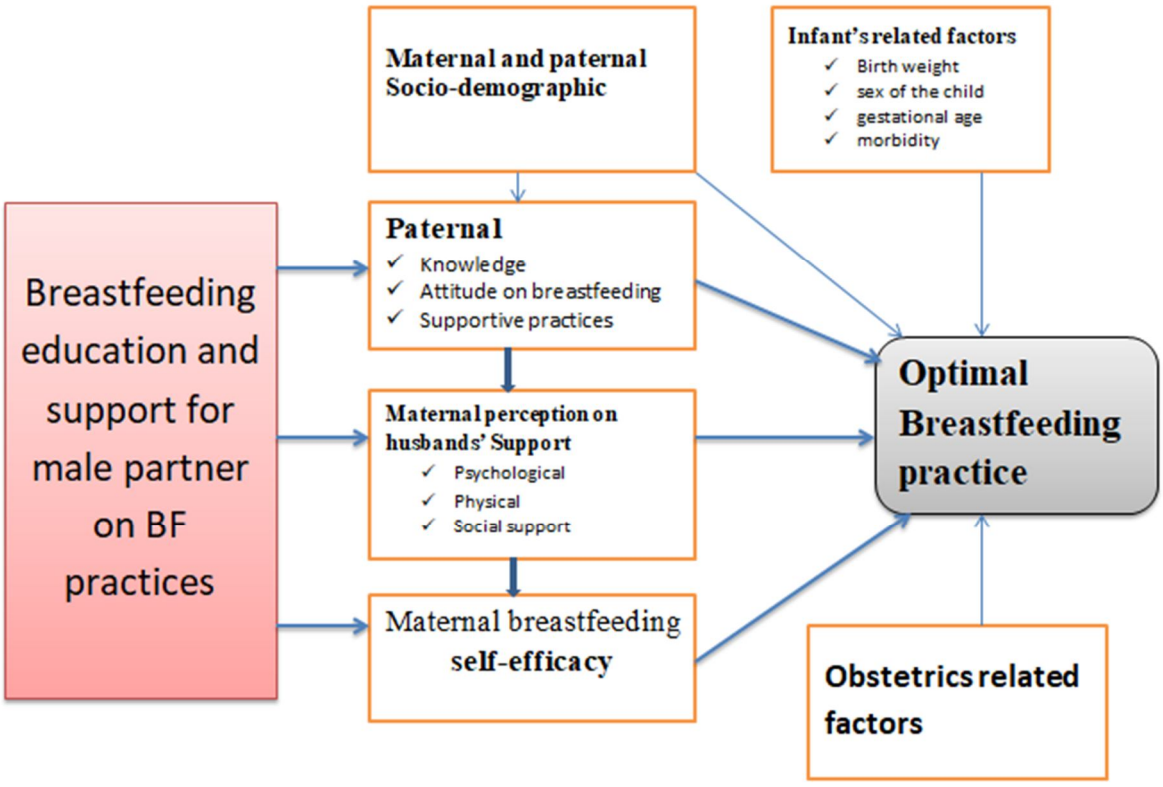

Fig1. Conceptual framework to improve optimal breastfeeding practices by targeting father in breastfeeding promotion developed after review of related literatures (82, 83).

2.3. Significance of the study

According to Ethiopian data, the problem of malnutrition manifests itself predominantly during the first 12 months of life, when growth stalls due to sub-optimal infant feeding practices. As a result, it's critical to address infants feeding concerns within the first year of life, including promoting proven optimal breastfeeding techniques in both healthy and sick infants.

The role of fathers in supporting OBF has been included in the global strategy for breastfeeding promotion issued by the World Health Organization (WHO), however it was not mentioned in the original Ten Steps to successful breastfeeding or addressed explicitly in the revised version of the Ten Steps. The information generated by this study may therefore be useful to consider targeting husbands in the promotion of breastfeeding as a component of the WHO-recommended Ten Steps for Breastfeeding Promotion.

This experimental design of a breastfeeding promotion intervention involving fathers will provide more positive evidence of the intervention's benefits on optimal breastfeeding practices in developing or sub-Saharan African nations.

The result of this study will be used as evidence for responsible government agencies like the Ministry of Health and NGOs like UNICEF, WHO, and others to consider integrating breastfeeding counseling for fathers in existing maternal and child health services at in hospital maternity wards and any other community health settings.

This interventional study will contribute knowledge to future research efforts on potential strategies to improve optimal breastfeeding practices in Ethiopia. It is anticipated that the study will motivate the mainstreaming of paternal involvement in IYCF issues.

To our knowledge, this cluster randomized control trial study will be the first Ethiopian study to provide evidence of the impact of male-partner-focused breastfeeding education and support intervention on optimal breastfeeding practices. Therefore, it is expected that future programs will re-plan the current breastfeeding counseling strategies to include the husbands.

2.4. Research Questions

- Are breastfeeding promotion education and support provided to male partners compared to the usual care effective in improving optimal breastfeeding practice in lactating mothers?
- Are breastfeeding promotion education and support provided to male partners compared to the usual care effective in improving maternal Perceptions of husbands' breastfeeding support?
- Are breastfeeding promotion education and support provided to male partner compared to the usual care effective in improving child morbidity?
- Does breastfeeding promotion education and support provided to male partners improve couples' self-efficacy on optimal breastfeeding?
- Does breastfeeding promotion education and support provide to male partner influence paternal and maternal knowledge, attitude, and Supportive practice of optimal breastfeeding practices?
- What is the experience of men on breastfeeding promotion education and support to improve breastfeeding practices?

2.5. Research Hypothesis

1. Mothers whose partners received the breastfeeding education and support intervention have increased optimal breastfeeding practices than mothers who did not receive the intervention.
2. Mothers whose partner received the breastfeeding education and support intervention have good perceptions of husbands' breastfeeding Support than mothers who did not receive the intervention
3. Breastfeeding promotion education and support provided to male partners improves child morbidity than the usual care
4. Mothers whose partner received breastfeeding education and support intervention have a superior postnatal breastfeeding self-efficacy scale than mothers who did not receive the intervention

CHAPTER THREE: OBJECTIVES

3.1. General objective

The overall objective of this research is to assess the effect of breastfeeding education and support provided to male partners on optimal breastfeeding practice in Hadiya Zone, southern Ethiopia**.**

3.2. Specific Objectives

- To explore men's and women's experiences of male partner supportive practices to optimal breastfeeding Practice in Hadiya Zone, southern Ethiopia [*qualitative phenomenology*]

- To examine the effect of breastfeeding education and support intervention on fathers' knowledge, attitude, and supportive practice on optimal breastfeeding practices in Hadiya Zone, southern Ethiopia (*cluster-randomized controlled trial)*

- To compare breastfeeding education and support provided to male partner with routine care on maternal perceptions on husbands' breastfeeding Support in Hadiya Zone, southern Ethiopia [*cluster-randomized controlled trial*]

- To evaluate the effect of breastfeeding education and support provided for a male partner on optimal breastfeeding practice in Hadiya Zone, southern Ethiopia (*cluster-randomized controlled trial)*

- To measure the role of breastfeeding education and support provided to male partner on mother's breastfeeding self-efficacy (*cluster-randomized controlled trial)*

- To compare the effect of breastfeeding education and support provided to male partner with routine care on the frequency of child morbidity in Hadiya Zone, southern Ethiopia (*cluster-randomized controlled trial)*

CHAPTER FOUR: METHODS AND MATERIALS

4.1 Study setting

The study will take place in the Hadiya Zone, which is one of the SNNP region's administrative zones in South Ethiopia. Hosanna is the capital of the Hadiya Zone, which is located 232 kilometers south of Addis Ababa. Hadiya Zone has 13 districts and four town administration. Hadiya is bordered on the south by Kembata Tembaro (KT), on the southwest by the Dawro Zone, on the west by the Omo River which separates it from Oromia Region and the Yem Special Woreda, by Gurage on the north, by Silte on the northeast, and by the Alaba Zone on the east; The Mirab and Misraq Badawacho woreds form an exclave isolated from the rest of the zone by KT. The Zone has a total population of **1, 727,920** according to projected 2007 Census conducted by the CSA, of whom 846,681 are men and 881,239 women; Hadiya has a population density of 342.64 people per square kilometer, covering 3,593.31 square kilometers. Gibe and Soro districts will be selected purposively. The total population size of the two districts (Soro and Gibe) is **333,117**, out of which **11,526** are estimated to be pregnant mothers. Two Districts (Soro and Gibe) will be selected with the total of 54 kebeles (clusters). In the two districts, there are 65 health institutions, including 55 health posts, 8 health centers, and two primary hospitals (one in Gibe and one in Soro district).

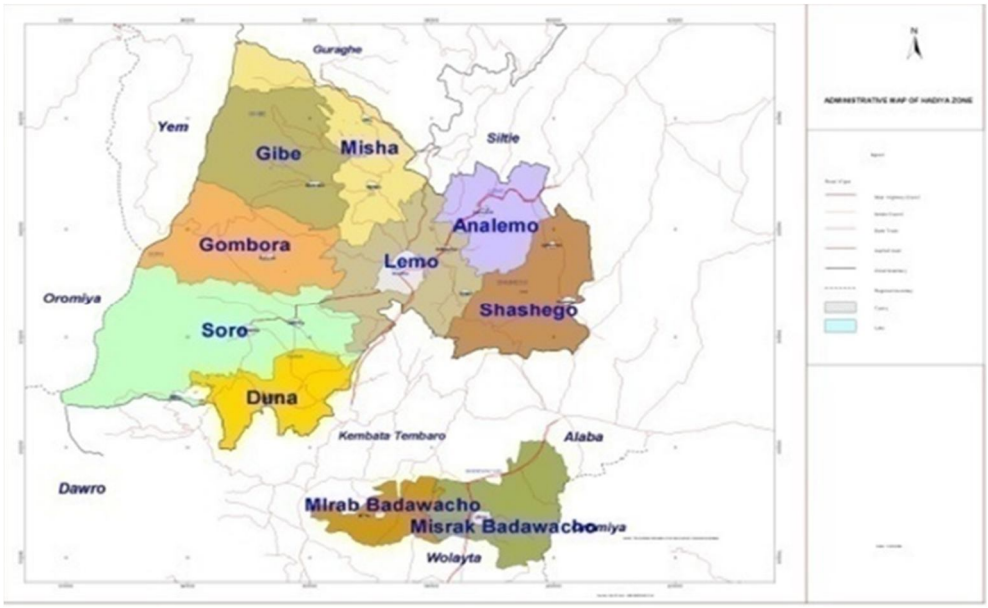

Fig2. Map of the study area, Hadiya Zone

4.2: Qualitative study (Objective one)

4.2.1 Study design

A qualitative design using phenomenology

4.2.2 Study population

Lactating mother and male partners

4.2.3 Eligibility Criteria

Inclusive criteria

- ✓ had at least one child with breastfeeding experience
- ✓ able to speak the local language
- ✓ Permanent resident of the study area (at least 6 months)
- ✓ Partners live together

Exclusive criteria

- ✓ living apart from their partner, which will have an impact on their relationship
- ✓ partners without child breastfeeding experience
- ✓ partners cannot communicate with local language

4.2.4 Sampling procedure

The study will use a purposive sampling technique. A sample of 16 male partners will be recruited for in-depth interviews and 3 FGD will be held with mothers (7-12 each group)

4.2.5 Data collection method

Semi-structured individual in-depth interviews of the male partners with open- and closed-ended questions related to male involvement and support will be conducted. The Focus group discussions (FGDs) will be conducted with mothers with an FGD guide written questions and probes will be used during the discussions with the type of support mothers received from fathers for breastfeeding. The mother's perspective on the role of the father in the breastfeeding process, the father's preparation for breastfeeding, and if there was anything missing in the father's support for breastfeeding were all covered in the FGD guide.

4.2.6 Data Collection Tools and Procedures

FGDs and interview guides will be developed through an intensive review of literature. Data collectors and supervisors will be trained on how to conduct FGDs and in-depth interviews.

Data collectors will be BSc Nurses or Midwives who can speak the local language (Hadiyisa) and All FGDs and KIIs will be recorded using a voice recorder.

4.2.7 Data Analysis

A thematic analysis will be performed by using Atlas Ti7 software. The audio-recorded data will be first transcribed in the local language (Hadiyisa) immediately after completion of each FGD and in-depth interviews, and then translated into English by the principal investigator. The first step will be familiarization with the data whereby the FGDs and in-depth interviews will be transcribed verbatim. Transcriptions will be imported into Atlas Ti7 software.

Three researchers will conduct the analysis and code the data separately at first and then together where they compare their coding and identify common themes and categories using content analysis to finalize the analysis work. The developed codes will be refined until there will no new code emerges. A matrix table will be used to list the codes, and all the codes that will be related will be sorted and listed into one theme. Finally, researchers will review and refine the themes and write a report.

4.2.8 Data quality control measures

Different techniques will be considered to ensure the study's credibility, dependability/ consistency, transferability, and conformability of the data.

Credibility will be ensured by peer debriefing, prolonged engagement, clarifying researcher bias, quotes in the manuscript and Member checking. Dependability will be ensured by Rich description of the research methods, ensuring and measuring coding accuracy and intercoders' reliability. Conformability will be ensured by reflexivity and triangulation (methodological, data source, investigators and theoretical). Transferability will be ensured by purposeful sampling, data saturation and comparing results.

Data collectors and fieldwork supervisors training will be ensured in a good way. A pre-test will be conducted among participants with a similar population and setting, the interview and FGD guides will be ensured and modified by qualitative research experts.

4.3: Quantitative studies (Objective 2-6)

4.3.1 Study Design

This will be an community-based Cluster-randomized controlled trial conducted in Hadiya Zone, Southern Ethiopia. Two arms cluster-randomized controlled trial with a 1:1 allocation

ratio will be designed to investigate the effectiveness of breastfeeding education and support intervention provided to male partners on optimal breastfeeding practices

4.3.2 Source population

The source population for all the study groups will be coupled (mother and male partner) in the healthy pregnant women in their third trimester.

4.3.3 Study population

Both partners of pregnant women in their third trimester selected from a cluster of trial study

4.3.4 Eligibility Criteria

Inclusion criteria

- ✓ Male partner and mother being in the third trimester of pregnancy
- ✓ Male partner and Healthy mother with no underlying disease.
- ✓ Male partner and Healthy mother with no pregnancy complication.
- ✓ Male partner who live with their wives at home or maintain regular communication with them.
- ✓ Partners capable of giving informed consent
- ✓ Partners living in the selected cluster with no plans to move away during the intervention period

Exclusion criteria

- ✓ Mother who experienced a pregnancy loss (miscarriage, still birth, neonatal death) during the follow up period
- ✓ Mother had serious medical problems
- ✓ Couples who divorced or separated or migrated out of the study area during the intervention
- ✓ Mother with twins birth
- ✓ Infants admitted to neonatal ICUs at birth

4.3.5 Sample size determination and sampling technique

The sample size (n) required for the study will be calculated with **G*Power** to estimate a two population proportion by considering the following assumptions.

At baseline, 45.5 % of mothers use optimal breastfeeding practice at six months (84) and we are looking to see an improvement of 20% optimal breastfeeding practice by education and support intervention at six months in the intervention group.

A type I error of 5%

Strength of 80% with 95% CIs

A total of a sample of **170** father/mother pairs in each group will be needed

As this is a randomized design with clusters (each cluster is a kebeles), the sample size needs to be increased taking into account the effect of the design

Considering design effect of **2** and loss of follow up of 20%, the total sample size will be **408 father/**mothers pairs (**204** in intervention, and **204** in control groups)

By assuming an intra-cluster correlation coefficient of 0·1 for a cluster size of 26, it will be calculated that we will need 16 clusters (Kebeles).

In the two selected disitrics(Gibe and Soro) of Hadiya Zone, there are about 54 Kebeles which is lowest administrative unit in Ethipia , 16 clusters (Kebeles) will be selected which is 30% of the total Kebeles in Gibe and Soro districts (8 intervention arms and 8 control arms)

4.3.6. Sampling procedure/technique/ and Randomization

1. ***Sampling procedure/technique/***

From the 13 districts in Hadiya zone, two districts will be selected purposively. After identifying and listing the 54 Kebeles found in the selected districts or woredas, 16 non adjacent Kebeles will be selected.

Then eligible pregnant women will be identified from the selected Kebeles using health extension worker's logbook before the Kebeles are randomized into either treatment or control group.

Kebeles found in the selected districts will form the unit of randomization for the trial; while father-mother's pairs within the Kebeles will form units of observation or analysis (Figure 2).

2. Randomization

An independent biostatistician (a person not involved in the study) will conduct the randomization to produce comparable groups and eliminate the source of selection bias in the assignment of Kebeles to the intervention and control groups. Allocation concealment will be done for clusters, as they will not know if they will be in the intervention group or not. First cluster ID will be given like #1, #2, #3…#16 then name of the sequential numbered clusters

with given ID will be closed in an opaque envelope and blinded randomizer (biostatistician) will produce comparable groups.

Simple randomization with a 1:1 allocation will be used to randomize Kebeles to either control or intervention group. First, 16 nonadjacent clusters will be selected purposively from Kebeles of two selected disitrics(Gibe and Soro) in Hadiya Zone. Then, the 16 clusters (Kebeles) will be listed alphabetically by their name and closed in an opaque envelope with their id. A list of random numbers will be generated in MS Excel 2010, and the generated values will be fixed by copying them as 'values' next to the alphabetic list of the clusters. These will be arranged in ascending order according to the generated random number. Finally, the first eight clusters (Kebeles) will be selected as intervention clusters and the last eight as control clusters. An investigator and statistician will carry out the randomized allocation to form groups of the same size from a list of the selected Kebeles. Within each unit, the mother-father pairs will be selected by simple random sampling (Figure 2).

Single-blinding will be applied, in which the outcome assessor (data collector) will be aware of the intervention allotted.

Data collectors will be masked to the Kebeles allocation by not informing them of the allocation.

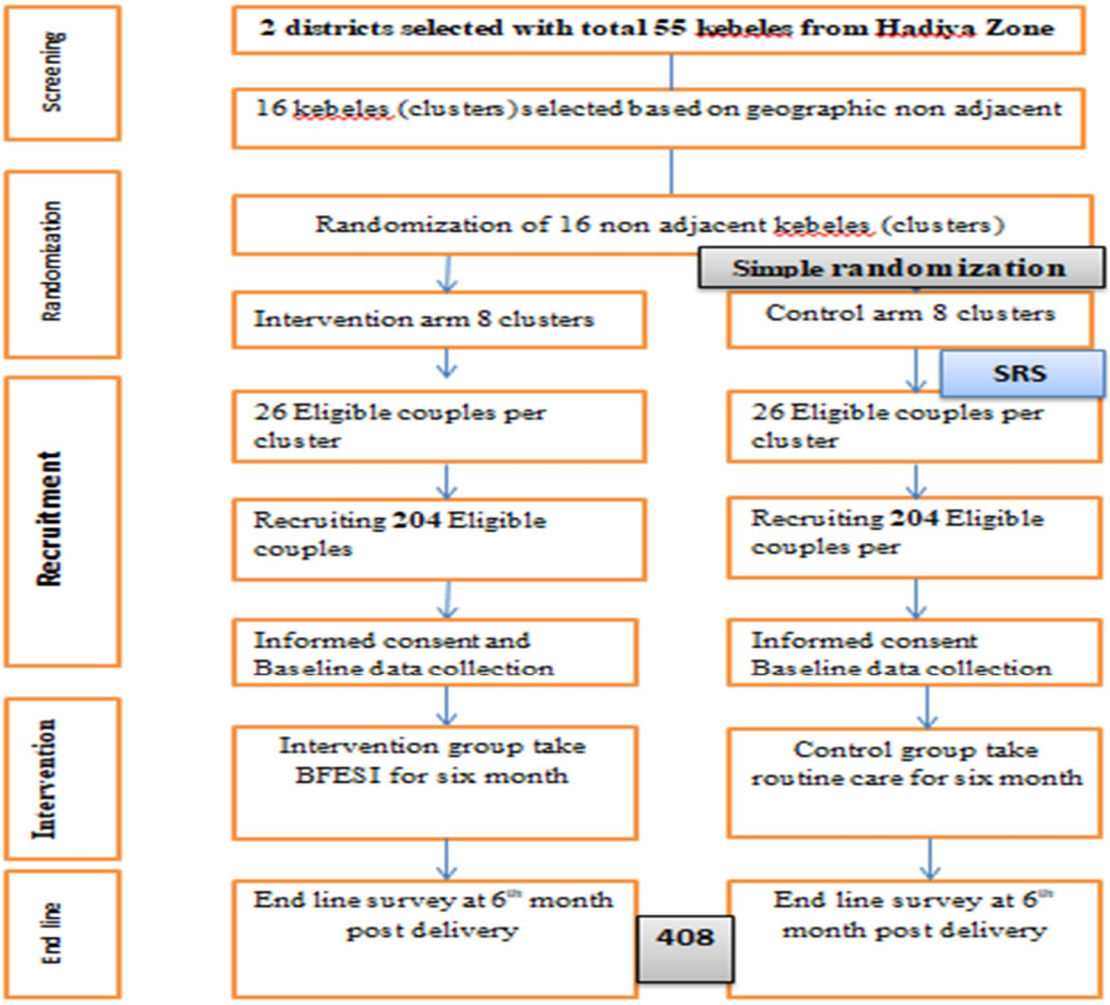

Fig 3.Flowchart of participants in an education and support intervention provided to male partners on optimal breastfeeding practices in Hadiya Zone

4.3.7 Intervention description

The Control Group (CG) will receive the standard breastfeeding support (routine care) which will be given by health care professionals during antnatal or during postnatal time. This group received no intervention from the research team.

Intervention group (IG) will receive breastfeeding education and support intervention on optimal breastfeeding practices. The intervention activities will be designed and implemented to target male partners and pregnant mothers in their third trimenster. Male partners and women in the intervention group will receive an enhanced breastfeeding education and support intervention from their third trimenster pregnancy till 6 months post-delivery

The intervention is composed of the following elements: i) antnatal and postnatal breastfeeding education to raise knowledge, awareness, support, and counseling on benefits

of optimal breastfeeding practices and involvement in supporting breastfeeding mothers. ii) Specific take-home print materials to be shared by both partners will be developed that support optimal breastfeeding practices. iii) Telephone call counsiling will be given to the male partner or mother on different optimal BF practice issues and iv) individual home visits.

The educational intervention will focus on increasing father knowledge of breastfeeding and social supporting breastfeeding mothers, reducing fathers' reservations about breastfeeding, reducing negative attitudes, and building skills during the antnatal and postnatal period

Specific take-home print materials to be shared by both partners will be developed that support the optimal breastfeeding practices and fathers' involvement in supporting breastfeeding mothers.

Telephone call counseling will be to remand husband on optimal breastfeeding practices and involvement in supporting breastfeeding mother after delivery until at 2nd week and 3rd month

Table 1: Summery of Intervention protocol (modified from Bich et al, 2018)

s. No	**Content**	**Dose**	**Frequency**	**Compliance parameters**	**Responsible person**
1	**Paternal and maternal group education and counselling for fathers during last trimester** ✓ by preparing small social event	1.5 hours	Once at their 3rd triaminster period	-% male partners participated -% mothers participated	researcher educators or counselors
2	**Providing specific take-home print materials** ✓ Maternal OBF practices ✓ paternal support practice	-One poster for father and -one template for mother	Once in the 3rd triaminster pregnancy	-% of fathers received print materials -% mothers received print materials	educators or counselors
3	**Telephone call** ✓ A telephone call will be made to the father to remand and ask any concerns about the information provided	6 minutes	Two times at ✓ 2nd week ✓ 3rd month postpartum	-% fathers responded to call	educators or counselors
4	**Home visit** ✓ Individual counseling for male partners and mothers	20minutes	Three time at ✓ 6th week ✓ 3.5 month ✓ 5th month postpartum	% father counseled %mother counseled	educators or counselors
5	**endline data collection**	30	at 6th month	% father intervied % mother intervied	data collectors.

4.3.8 Selection and training of research team

The research team will be composed of:

Breastfeeding educators or counselors: eight trained village health workers will be selected from the intervention cluster (Kebeles). Criteria for selection will be:

i. Good command of Amharic and Hadiyisa (the local language)

ii. Good interpersonal and communication skills

iii. Staff in the respective cluster and stay for an entire research period

The educators or counselors will be trained for three days by the researcher. The training will cover paternal support and awareness on components and importance of optimal breastfeeding practices: Early initiating breastfeeding within one hour of birth, breastfeeds frequently day and night (on demand), giving infant only breast milk for the first 6 months, avoiding pre-lacteal feeding, continuing breastfeeding during sickness, starting complementary feeding by the age of six months, feeding colostrum and continuing breastfeeding until the child is two years of age or older, baby positioning and attachment, how to reinforce the confidence of the mother in her ability to breastfeed and how to give practical help, and how to support and encourage her to go on with breastfeeding.

Communication and counseling skills will be also covered. A pre-test and post-test on breastfeeding knowledge will be administered to the educators or counselors before and after the training to ensure uniformity; all the educators or counselors should have to pass the test.

Enumerators or outcome assessors: Data will be collected with 16 data collectors/ enumerators/. The enumerators or data collectors will be trained for three days by the researcher. The training content included: the study objectives, responsibilities of the data collectors, research instruments, and interview skills.

Practical demonstrations will be conducted to ensure that the enumerators or data collectors understood the questions and learned the appropriate interviewing skills.

4.3.9 Provision of the intervention

The intervention will be carried out continuously during both antenatal and postnatal periods from Februray 2022 to October 2022. The intervention will be designed based on **social cognitive theory** (Bandura, 1998). BF education and support intervention will provide by trained village health workers starting from the 3rd trimenster of pregnancy for both male

partner and mother besides the routine information and education they get from health institution as routine care

Paternal and maternal group education during last trimester for both male partner and mother will be given at their third triminster pregnancy by preparing small social event for 1.5 hours on the following topics: early BF initiation, importance of colostrum, BF on-demand and frequent feeds, definition of EBF, benefits of EBF for infant and mother, positioning and attachment techniques during BF, dangers of pre-lacteal feeds, adequacy of breast milk for 6 month, dangers of breast milk substitutes, maternal diet and rest , continuing breastfeeding during sickness, to start complementary feeding by the age of six months and paternal supportive practices for breastfeeding mother such as household chores and responsibilities, caring for the baby, feeding the baby, caring for the mother, encouragement and motivation, being in agreement and creating favourable environment.

Specific take-home print materials will be given for both male partner and mother during third triminster pregnancy. One poster for male partner and one template for mother will be provided at the time of group education on the third triminster pregnancy. The content of poster for husband includes continued paternal psychological, physical and social support of breastfeeding mother. The content of template for mother includes optimal breastfeeding practices.

Telephone call counselling: Telephone call will be held at 2nd week and 3rd month for the husband. To encourage fathers' involvement in supporting partners during breastfeeding different issue will be counselled during each call.

Home visit: Individual counselling for male partners and mother will be held at 6 weeks ,3.5 month and 5th month to remember the couples about optimal breastfeeding and husbands' involvement in supporting.

4.3.10 Data collection and measurement

Data will be collected with 16 data collectors through a face-to-face interview by trained nurses or midwives who are working in nearest health center for specific cluster. Baseline data will be collected from pregnant mothers and male partners in their 3rd triminster. End line data with all other outcome variables will be collected at 6th month.

Basic socio-demographic characteristics of the partners, new born and maternity experience of mother will be collected at baseline. Data on knowledge, attitude and involvement in

supportive practice of male partner, breastfeeding self-efficacy and perception of mothers on husbands support will be also collected at base line and end line. Data on optimal breastfeeding practices will be collected at end line which is at 6 month after delivery.

The baseline and end line questionnaires will include several previously validated and widely used instruments to measure factors associated with optimal breastfeeding outcomes. These will include the Iowa Infant Feeding Attitude Scale, the Breastfeeding Self-Efficacy Scale, and the Postpartum Partner Support Scale.

Baseline data will be collected in 3rd trimenster of pregnancy before administration of intervention.

4.3.11 Operational definitions and measurements

Objective two: Fathers' breastfeeding knowledge will be assessed using a questionnaire adapted from the Food and Agricultural Organization (FAO) of the United Nations (UN) (85). This questionnaire has 16 questions, which will be coded into Yes or No responses and one mark will be awarded for every correct response (yes), zero will be awarded for every incorrect response (no). Hence, the total number of marks in the knowledge section ranged from 0 to 16. Male partners who score above Mean will be considered as knowledgeable and those who score below mean will be considered as not knowledgeable.

Breastfeeding attitudes will be measured using the Iowa Infant Feeding Attitude Scale (IIFAS). This tool has 17 questions and uses a 5 point Likert scale provided options such as strongly agree to strongly disagree for each item. The total score will be calculated out of 85, with a minimum of 17 and a maximum of 85. This scale will help to identify the attitude of the male partner for capturing the favirable atittude (above the mean score) and unfavirable atitude (below the mean score) towards breastfeeding (86).

The supportive practice of male partners in optimal breastfeeding practice will be measured by using a questionnaire adopted from literature. This questionnaire has 8 questions, which will be coded into Yes or No responses and one mark will be awarded for every correct response (yes), zero will be awarded for every incorrect response (no). Hence, the total number of marks in the **s**upportive practice ranged from 0 to 8. Male partners' who score above mean will be considered as have supportive practice and those who score below means will be considered as a not **s**upportive practice

Objective three: In this study mothers will be asked about infant breastfeeding practice includes Early initiation of BF, breastfeeding frequently day and night (on demand), giving infants only breast milk for the first 6 months, intended duration of breastfeeding, pre-lacteal feeding, and history of feeding colostrum.

Exclusive breastfeeding at 6 months is measured as the proportion of women who provided their infants with only breast milk but no solids, nonhuman milk, water, or other liquids (other than vitamins or medications) at six months. Exclusive breastfeeding practices will be identified from various methods including the last 24hrs, last week and since-birth recalls when the infant are on 6weeks, 3 months, and 6 months. The duration of exclusive breastfeeding will be identified by asking the mother to recall the time when the mother stopped EBF with the child (time to event)

Exclusive BF for the age will be measured by asking mothers with infants aged between 0 and 6 months to provide information about the history of infant feeding for the last 24 hours.

On-demand breastfeeding- BF frequency greater than or equal to 8 times per 24 hours
Pre-lacteal feeding will be measured by asking mothers whether pre-lactally feed their child within three days of delivery.
Bottle feeding will be measured by asking mothers whether they are using bottle-feeding for their child at the time of the interview.
Colostrum feeding will be measured by asking mothers about the history of feeding the first yellow milk for their child (Table 2).
Table 2. Infant feeding components and scoring are used to create optimal breastfeeding practices for infants-age 0–6 months

No	**Infant feeding components**	Response	
1	Early initiation of BF	<=1hrs=1	>1hrs=0
2	breastfeeding frequently day and night (on demand)	>8= 1	<8= 0
3	giving infant only breast milk for the first 6 months(EBF)	Yes=1	No= 0
4	intended duration of breastfeeding	>=2yrs=1	<2yrs= 0
5	pre-lacteal feeding	Yes= 0	No=1
6	feeding colostrum	Yes=1	No=0
	Range of total score	**0-6**	

The infant breastfeeding practice scores will be summed to give a total score that could range between 0 and 6. The infant breastfeeding practice scores will be then classified as Poor (0–2), Medium (3–4), or Good (5–6).

When the study subjects have scored the highest tertiles (good) of infant breastfeeding practice scores will be considered as **optimal breastfeeding practices**.

When the study subjects have scored the lowest two tertiles (poor and medium) infant breastfeeding practice scores will be merged and will be considered as **sub-optimal breastfeeding practice.**

Objective four: Breastfeeding Self-Efficacy (BSE) refers to a mother's confidence in her ability to breastfeed her infant.

Data on maternal BF self-efficacy will be collected at baseline and at end line. Breastfeeding Self Efficacy Scale-Short Form developed to assess BF self-efficacy during postnatal period, a 14-item, self-report instrument and scored in 5-point Likert-type scale where 1 = not at all confident and 5 = very confident. Items are presented positively and summed to produce a total score ranging from 14 to 70, with higher scores indicating higher levels of BF self-efficacy (41).

Objective five: Prevalence Morbidity status will be outcome variables. Morbidity status of children will be measured based on three morbidities: diarrhea, fever and acute respiratory illnesses (ARIs). In this study, diarrhea and fever will be assessed by asking the following questions: a) has the child had diarrhea in the last 2 weeks? and b) has the child been ill with a fever at any time in the last 2 weeks? Acute respiratory illnesses will be assessed based on the women's responses for the following questions: a) has the child had an illness with a cough at any time in the last 2 weeks? b) When the child had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty of breathing? and c) was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose? The women's response to the above questions will be recoded to 'yes' and 'no' options. The presence of ARI symptoms among children will be ascertained if a child had a cough accompanied by short, rapid breathing which will be chest-related and/or by difficult breathing which will be chest-related in the last 2 weeks preceding the interview.

Morbidity status of children will be measured based on three morbidities such as diarrhea, fever and acute respiratory illnesses (ARIs). Children with at-least one of the three

morbidities during intervention period will be considered as have frequency of morbidity otherwise no morbidity in child during the intervention period.

To show effect of intervention on child morbidity the following Variables will be controlled as confounding variables include maternal age at delivery, place of residence, number of antenatal visits, wealth index quintile, maternal education, sex of child, type of cooking fuel, sanitation facility, source of drinking water, and disposal of child's stools when not using toilet

Objective six: Husbands' support for breastfeeding will be defined as the physical, emotional and psychosocial support the mother receives from her husband during breastfeeding. Physical support refers to helping during positioning mother for breastfeeding, helping in breastfeeding at night, helping in child care activities and in household works, seeking service from healthcare provider for breastfeeding problems. Emotional and psychosocial support refers to encouraging verbally to breastfeed, encouraging to breastfeed in public area, involving in decision making to breastfeed.

Maternal perceptions on husbands' breastfeeding Support will be measured by Postpartum Partner Support Scale, a 25-item self-report instrument designed to assess partner postpartum perceptions of support. Items are rated on a 4-point scale to produce a summative score ranging from 25 to 100, with higher scores indicating higher levels of maternal Perceptions on postpartum-specific partner support.

4.3.12 Study variable

Table 3: Description of dependent and independent variables

Dependent variables	Independent variables
Primary outcome variable 1. Optimal breastfeeding practice Secondary outcome variables 1. Paternal knowledge, attitude and involvement in supporting 2. Breastfeeding Self-Efficacy	✓ **Maternal Socio-demographic factors:** Age, marital status, residence, occupation, maternal educational status, employment status, wealth index, working situation of the mother, living situation with partner, type of cooking fuel, sanitation facility, source of drinking water, and disposal of child's stools when not using toilet ✓ **Paternal Socio-demographic factors:** Age, marital status, residence, occupation, Paternal educational status,

3. Prevalence of child morbidity 4. Maternal Perceptions on husbands' breastfeeding Support	employment status ✓ **maternal health service and childbirth related factors:** age at delivery, Parity, Attendance of antenatal care services, number of antenatal visits, Provision of advice on breastfeeding by healthcare staff during ANC, Attendance of postnatal care services (PNC), place of delivery, Mode of delivery, breastfeeding experience and birth attendance. ✓ *New born factors*: gender of foetus, sex of the child; birth-weight, birth order ; discharged from hospital with mother ; APGAR test, separation from the mother during hospital stay ; breast-fed during first hours after birth etc. will be developed based on the literature ✓ ***Wealth index-***is calculated using data on a household's ownership of selected assets, such as television and radio, etc. Generated with a statistical procedure known as principal components analysis, the wealth index places individual households on a continuous scale of relative wealth. Each household asset for which information is collected is assigned a weight or factor score generated through principal components analysis. The resulting asset scores are standardized in relation to a standard normal distribution with a mean of zero and a standard deviation of one. These standardized scores are then used to create the break points that define wealth tertiles as: poor, middle and rich.

Outcomes will be assessed as illustrated in the Standard Protocol Items: Recommendations for interventional trials (SPIRIT) (Table3)

Table 4: Standard Protocol Items: Recommendations for Interventional Trials (SPIRIT)

Outcomes		Allocation	Study period			
			Enrolment		Close-out	
		-t	Baseline (t0)	Intervention (3rd trimnster) to 6m	End line at month 6	Remark
Enrolment	Allocation	x				
	Eligibility screen		x			
	Informed consent		x			
Interventions				x		
Socio-demographics of both partner and new born			x			
Paternal knowledge, attitude and Supportive practice on optimal breastfeeding			x		x	
Optimal breastfeeding practices					x	
mother's BF self-efficacy			x		x	
frequency of child morbidity					x	
Maternal perception on husbands support			x		x	

4.3.13 Data analysis

The data will be entered into a computer by Epi data 3.1 & analyzed using STATA window version 14.0. The analysis will be done by intention to treat approach.

Objective two: Paired *t*-test will be used to analyze the difference between the mean of paternal knowledge and attitude in the intervention group before and after intervention and the difference mean of knowledge and attitude scores in the control group before and after intervention

Logistic regression analysis will be used to see the significance of the association between dependent and independent variables. Half of the attitude items that are worded in a manner favorable to formula feeding will be reverse scored during analysis. P-value < 0.05 will be considered as statistical significance in this study.

Objective three: Generalized Estimating Equations (GEE) model that controlled for within-HC clustering will be used to estimate the effect of the intervention on optimal breastfeeding practice at 6week, 3, and 6 months.

In all analyses, the adjustment will be made for clustering at the zone level since randomization was done at cluster level rather than individual level.

Objective four: Descriptive statistics will be used to report participant scores on the BSES-SF and to determine participant level of confidence about optimal breastfeeding.

Paired *t*-test will be used to analyze difference between the mean of self-efficacy scores in the intervention group before and after intervention and the difference mean of self-efficacy scores in the control group before and after intervention

Pearson's correlation will be used to determine if there will be a relationship between breastfeeding self-efficacy and optimal breastfeeding

Generalized Estimating Equations (GEE) model that controlled for within-HC clustering will be used to estimate the effect of the intervention on optimal breastfeeding practice at 6week, 3, and 6 months

Objective five: Poisson regression analysis will be used to control for possible confounding variables. The Poisson regression analysis will be applied to examine the effect of the intervention on childhood morbidity compere to control. All statistical significances will be declared at P-value less than 0.05.

Objective six: Paired *t*-test will be used to analyze difference between the mean of maternal perception on husband support scale scores in the intervention group before and after intervention and difference mean of maternal perception on husband support scale scores in the control group before and after intervention

Pearson's correlation will be used to determine if there will be a relationship between maternal perception on husband support scale and optimal breastfeeding

Linear regression will be used to see the association between maternal perceptions on the husband support scale as a continuous outcome variable with other covariates

4.3.14 Data quality control

The data collectors will be recruited and trained for 2 days. Questionnaires will be prepared first in English by the investigator and then translated to Amaharic (working language) by another individual who is native to Amaharic (working language). The questionnaire will be

translated back to English by another individual to maintain its consistency. Questionnaires will be developed utilizing questions previously validated in the other study.

The FAO and IIFAS questionnaire has been field-tested in several countries to ensure validity, readability, ease of administration and is less burdensome on respondents. Thus the questionnaire formulated based on the FAO, BSE, and IIFAS questionnaire will be pre-tested on 5% of fathers' for purpose of precision, validity, and easiness of data collection.

In this study, the content validity method will be used to achieve instrument validity. To determine the reliability in our context, a pilot study will be performed using 10 eligible subjects.

All tools will be pre-tested in one Kebele not included in the study to make necessary amendments to the tools. The baseline and follow-up questionnaires will include many previously validated and widely used instruments to measure optimal breastfeeding practices.

The selected and trained supervisors will supervise the data collector on daily basis for completeness and consistency of the tool. In addition, the data will be thoroughly cleaned and carefully entered into computer for the beginning of the analysis.

4.3.15 Ethics approval

Ethical clearance will be obtained from the Institutional Review Board of Jimma University and permission will be obtained from SNNP Regional health bero and Hadiya Zone health department. The investigator will duly inform the subjects that participate in the study and will request their informed consent, signed, and dated in writing. He/she will provide complete and adequate verbal and written information about the nature, purpose and possible risks and benefits of the study. The purpose of the study will be explained to the study subjects. At the time of data collection, a verbal consent will be taken from the participants to confirm whether they are willing to participate. Those not willing to participate will be given the right to do so. Confidentiality of responses will be also ensured throughout the research process.

4.3.16 Dissemination plan

Papers from this intervention research will be published in peer reviewed journals. Result of the study will be presented to SNNPG and Hadiya Zone health department. Moreover, findings will be presented at national and international conferences and workshops.

Table 5: A Summary of the brief outlines of the methods section

Specific objectives	**Study design**	**Study Populations**	**Sampling method**	**Data collection methods**	**Sample size**	**Analysis**
To explore men's and women's experiences of male involvement in optimal breast-feeding Practice	Qualitative(phenomenology	-lactating mother and male partners	Convenience sampling	Key informant interview and FDG	16KI of male partner and 3FGD (7-12)	Thematic analysis
To examine the effect of breastfeeding education and support intervention on fathers' knowledge, attitude and **s**upportive practice of optimal breastfeeding	Cluster-randomized controlled trial	Male partners of pregnant mothers on their 3rd trimnester till 6 month of post delivery	SR sampling techniqu e	Interviewers administered at baseline survey and end line	408(204 intervention and 204control group)	-Paired t-test -logistic regression model
To evaluate effect of breastfeeding education and support provided to male partner on optimal breast-feeding practice	cluster-randomized controlled trial	Pregnant mothers & male partners on their 3rd trimnester till 6 month of post delivery	SR sampling techniqu e	Interviewers administered at end line survey	408(204 intervention and 204control group)	- GEE
To measure role of breastfeeding education and support intervention provided to partner on mother's breastfeeding self-efficacy	Cluster-randomized controlled trial	Pregnant mothers & male partners on their 3rd trimnester till 6m of post delivery	SR sampling techniqu e	Interviewers administered at baselin and end line survey	408(204 intervention and 204control group)	-Paired t-test Pearson's correlation -GEE
To compare frequency of child morbidity among intervention and control groups	Cluster-randomized controlled trial	Pregnant mothers male partners on their 3rd trimnester till 6 month of post delivery	SR sampling techniqu e	Interviewers administered end line survey	408(204 intervention and 204control group)	Poisson regression
To compare BF education and support provided to male partner with routine care on maternal Perceptions on husbands' BF Support	Cluster-randomized controlled trial	Pregnant mothers male partners on their 3rd trimnester till 6 month of post delivery	SR sampling techniqu e	Interviewers administered at baselin and end line survey	408(204 intervention and 204control group)	Pearson's correlation -Linear regression

CHAPTER FIVE: WORK PLAN AND BUDGET BREAK DOWN

5.1 Work plan:

Activities	**2020/21**				2021/22				202/23		
	1st quarter (Sept 2020--Nov,2020)	2nd quart (Dec2020--Feb2021)	3rd quart(March 2021---May 2021)	4th quarte(June, 2021--Aug2021)	1st quarter (Sept2021---Nov2021)	2nd quart(Dec2021---February, 2022)	3rd quar (March 2022---May, 2022)	4th quart (June 2022-Aug 2022)	1st quar (Sept 2022---Nov 2022)	2nd quarter (Dec 2022---Feb2023)	3rd quart March 2022---May, 2023)
Draft proposal development											
Finalizing proposal writing											
Proposal defence											
Ethical clearance											
Systematic review											
Training of data collectors											
Pre-testing of instrument											
Baseline data collection											
Intervention administration of BFES											
Data analysis and manuscript writing for Paper I											
Data analysis and manuscript writing for paper II											
Publishing paper, I and II											
Follow up data collection 1											
Follow up data collection 2											
Follow up data collection 3											
Data analysis and manuscript writing for Paper III,IV, V and VI											
Writing the PhD dissertation											
Mock defence											
Public defence and Submission											

5.2 Budget break down

S. N	Budget category	Unit	Quantity	Unit Price (Birr)	Total price	Remark
	Personnel cost					
	Training					
1	Qualitative data collectors	number	6	7*3*372	7,812	
2	Data collectors/ *outcome assessors*	number	16	16*3*372	17,856	
3	educators or counsellors	number	8	8*3*372	8,928	
4	supervisors	number	4	4*3*372	4,464	
	Data Collection					
1	Baseline Data collectors	number	16	16*4,999	79,984	contract
2	End line data collectors at 6 month	„	16	16*4,999	79,984	,,
3	Educators or counselors	„	8	8*4,999	39,992	,,
4	Qualitative data collectors	„	6	6*4,999	29,994	,,
5	supervisors	„	4	4*4,999	19,996	,,
	Sub Total				**289,010**	ETB
	Materials and service cost					
1	Language editing MA	number	contract	1*3000	3,000	
2	Transportation	Trip	5	5*50	250	
3	Ques. Duplication	Page	11,424	11,424*1	11,424	
4	take-home print materials(poster)	Number	408	10*408	4,080	
5	Coffee/tea for training	number	5 days	5*300	1500	
6	Telephone card for intervention	Birr	100	100*2*8	1,600	
	Sub total				**21,864**	
	Grand Total				**310,864 ETB**	

Project budget summary

S.no	Description of the cost	Cost in Birr	Remark
1	Personnel cost	**289,010 ETB**	
2	Materials and service cost	**21,864 ETB**	
	Total	**310,864 ETB**	

Annex I: References:

1. World Health O, United Nations Children's Fund. Global Strategy for Infant and Young Child Feeding. Geneva: World Health Organization; 2003. Available on line at: https://apps.who.int/iris/handle/10665/42590 : Date accessed on 20/02/2021.
2. Health W, Organization. Guideline: counselling of women to improve breastfeeding practices. 2018. p. Licence: CC BY-NC-SA 3.0 IGO. https://www.who.int/publications/i/item/9789241550468: Date accessed on 17/11/2021
3. UNICEF W. Global Breastfeeding Collective. Global Breastfeeding Scorecard, 2017: Enabling women to breastfeed through better policies and programmes. New York, Geneva 2018.
4. Arora S, McJunkin C, Wehrer J, Kuhn P. Major factors influencing breastfeeding rates: Mother's perception of father's attitude and milk supply. Pediatrics. 2000;106(5):E67.
5. Scott JA, Landers MC, Hughes RM, Binns CW. Factors associated with breastfeeding at discharge and duration of breastfeeding. Journal of paediatrics and child health. 2001;37(3):254-61.
6. Katherine Tombeau C EUe. Maternal Perceptions of Paternal Investment Are Associated With Relationship Satisfaction and Breastfeeding Duration in Humans. Erschienen in: Journal of family psychology ; 32 (2018), 8 - S 1025-1035 2018;1025-1035
7. Brown A, Davies R. Fathers' experiences of supporting breastfeeding: challenges for breastfeeding promotion and education. Matern Child Nutr. 2014;10(4):510-26.
8. Nigatu D AM, Motbainor A. Effect of exclusive breastfeeding cessation time on childhood morbidity and adverse nutritional outcomes in Ethiopia: Analysis of the demographic and health surveys. PloS one. 2019;14(10):9-10.
9. WHO. Infant and young child feeding: model chapter for textbooks for medical students and allied health professionals 2009. https://apps.who.int/iris/bitstream/handle/10665/44117/9789241597494_eng.pdf;sequence: Date accessed on 17/11/2021.
10. Agency CS. Ethiopian Demographic and health survey 2019, Ethiopia ORC Macro Calverton Maryland, USA July 2019; 2019. Available on line at: https://www.ephi.gov.et/images/Mini-Demographic-and-Health-Survey-Key-Indicators-2019.pdf: Date accessed on 20/02/2021
11. WHO. Guideline: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services. Geneva:: World Health Organization; 2017. p. Licence: CC BY-NC-SA 3.0 IGO. Available on line at: https://apps.who.int/iris/bitstream/handle/10665/259386/9789241550086-eng.pdf: Date accessed on 2/03/2021
12. Abbass-Dick J, Stern SB, Nelson LE, Watson W, Dennis CL. Coparenting breastfeeding support and exclusive breastfeeding: a randomized controlled trial. Pediatrics. 2015;135(1):102-10.
13. Bich TH, Hoa DT, Ha NT, Vui le T, Nghia DT, Malqvist M. Father's involvement and its effect on early breastfeeding practices in Viet Nam. Matern Child Nutr. 2016;12(4):768-77.
14. Merritt R, Vogel M, Ladbury P, Johnson S. A qualitative study to explore fathers' attitudes towards breastfeeding in South West England. Primary health care research & development. 2019;20:e24.

15. Tadesse K, Zelenko O, Mulugeta A, Gallegos D. Effectiveness of breastfeeding interventions delivered to fathers in low- and middle-income countries: A systematic review. Matern Child Nutr. 2018;14(4):e12612.
16. Salehiniya H, Ebrahimzadeh S, Boskabadi H, Tafazoli M, Moudi A. Comparing the effect of breastfeeding promotion interventions on exclusive breastfeeding: an experimental study. Biomedical Research and Therapy. 2016;3(11):910.
17. Meedya S, Fahy K, Kable A. Factors that positively influence breastfeeding duration to 6 months: a literature review. Women and birth : journal of the Australian College of Midwives. 2010;23(4):135-45.
18. Tohotoa J, Maycock B, Hauck YL, Howat P, Burns S, Binns CW. Dads make a difference: an exploratory study of paternal support for breastfeeding in Perth, Western Australia. International breastfeeding journal. 2009;4:15.
19. Clifford J, McIntyre E. Who supports breastfeeding? Breastfeeding review : professional publication of the Nursing Mothers' Association of Australia. 2008;16:9-19.
20. Cohen R, Lange L, Slusser W. A description of a male-focused breastfeeding promotion corporate lactation program. Journal of human lactation : official journal of International Lactation Consultant Association. 2002;18(1):61-5.
21. Tohotoa J, Maycock B, Hauck Y, Howat P, Burns S, Binns C. Supporting mothers to breastfeed: the development and process evaluation of a father inclusive perinatal education support program in Perth, Western Australia. Health Promot Int. 2011;26(3):351-61.
22. Belay S, Haidar J. EFFECT OF PRENATAL EDUCATION ON BREASTFEEDING INITIATION AND EXCLUSIVE BREAST FEEDING RATE IN SELECTED HEALTH INSTITUTIONS OF HAWASSA CITY, THE CAPITAL OF SNNPR , ETHIOPIA. East African journal of public health. 2013;10:622-31.
23. Ukegbu A, Ebenebe EU, Ukegbu P, Onyeonoro U. Determinants of breastfeeding pattern among nursing mothers in Anambra State, Nigeria. East African journal of public health. 2011;8 3:226-31.
24. Putthakeo P, Ali M, Ito C, Vilayhong P, Kuroiwa C. Factors influencing breastfeeding in children less than 2 years of age in Lao PDR. Journal of paediatrics and child health. 2009;45(9):487-92.
25. Setegn T, Belachew T, Gerbaba M, Deribe K, Deribew A, Biadgilign S. Factors associated with exclusive breastfeeding practices among mothers in Goba district, south east Ethiopia: a cross-sectional study. International breastfeeding journal. 2012;7(1):17.
26. Shibru Hoche BM, Negash Wakgari. Sub-Optimal Breast Feeding and Its Associated Factors in Rural Communities of Hula District, Southern Ethiopia: A Cross-Sectional Study. Ethiop J Health Sci. 2017;28(1):49.
27. Dessalegn Tamiru[1] , M. Sc, Binyam Bogale[2], MPH, Behailu Merdikios[3], MGH. Breastfeeding patterns and factors associated with exposure to Sub-optimal breastfeeding practices in rural communities of Arba Minch Zuria, Ethiopia. Global Health Perspectives ·. 2013;01(02).
28. Hailu WS, Bayih MT, Babble NF. Four in every ten infants in Northwest Ethiopia exposed to sub-optimal breastfeeding practice. PloS one. 2020;15(11):e0238576.
29. Awoke N, Tekalign T, Lemma T. Predictors of optimal breastfeeding practices in Worabe town, Silte zone, South Ethiopia. PloS one. 2020;15(4):e0232316.
30. Abageda M, Mokonen A, Hamdela B. Predictors of Optimal Breastfeeding Practices Among Mothers Who Have Less Than 24 Months of Age Children in Misha District, Hadiya Zone, South Ethiopia. J Preg Child Health. 2015;2:182.
31. Hagos A, Tsadik M, Belachew AB, Tesfahunegn A. Individual and community-level factors influencing optimal breastfeeding: A multilevel analysis from a national survey study

of Ethiopia. PloS one [Internet]. 2021 2021; 16(4):[e0241428 p.]. Available from: http://europepmc.org/abstract/MED/33914746

https://doi.org/10.1371/journal.pone.0241428

https://europepmc.org/articles/PMC8084135

https://europepmc.org/articles/PMC8084135?pdf=render.
32. Karande S, Perkar S. Do fathers' attitudes support breastfeeding? A cross-sectional questionnaire-based study in Mumbai, India. Indian journal of medical sciences. 2012;66(1-2):30-9.
33. Mitchell-Box K, Braun KL, Hurwitz EL, Hayes DK. Breastfeeding attitudes: association between maternal and male partner attitudes and breastfeeding intent. Breastfeeding medicine : the official journal of the Academy of Breastfeeding Medicine. 2013;8(4):368-73.
34. Abhinaya A, Arunprasath T, Padmasani L. Fathe' s knowledge and attitude towards breast feeding. The Journal of medical research. 2016;4:1778-85.
35. Ouyang Y-Q, Nasrin L. Father's Knowledge, Attitude and Support to Mother's Exclusive Breastfeeding Practices in Bangladesh: A Multi-Group Structural Equations Model Analysis. Healthcare. 2021;9(3):276.
36. Taşpınar A, Çoban A, Küçük M, Şirin A. Fathers' knowledge about and attitudes towards breast feeding in Manisa, Turkey. Midwifery. 2013;29(6):653-60.
37. Tsai S-Y. Influence of partner support on an employed mother's intention to breastfeed after returning to work. Breastfeeding medicine : the official journal of the Academy of Breastfeeding Medicine. 2014;9 4:222-30.
38. Mutuli L, Walingo M, Othuon L. Assessing Predictive Power of Psychosocial Factors on Breastfeeding Behavior of Mothers Attending Postnatal Clinics in Western Kenya. ICAN: Infant, Child, & Adolescent Nutrition. 2012;4:230-41.
39. Minas AG, Ganga-Limando M. Social-Cognitive Predictors of Exclusive Breastfeeding among Primiparous Mothers in Addis Ababa, Ethiopia. PloS one. 2016;11.
40. de Jager E, Broadbent J, Fuller-Tyszkiewicz M, Skouteris H. The role of psychosocial factors in exclusive breastfeeding to six months postpartum. Midwifery. 2014;30(6):657-66.
41. Dennis CL. The breastfeeding self-efficacy scale: psychometric assessment of the short form. Journal of obstetric, gynecologic, and neonatal nursing : JOGNN. 2003;32(6):734-44.
42. Rempel LA, Rempel JK. Partner Influence on Health Behavior Decision-Making: Increasing Breastfeeding Duration. Journal of Social and Personal Relationships. 2016;21(1):92-111.
43. Mgongo M, Hashim T, Stray-Pedersen B, Vangen S, Msuya S, Wandel M. Facilitators and Barriers to Breastfeeding and Exclusive Breastfeeding in Kilimanjaro Region, Tanzania: A Qualitative Study. International Journal of Pediatrics. 2019;2019:1-7.
44. Mitchell-Box K, Braun KL. Fathers' thoughts on breastfeeding and implications for a theory-based intervention. Journal of obstetric, gynecologic, and neonatal nursing : JOGNN. 2012;41(6):E41-50.
45. Pontes CM, Alexandrino AC, Osorio MM. The participation of fathers in the breastfeeding process: experiences, knowledge, behaviors and emotions. Jornal de pediatria. 2008;84(4):357-64.
46. Nickerson LE, Sykes AC, Fung TT. Mothers' experience of fathers' support for breast-feeding. Public Health Nutrition. 2012;15(9):1780-7.
47. Comrie-Thomson L, Mavhu W, Makungu C, Nahar Q, Khan R, Davis J, et al. Male involvement interventions and improved couples' emotional relationships in Tanzania and

Zimbabwe: 'When we are walking together, I feel happy'. Culture, health & sexuality. 2020;22(6):722-39.
48. Al Namir HMA, Brady A-M, Gallagher L. Fathers and breastfeeding: attitudes, involvement and support. British Journal of Midwifery. 2017;25(7):426-40.
49. Gebremariam KT, Zelenko O, Mulugeta A, Gallegos D. A cross-sectional comparison of breastfeeding knowledge, attitudes, and perceived partners' support among expectant couples in Mekelle, Ethiopia. International breastfeeding journal. 2021;16(1):3.
50. Gebremariam KT, Zelenko O, Hadush Z, Mulugeta A, Gallegos D. Exploring the challenges and opportunities towards optimal breastfeeding in Ethiopia: a formative qualitative study. International breastfeeding journal. 2020;15(1):20.
51. Su M, Ouyang YQ. Father's Role in Breastfeeding Promotion: Lessons from a Quasi-Experimental Trial in China. Breastfeeding medicine : the official journal of the Academy of Breastfeeding Medicine. 2016;11:144-9.
52. Susin LR, Giugliani ER, Kummer SC, Maciel M, Simon C, da Silveira LC. Does parental breastfeeding knowledge increase breastfeeding rates? Birth (Berkeley, Calif). 1999;26(3):149-56.
53. Susin LR, Giugliani ER. Inclusion of fathers in an intervention to promote breastfeeding: impact on breastfeeding rates. Journal of human lactation : official journal of International Lactation Consultant Association. 2008;24(4):386-92; quiz 451-3.
54. Wallenborn JT, Wheeler DC, Lu J, Perera RA, Masho SW. Importance of Familial Opinions on Breastfeeding Practices: Differences Between Father, Mother, and Mother-in-Law. Breastfeeding medicine : the official journal of the Academy of Breastfeeding Medicine. 2019;14(8):560-7.
55. Wolfberg AJ, Michels KB, Shields W, O'Campo P, Bronner Y, Bienstock J. Dads as breastfeeding advocates: results from a randomized controlled trial of an educational intervention. American journal of obstetrics and gynecology. 2004;191(3):708-12.
56. Yourkavitch JM, Alvey JL, Prosnitz DM, Thomas JC. Engaging men to promote and support exclusive breastfeeding: a descriptive review of 28 projects in 20 low- and middle-income countries from 2003 to 2013. Journal of Health, Population and Nutrition. 2017;36(1).
57. Ansari S, Abedi P, Hasanpoor S, Bani S. The Effect of Interventional Program on Breastfeeding Self-Efficacy and Duration of Exclusive Breastfeeding in Pregnant Women in Ahvaz, Iran. International scholarly research notices. 2014;2014:510793.
58. Aoko L, Kiage BN, Kyallo FM. The participation of fathers in breastfeeding process: knowledge, beliefs, and practices in Kisumu, Kenya. African Journal of Food, Agriculture, Nutrition and Development. 2018:13634-45.
59. Dinga L, Kiage-Mokua B, Kyallo F. Father-targeted nutrition education improves early initiation and breastfeeding exclusivity: The case of Kisumu county, Kenya. Journal of Food Science and Nutrition. 2018;01.
60. Bich TH, Long TK, Hoa DP. Community-based father education intervention on breastfeeding practice-Results of a quasi-experimental study. Matern Child Nutr. 2019;15 Suppl 1(Suppl 1):e12705-e.
61. Hunter T, Cattelona G. Breastfeeding initiation and duration in first-time mothers: exploring the impact of father involvement in the early post-partum period. Health Promot Perspect. 2014;4(2):132-6.
62. Imdad A, Yakoob MY, Bhutta ZA. Effect of breastfeeding promotion interventions on breastfeeding rates, with special focus on developing countries. BMC public health. 2011;11 Suppl 3:S24.

63. Lima FT, Santana AC, dos Santos GM, dos S. Albergaria TF, Silva LR. The Knowledge and Participation of the Father in Breast Feeding, Salvador, Brazil. Open Journal of Obstetrics and Gynecology. 2016;06(10):559-71.
64. Maycock B, Binns CW, Dhaliwal S, Tohotoa J, Hauck Y, Burns S, et al. Education and support for fathers improves breastfeeding rates: a randomized controlled trial. Journal of human lactation : official journal of International Lactation Consultant Association. 2013;29(4):484-90.
65. Ozluses E, Celebioglu A. Educating fathers to improve breastfeeding rates and paternal-infant attachment. Indian pediatrics. 2014;51(8):654-7.
66. Pisacane A, Continisio GI, Aldinucci M, D'Amora S, Continisio P. A controlled trial of the father's role in breastfeeding promotion. Pediatrics. 2005;116(4):e494-8.
67. Piro SS, Ahmed HM. Impacts of antenatal nursing interventions on mothers' breastfeeding self-efficacy: an experimental study. BMC pregnancy and childbirth. 2020;20(1):19.
68. Zhu J, Chan WC, Zhou X, Ye B, He HG. Predictors of breast feeding self-efficacy among Chinese mothers: a cross-sectional questionnaire survey. Midwifery. 2014;30(6):705-11.
69. Yang X, Gao LL, Ip WY, Sally Chan WC. Predictors of breast feeding self-efficacy in the immediate postpartum period: A cross-sectional study. Midwifery. 2016;41:1-8.
70. Li T, Guo N, Jiang H, Eldadah M. Breastfeeding Self-Efficacy Among Parturient Women in Shanghai: A Cross-Sectional Study. Journal of human lactation : official journal of International Lactation Consultant Association. 2019;35(3):583-91.
71. Loke AY, Chan LK. Maternal breastfeeding self-efficacy and the breastfeeding behaviors of newborns in the practice of exclusive breastfeeding. Journal of obstetric, gynecologic, and neonatal nursing : JOGNN. 2013;42(6):672-84.
72. Dennis CL, Brennenstuhl S, Abbass-Dick J. Measuring paternal breastfeeding self-efficacy: A psychometric evaluation of the Breastfeeding Self-Efficacy Scale-Short Form among fathers. Midwifery. 2018;64:17-22.
73. Nepali S, MS. Husband's Support for Breastfeeding and Breastfeeding Efficacy of Nepalese Mothers. Health Prospect: Journal of Public Health. March, 2018;18(I).
74. Mannion CA, Hobbs AJ, McDonald SW, Tough SC. Maternal perceptions of partner support during breastfeeding. International breastfeeding journal. 2013;8(1):4.
75. Bowatte G, Tham R, Allen KJ, Tan DJ, Lau M, Dai X, et al. Breastfeeding and childhood acute otitis media: a systematic review and meta-analysis. Acta paediatrica (Oslo, Norway : 1992). 2015;104(467):85-95.
76. Ladomenou F, Moschandreas J, Kafatos A, Tselentis Y, Galanakis E. Protective effect of exclusive breastfeeding against infections during infancy: a prospective study. Archives of Disease in Childhood. 2010;95(12):1004-8.
77. Ip S, Chung M, Raman G, Chew P, Magula N, DeVine D, et al. Breastfeeding and maternal and infant health outcomes in developed countries. Evidence report/technology assessment. 2007(153):1-186.
78. Lamberti L, Zakarija-Grković I, Walker C, Theodoratou E, Nair H, Campbell H, et al. Breastfeeding for reducing the risk of pneumonia morbidity and mortality in children under two: A systematic literature review and meta-analysis. BMC public health. 2013;13 Suppl 3:S18.
79. Quigley M, Carson C, Sacker A, Kelly Y. Exclusive breastfeeding duration and infant infection. European journal of clinical nutrition. 2016;70.
80. Quigley MA, Kelly YJ, Sacker A. Breastfeeding and hospitalization for diarrheal and respiratory infection in the United Kingdom Millennium Cohort Study. Pediatrics. 2007;119(4):e837-42.

81. Nikièma L, Huybregts L, Martin-Prevel Y, Donnen P, Lanou H, Grosemans J, et al. Effectiveness of facility-based personalized maternal nutrition counseling in improving child growth and morbidity up to 18 months: A cluster-randomized controlled trial in rural Burkina Faso. PloS one. 2017;12(5):e0177839.
82. Benedict RK CH, Torlesse H, Stoltzfus RJ. Trends and predictors of optimal breastfeeding among children 0–23 months, South Asia: Analysis of national survey data. Matern Child Nutr. 2018;14(54)(e12698).
83. Oot LS, K.; Ross, J.; and Sommerfelt, A.E. The Effect of Suboptimal Breastfeeding on Preschool Overweight/Obesity: A Model in PROFILES for Country-level Advocacy. Washington, DC: FHI 360/FANTA.; 2016.
84. Hagos A. Individual and community-level factors influencing optimal breastfeeding: A multilevel analysis from a national survey study in Ethiopia. 2016.
85. Marías YFaPG. Guidelines for assessing nutrition-related knowledge, attitudes and practices. Rome: Food and Agriculture Organization of the United Nations (FAO); 2014. p. vi + 180 pp.
86. de la Mora A, Russell D, Dungy C, Losch M, Dusdieker L. The Iowa Infant Feeding Attitude Scale: Analysis of Reliability and Validity1. Journal of Applied Social Psychology - J APPL SOC PSYCHOL. 1999;29:2362-80.

Annex II: Questionnaires English

JIMMA UNIVERSITY

INSTITUTE OF HEALTH

DEPARTMENT OF POPULATION AND FAMILY HEALTH

Study Title: Effect of breastfeeding education and support provided to male partner on optimal breastfeeding practice in Hadiya Zone, southern Ethiopia

Read for the study participants

Dear Mother and Father

Consent Form

My name is _____. I am interviewing fathers and mothers who are pregnant and breastfeeding to assess the effect of partner on optimal breastfeeding practice. The objective of this study is to assess effect of partner on optimal breastfeeding practice in Hadiya zone. I am going to ask you some questions that are very important for the programmers in infant/child feeding service to plan improved intervention. Your name will not be written in this form and the information you give is kept confidential. If you do not want to answer, all or some of the questions you do have the right to do so. However, your willingness and support to answer all of the questions would be appreciated and thank you on the behalf of the all participants

Would you participate in responding to questions in this questionnaire?

Yes_____ continue. No_____ thank you!

001. Questionnaire ID number_____

Part I: **Socio-demographic characteristics of all eligible fathers**

S.Nº	Socio-demographic variables.	Response format	Skip to
Q101	Maternal age? (completed in years)	_____years.	
Q102	Paternal age (completed in years)	_____years.	
Q103	Mothers' attended formal school?	1. Yes 2. No	If no, Q107

Q104	What is the highest grade you completed?	1. Primary level (1-4 grade 2. Medium level (5-8 grade) 3. Secondary level (9-12 grade) 4. Technical/vocational certificate 5. Diploma and above 99. Other (specify) _____	
Q105	Fathers' attended formal school?	1. Yes 2. No	If no, Q107
Q106	If yes, What is the highest grade you completed?	1. Primary level (1-4 grade 2. Medium level (5-8 grade) 3. Secondary level (9-12 grade) 4. Technical/vocational certificate 5. Diploma and above 99. Other (specify) _____	
Q107	Paternal employment	1. Employed 2. Non-employed	
Q108	Paternal occupational status?	1. Government employee 2. Private sector 3. Business women 4. House wife 5. Daily laborer 6. Student 99. Other(Specify)_____	
Q109	Maternal employment	1. Employed 2. Non-employed	
Q110	Maternal occupational status?	7. Government employee 8. Private sector 9. Business women 10. House wife 11. Daily laborer 12. Student 99. Other(Specify)_____	
Q111	Family size	1. One 2. Two 3. ≥ three	
Q112	What is your Residence?	1. Urban 2. Rural	

Part II: Household fixed assets of breast feeding mothers

Now I will ask you about some fixed assets that your household have.			
Does the household have any of the following properties? (Circle)		**Yes**	**No**
Q201	Functioning radio/Tape recorder/CD player	1	0
Q202	Functioning Television	1	0

Q203	Gas Stove	1		0
Q204	Kerosene stove	1		0
Q205	Electric stove	1		0
Q206	Cart/Gari	1		0
Q207	Watch (Hand/Wall)	1		0
Q208	Mobile phone	1		0
Q209	Sofa	1		0
Q210	Spring mattress	1		0
Q211	Sponge/Foam mattress	1		0
Q212	Cotton mattress	1		0
Q213	Grass Mattress	1		0
Q214	Chair/Stool	1		0
Q215	Generator	1		0
Q216	Water pump	1		0
Does the household have any of the following animals?		**Yes**	**No**	How many?
Q217	Oxen	1	0	
Q218	Cows	1	0	
Q219	Horse/mules	1	0	
Q220	Goats/Sheep	1	0	
Q221	Chickens	1	0	
Q222	Donkey	1	0	

Part III: Core questions on maternity experience and New born characteristics

S.N^{o}	Questions	Response coding categories	Skip to
Q201	Gravidity	_____	
Q202	Parity	_____	
Q203	What was pregnancy intention with the last child?	1. Wanted 2. Unwanted 3. Mistimed	
Q204	History of abortion	1. Yes 2. No	
Q205	ANC attendance	1. Yes 2. No	
Q206	how many times (visits) have you attended the Antenatal clinic	Number of attended Antenatal follow up_____ Don't know_____	

Q207	Mode of delivery?	1. Normal vaginal delivery(NVD) 2. Caesarean section(c/s) 3. Other	
Q208	Have you ever been informed/advised about breastfeeding while you were pregnant?	1. Yes 2. No 3. Don't know	
Q209	Sex of new born	1. Male 2. Female	
Q210	Gestational age	1. 37 weeks above 2. <37 weeks	
Q211	Birth weight of the new born	1. <2500g 2. ≥ 2500 g	
Q212	Child birth order	1. First 2. Second or higher	

Part IV. Knowledge, attitude and Supportive practice of male partner towards breastfeeding at baseline

1. Knowledge

No	**Question**	**Response**	**Remark**
1	First food for the newborn is breastmilk	1. Yes 2. No	
2	Exclusive breast milk can be given during first 6 months	1. Yes 2. No	
3	Is colostrum nutritionally beneficial to the child?	1. Yes 2. No	
4	During breastfeeding the mother should sit comfortably	1. Yes 2. No	
5	Is it important to initiate breastfeeding within 1 hr. after birth?	1. Yes 2. No	
6	Exclusive breastfeeding is beneficial to the mother	1. Yes 2. No	
7	Lactating mother should take healthy food to improve secretion of milk	1. Yes 2. No	
8	Breastfeed affect the beauty of feeding mothers	1. Yes 2. No	
9	Breast feeding should be continued Up to 2 years	1. Yes 2. No	
10	Breast feeding helps in mother and child bonding	1. Yes 2. No	
11	Breastmilk only is sufficient for the baby's first 6 months of life	1. Yes 2. No	

12	Is there a need to introduce complementary food after 6 months?	1. Yes 2. No	
13	The baby should be breastfed on demand	1. Yes 2. No	
14	In times of absence the baby can continue to be exclusively breastfed by expressing breast milk and storing	1. Yes 2. No	
15	Continue breast feeding even during maternal or child illness	1. Yes 2. No	
16	Prelacteal feeds should not be given	1. Yes 2. No	

2. Iowa Infant Feeding Attitude Scale

For each of the following statements, please choose the answer that best describes how agree you are with breastfeeding your new baby. Please mark your answer by circling the number that is closest to how you feel. There is no right or wrong answer.

1 = strongly disagree 2 = disagree 3 = undecided 4 = agree 5 = strongly agree

No	Question	Response				
1	The benefits of breastfeeding last only as long as the baby is breast-fed*	1	2	3	4	5
2	Formula feeding is more convenient than breastfeeding*	1	2	3	4	5
3	Breastfeeding increase mother infant bonding	1	2	3	4	5
4	Breast milk is lacking in iron*	1	2	3	4	5
5	Formula fed babies are more likely to be overfed than breastfed babies	1	2	3	4	5
6	Formula feeding is the better choice if the mother plans to go back to work*	1	2	3	4	5
7	Mothers who formula feed miss one of the great joys of motherhood	1	2	3	4	5
8	Women should not breastfeed in public places such as restaurants*	1	2	3	4	5
9	Breastfed babies are healthier than formula fed babies	1	2	3	4	5
10	Breastfed babies are more likely to be overfed than formula fed babies*	1	2	3	4	5
11	Fathers feel left out if a mother breast-feeds*	1	2	3	4	5
12	Breast milk is the ideal food for babies	1	2	3	4	5
13	Breast milk is more easily digested than formula	1	2	3	4	5
14	Formula is as healthy for an infant as breast milk*	1	2	3	4	5
15	Breastfeeding is more convenient than formula	1	2	3	4	5
16	Breast milk is cheaper than formula	1	2	3	4	5
17	A mother who occasionally drinks alcohol should not breastfeed her baby*	1	2	3	4	5

3. **Supportive practice of male partner**

No	**Question**	**Response**	**Remark**
1	Do you Participate in the antenatal process during partner's pregnancy?	1. Yes 0. No	
2	Do you have interest to help your partner to breastfeed?	1. Yes 0. No	
As a father, which is your participation?			
3	Household chores and responsibilities	1. Yes 0. No	
4	Caring for the baby	1. Yes 0. No	
5	Feeding the baby	1. Yes 0. No	
6	Caring for the mother	1. Yes 0. No	
7	Encouragement and motivation	1. Yes 0. No	
8	Being in agreement	1. Yes 0. No	
9	Favourable environment	1. Yes 0. No	
10	Suggestions to formulate a program to influence fathers to participate more in the breastfeeding process:	1. programs/courses/talks/workshops 2. More incentive for fathers to participate in the antenatal 3. More information on the subject 4. advertisements in the media to stimulate 5. theory and practice classes in the maternities and common wards 6. Other suggestions 7. No answer	

4. Husband's Support Scale

Below is a series of statements about your spouse/partner and the support provided after the birth of your baby? Please indicate which number comes closest to how you have been feeling during the past weeks. 1 = strongly disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

No	IN GENERAL, MY SPOUSE/PARTNER:	Response			
1	Respects the decisions I make as a mother	1	2	3	4
2	Is there for me when I need him	1	2	3	4

3	Helps me take care of the baby	1	2	3	4
4	Encourages me to get help when I need it	1	2	3	4
5	Makes me feel that I am a good mother	1	2	3	4
6	Agrees with how I am taking care of the baby	1	2	3	4
7	Listens to my concerns	1	2	3	4
8	Provides useful suggestions to help me with my concerns	1	2	3	4
9	Cares about me and how I am doing	1	2	3	4
10	Increases my confidence in being a good mother	1	2	3	4
11	Helps me with the household chores	1	2	3	4
12	Encourages me when I am stressed with the all the demands of being a mother	1	2	3	4
13	Helps me cope with any difficulties I encounter	1	2	3	4
14	Provides me with feedback on how I am doing	1	2	3	4
15	Disagrees more with me since the birth of the baby	1	2	3	4
16	Helps me feel positive about being a mother	1	2	3	4
17	Helps me solve any problems I am having	1	2	3	4
18	Helps me find answers to my questions	1	2	3	4
19	Provides me with opportunities to do things for myself	1	2	3	4
20	Makes me feel better after talking with him	1	2	3	4
21	Makes me feel that I can count on him if I need help	1	2	3	4
22	Provides me with companionship to do different things	1	2	3	4
23	Criticises me and how I am taking care of the baby	1	2	3	4
24	Helps me see the positive side of things	1	2	3	4
25	Overall, I am satisfied with the support from my partner	1	2	3	4

Part V: Breastfeeding Self-Efficacy Scale – Short Form

For each of the following statements, please choose the answer that best describes how confident you are with breastfeeding your new baby. Please mark your answer by circling the number that is closest to how you feel. There is no right or wrong answer.

1 = not at all confident

2 = not very confident

3 = sometimes confident

4 = confident

5 = very confident

No	Question	Response				
1	I can always determine that my baby is getting enough milk	1	2	3	4	5
2	I can always successfully cope with breastfeeding like I have with other challenging tasks	1	2	3	4	5
3	I can always breastfeed my baby without using formula as a supplement	1	2	3	4	5
4	I can always ensure that my baby is properly latched on for the whole feeding	1	2	3	4	5
5	I can always manage the breastfeeding situation to my satisfaction	1	2	3	4	5
6	I can always manage to breastfeed even if my baby is crying	1	2	3	4	5
7	I can always keep wanting to breastfeed	1	2	3	4	5
8	I can always comfortably breastfeed with my family members present	1	2	3	4	5
9	I can always be satisfied with my breastfeeding experience	1	2	3	4	5
10	I can always deal with the fact that breastfeeding can be time consuming	1	2	3	4	5
11	I can always finish feeding my baby on one breast before switching to the other breast	1	2	3	4	5
12	I can always continue to breastfeed my baby for every feeding	1	2	3	4	5
13	I can always manage to keep up with my baby's breastfeeding demands	1	2	3	4	5
14	I can always tell when my baby is finished breastfeeding	1	2	3	4	5

Part VI: Basic information about optimal breast feeding practice

S.Nº	Now I would like to ask you some questions about breast-feeding of the last child.	Response coding categories	Skip to
Q401	How long after birth did you first put the child to the breast?	1. Within 1 Hour 2. 1-24hr 3. 1-3days 4. After 3days	
Q402	Did you give the first milk (colostrum) that came from your breasts?	1. Yes 2. No 77. Don't know	
Q403	If no, why didn't you give it for your child?	1. It is dirty 2. It creates abdominal pain to the baby 99. Others(specify)_____	
Q404	If the answer for No.402 is no, what did you feed the child?	Yes No Plain water 1 2 Water sugar/salt solution 1 2 Cow's milk 1 2 Formula milk 1 2 Butter 1 2 Other(specify)_____99	

Q405	Are you still breast-feeding the child?	1. Yes 2. No →	Q409
Q406	Was the child breastfed yesterday during the day or at night?	1. Yes 2. No	
Q407	How many times did you breast feed in 24 hours? **If the answer is not numeric, probe for approximate number.*	Number of breast feedings_____ 77. Don't know	
Q408	Did you feed your child with breast milk only in last 24 hours?	1 .Yes 2. No	
Q409	If no, what do you feed your child? **Read the response*	Yes No Sugar/salt solution? _1 2 Water/tea? _____ 1 2 Cow's milk? _____1 2 Powdered milk? ___1 2 Cereal based fluid?_1 2 Adult food?_____ 1 2 Other(Specify)_____99	
Q410	If the child hasn't fed anything except breast milk until now, when do you plan to start additional diet? **This question belongs only to a child who is on BF*	Age in complete months_____ Don'tknow_____77	
Q411	For how many months did you feed your last child with breast milk only? **If less than one month, record '00' months*	Number of complete months_____ 77. Don't know	
Q412	Did you stop breast feeding?	1. Yes 2. No	
Q413	Why did you stop breast feeding the youngest child? **This question belongs only to a child who is not on breast feeding(stopped breast feeding)*	1. Pregnancy 2. Oral contraceptive use 3. Felt it was time to stop 4. Inadequate breast milk 5. Maternal illness 99. Other(Specify)_____	
Q414	Totally for how many months did you feed your last child with breast milk?	Months_____ 77. Don't know	
Q415	In your opinion for how long should a child be totally breast fed?	Number of complete months_____ 77. Don't know	
Q416	In your opinion for how long should a child feed breast milk only?	Number of complete months_____ 77. Don't know	
Q417	If you had given the child mashed or liquid foods, what did you use to give the food to baby?	1. Bottle nipple 2. Cup & spoon 3. Hand/finger 99. Other(Specify)_____	
Q418	How was the frequency of breast feeding your Child during illness?	1. Less than the usual 2. About the same 3. More than the usual 4. Nothing to fed 77. Don't know	

Q419	How do would you give breast-milk if you are sick?	1. Stop breastfeeding 2. Continue breastfeeding 3. Decrease breastfeeding 99. Other(Specify)_____	
Q420	In your opinion how frequently should breastfeeding mother eat food?	1. Less than the usual 2. About the same 3. More than the usual 77. Don't know	
Q421	Have you ever heard about how to start and continue breast feeding your child?	1. Yes 2. No 77. Don't know	
Q422	In your opinion what should be the role of a husband in breast feeding?	Yes No Know the advantage of breast feeding and give advice_____ 1 2 Give economic support and __ 1 2 involve on home activities___ 1 2 Has no role_____ 1 2 Others(specify)_____99 Don't know_____ 77	

Part VII: Morbidity status of children

No	Question	Response	Remark
1	Has the child had diarrhea in the last 2 weeks?	1. Yes 2. No	
2	Has the child been ill with a fever at any time in the last 2 weeks?	1. Yes 2. No	
3	Has the child had an illness with a cough at any time in the last 2 weeks?	1. Yes 2. No	
4	Did he/she breathe faster than usual with short, rapid breaths or have difficulty of breathing?	1. Yes 2. No	
5	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	1. Yes 2. No	

Part VIII: Qualitative KI guideline

1. How would you describe breast-feeding?
2. Were your children breastfed? Why or Why not?
3. It has been argued that a child should breastfed for a certain period. What is your opinion on this? What are good things about breastfeeding? What are the bad things about breastfeeding?
4. How do you understand breastfeeding?
5. What are some advantages to breastfeeding? Any disadvantages?
6. Were you involved in the decision about feeding of your children when they were infants?

7. Who should be involved in the decisions about infant feeding in a household?
8. Do you think it is important for men to support breastfeeding? Why or why not?
9. Tell me more about the attitudes and beliefs in your culture when a woman should breastfed and when she must not.
10. What is the role of fathers and men in the care of infants in your community?
11. What is the role of fathers and men in relation to infant feeding in your community?
12. Tell me more how the woman can be supported pre-natal, after delivery and during pueripuerium. (Probe by father of baby, if only mention other family members role)
13. Would you like to have been more involved in taking care of your children, especially when they were infants? Why or why not? If yes, what would you like to have done differently?
14. If there is an educational program created just for partners, what information would you like to see included?
15. Any other thoughts before we close?

FGD guideline for mother

What was your breast-feeding experience like?

- ✓ How long?
- ✓ Overall good/bad?

Overall, how would you describe your husband's/partner's view of breast-feeding?

- ✓ How would you describe his level of support around breast-feeding?
- ✓ Did he want you to breast-feed?
- ✓ Was this a mutual decision or your own decision?

What role did your husband/partner play in breast-feeding?

- ✓ Is there anything that he didn't do that you wish he did?
- ✓ Is there anything that he did that you didn't want him to do or anything that you didn't want him to be involved in?

What do you think women need from their husbands/partners to make breast-feeding more successful?

- ✓ Physical support?

- ✓ Emotional support?
- ✓ Help in other areas of family life?

How did you prepare for breast-feeding? How was your husband/partner involved in preparation? Do you think your preparation was adequate? Was your husband/partner adequately prepared? Why or why not?

- ✓ Has your husband/partner faced challenged in trying to support you during breast-feeding?
- ✓ Have there been unexpected situations since your baby's birth which require changes in support or additional support?
- ✓ If so, do any of these circumstances make it more difficult to provide support?
- ✓ Do you think your husband/partner needs additional/outside support?
- ✓ Tell me more about the attitudes and beliefs in your culture when a woman should breastfed and when she must not.
- ✓ What is the role of fathers and men in the care of infants in your community? What is the role of fathers and men in relation to infant feeding in your community?
- ✓ Any other thoughts before we close?

Annex III: Questionnaires Amahric version

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የስምምነት ቅጽ

ለጥናቱ ተሳታፊዎች ያንብቡ

ውድ እናት እና አባት

Ö?“ ÃeØMኝ eT¦ ----------ÃvLM:: በጅማ ዩኒቨርሲቲ የስነ ተዋልዶ ጤና የሦስተኛ ዲግሪ ተማሪ የሆነዉ ሙላቱ አባጋዳ በሚስራው ጥናት ላይ መረጃ ሰብሳቢ ነኝ። ነፍሰ ጡር እና ጡት በማጥባት ላይ ያሉ አባቶችን እና እናቶችን ቃለ መጠይቅ እያደረግሁ ነው የትዳር አጋር በጥሩ የጡት ማጥባት ልምምድ ላይ ያለውን ተጽእኖ ለመገምገም። የዚህ ጥናት አላማ በሀድያ ዞን ውስጥ ባለው ጥሩ የጡት ማጥባት ልምምድ ላይ የአጋር ተጽእኖን መገምገም ነው። በጨቅላ/ሕጻናት አመጋገብ አገልግሎት ውስጥ ላሉ ፕሮግራም አውጪዎች በጣም አስፈላጊ የሆኑ አንዳንድ ጥያቄዎችን ልጠይቅህ ነው። ስምዎ በዚህ ቅጽ አይጻፍም እና የሚሰጡት መረጃ በሚስጥር ይጠበቃል። መልስ መስጠት ካልፈለጉ፣ ሁሉም ወይም የተወሰኑት እርስዎ ያቀረቧቸው ጥያቄዎች ይህንን ለማድረግ መብት አሎት። ነገር ግን፣ ሁሉንም ጥያቄዎች ለመመለስ ፈቃደኛነትዎ እና ድጋፍዎ እናመሰግናለን እናም በሁሉም ተሳታፊዎች ስም እናመሰግናለን። ጥያቄ ወይም ችግር ካለ በስልክ ቁጥር 0910-99-9650 ወይም 0919-13-0165 መደወል ይችላሉ።

በጥናቱ ላይ ለመሳተፍ ተሳሞምተዋል? አዎ ------ አልተሰማማሁም ------

ካልተስማሙ እናመሰግናለን (ወደሚቀጥለው እለፍ)

የመጠይቁ መለያ ቁጥር_____
ቀበሌ_____

የቤት ቁጥር_____

የጠያቂ ስምና ፊርማ_____

ክፍል አንድ፡ የእናቶች እና ያባሎቸቸዉ ማህበራዊና ኢኮኖሚያዊ ሁኔታዎች ለመጠየቅ የተዘገጀ መጠይቅ።

ተ/ቁ	ጥያቄ	ምላሽ	ዕላፋ
101	የእናት ዕድሜ?/በዓመት/	----------	
102	የበለቤትሽ/የአባት ዕድሜ; /በዓመት/	----------	
103	ሐይማኖት	1. ፕሮቴስታንት 2. ኦርቶዶክስ 3. ሙስሊም 4. ካቶሊክ 99. K?L (ይጠቀስ)----------	
104	ብሄረሰብ	1. ሐዲያ 2. ከምባታ 3. አማረ 4. ጉራጌ 5. ስልጤ 99. K?L (ይጠቀስ)----------	
105	**የጋብቻ ሁኔታ**	1. **ያላገባ** 2. **ያገባ** 3. **የፈታ** 4. **ባል የሞተባት**	
106	**ትምህት ቤት ገብተi } U [iM;**	1. **አዎ** 2. **አይደለም** ——→	ወደ 107
107	**የትምህርት ደረጃ**	1. 1-4 **ክፍል** 2. 5-8 **ክፍል** 3. 9-12 **ክፍል** 4. **የኮሌጅ ሰርትፍኬት** 5. **ዲፖ`ሎማ እና ባለይ** 99. **ሌለ** (ይጠቀስ)----------	
108	**የስራ ሁኔታ**	1. **ሰራተኛ** 2. **ስራ የሌላዉ**	
109	**የሥራ ደረጃዎ** ምንÉን ነ¨‹;	1. ¾S ንÓeት c ^ } ኛ 2. ¾ÓM Å ` ï ት c ^ } ኛ 3. ¾ንÓÉ e ^ 4. ¾u?ት እSu?ት 5. ¾kን c ^ } ኛ 6. } T]	

		99. K?L (ይጠቀስ)----------	
110	ባለቤትi c[}ኛ ነዉ;	1. **አዎ** 2. **አይደለም**	
111	የባለቤትi ¾ትምህት ደረጃ	1. **የልተማራ** 2. **ማጸሃፍና ማንባብ የምችል** 3. 1-8 **ክፍል የተማረ** 4. 9-12 **ክፍል የተማረ** 5. **ኮሌጅና በለይ የተማረ**	
112	ፓዜጣ እና መጸሃፍ ተነብያለi	1. **አዎ** 2. **አይደለም**	
113	**የሚኖሩበት አካባቢ**	1. **ገጠር** 2. **ከተማ**	
114	**የቤተሰብ ብዘት**	1. **አንድ** 2. **ሁለት** 3. **ከሦስት በላይ**	

¡õM G‹Kƒ: ቤት ዉስጥ የለዉን ሀብት ለማጠየቅ የተዘገጀ ማጠይቅ

እናዝህ ንብረቶች በቤትi ¬eØ አላቸው; (S¡uw)		›K¬		¾K¬U
201	¾Uc^ _Ê/ቴፕ/ ማጨዎች	1		0
202	¾Uc^ ቴሌቨጅን	1		0
203	uአ¾` ¾Uc^ እስቶቨ	1		0
204	ቡታ ፓዝ	1		0
205	uSw[ƒ ¾Uc^ እስቶቨ	1		0
206	Ò]	1		0
207	¾እጅ ወይም የግድግዳ ሰዓት	1		0
208	VuÃM	1		0
209	fó	1		0
210	እስፕረንግ ፍረሽ	1		0
211	እስፖንጅ ፍረሽ	1		0
212	የጥጥ ፍረሽ	1		0
213	የሰረ ፍረሽ	1		0
214	ወንበረ	1		0
215	ጄኔረተር	1		0
216	ወሃ መዉጫ/ፓምፕ/	1		0
በቤትሽ ዉስጥ የምካተሉት እንስሰቶች አሉ;		›K¬	¾K¬U	ምን ያህል; (በቁጥር)
217	በሬ	1	0	
218	ላም	1	0	
219	ፈረስ/በቁሎ/	1	0	
220	ፍየል/በግ/	1	0	
221	ዶሮ	1	0	
222	አህያ	1	0	

ክፍል ሦስት: በወሊድ ልምድ እና አዲስ የተወለዱ ባህሪያት ላይ ዋና ጥያቄዎች

}.l	ጥያቄዎች	ምላሽ	
301	የእርግዝና ብዘት	_____ በቁጥር ይገለê	
302	የስንት ልጅ ወልደሽል	_____በቁጥር ይገለê	
303	ስንተኛ ልጅሽ ነዉ	_____ —	
304	የእርግዝነዉ የተቀደ ነበር;	1. ¾}kÅ 'u` 2. ÁM}kÅ 'u` 3. ÁKÑ»²?¬ 'u`	
305	የእርግዝና ጊዜሽ ስንት ወር ነዉ;	1. 37 ሳምንታት በላይ 2. 37 ሳምንታት በታች	
306	የተወለደው ን ነ አ ልጅሽ የልደት ክብደት	1. 2500 ግራም በታች 2. 2500 ግራም በላይ	
307	የልጅሽ ï ታ?	1.ወንድ 2.ሴት	
308	¾°`Ó´" ¡ƒƒM uÖ?" }sU ›`Ñi 'u`; የቅድመ ወሊድ ክትትል በጤና ተsም አድርገሽል	1. **አዎ** 2. ›LÅ[Ÿ‹Ч →	ወደ ጥያቄ 311 ዕላፍ
309	K 308 ***መልስሽ አዎን ከሆነ ምንያህል ጊዜ?***	K _____ ÁIM Ñ»²? 77. ›L¨‹pU	
310	¾S Ú [h¨‹" MÏ የት ነበር ¾¨KÉi¨‹;	1. ቤት 2. ¾SንÓeት JeታúM 3. ¾SንÓeት Ö?ና ×u÷Á 99. K?L (ይጠቀስ)----------	
312	Tን ነu` eት¨MÍ÷ ¾[Çi; **/ አብራሪና የረዱትን ሰዎች በሙሉ መዝግብ/**	1. Ö?ና vKS‹Á 2. MUÉ አªLÏ 3. Ö?ና ኤክስቴሽን **ባለሙያዎች** 4. ²SÉ 99. (ይጠቀስ)----------	
313	እንÈት ነu` ¾¨KÉi¨‹;	1. uት¡¡Kኛ ›¨LKÉ 2. u*ý_gን 77. አL¨pU	
314	Ÿ¨K÷É uታL ¾Ö?" ¡ ትትM አÉ`Ñi 'u`;	1. **አዎ** 2. ›ÃÅKU	
315	ከዚህ በፊት ስለ ጡት ማጥባት ተነግሮዎት/ተማክረዎት ያውቃሉ?	1. **አዎ** 2. ›M}cÖ˜U → 77. ›L¨‹pU	ወደ ክፍል 4 እላፍ
316	የፅንስ መጨንገፍ ታሪክ	1.አዎ 2. አይ	

ክፍል አራት: ጡት በማጥባት ላይ የወንድ አጋር እውቀት, አመለካከት እና ደጋፊ ልምምድ

1. የሕፃናት አመጋገብ እውቀት

ተ.ቁ	ጥየቄ	ምላሽ		አስተያየት
1	ለሕፃናት የመጀመሪያ ምግብ የእናት የጡት ወተት ነው	1=አዎ	0=አይ	

2	በመጀመሪያዎቹ 6 ወራት ውስጥ የእናት ጡት ወተት ነዉ የምሰጠዉ	1=አዎ	0=አይ	
3	¾SËS]Á¨‹” ¾Ö‹ƒ ¨ } ƒ/ኮሎስትረም/እ”Ñ`/ ለልጁ በአመጋገብ ጠቃሚ ነው?	1=አዎ	0=አይ	
4	ጡት በማጥባት ወቅት እናትየው በምኞት መቀመጥ አለባት	1=አዎ	0=አይ	
5	ሕፃናት u} ¨ዱ በ 1 ሰዓት ውስጥ ጡት ማጥባት መጀመር አስፈላጊ ነው;	1=አዎ	0=አይ	
6	ከተወለደ እስከ ስድስት ወር ብቸኛ ጡት ማጥባት ለእናትየው ጠቃሚ ነው	1=አዎ	0=አይ	
7	የምታጠባ እናት የወተትን ፈሳሽ ለማሻሻል ጤናማ ምግብ መውሰድ አለባት	1=አዎ	0=አይ	
8	ጡት ማጥባት በምያጠቡ እናቶች ውበት ላይ ተጽእኖ ያሳድራል	1=አዎ	0=አይ	
9	ጡት ማጥባት እስከ 2 ዓመት ድረስ መቀጠል አለበት	1=አዎ	0=አይ	
10	ጡት ማጥባት በእናቶች እና በልጅ መካከል ትስስር እንዲኖር ይረዳል	1=አዎ	0=አይ	
11	**የጡት ወተት ብቻ ለህፃኑ የመጀመሪያዎቹ 6 ወራት በቂ ነው**	1=አዎ	0=አይ	
12	ከ 6 ወር በኋላ ተጨማሪ ምግብን ማስተዋወቅ/ TeËS `/ ያስፈልጋል;	1=አዎ	0=አይ	
13	ህጻኑ በፍላጋ ግዜ/„KA „KA/ ጡት ማጥባት አለበት	1=አዎ	0=አይ	
14	ጡት የምተጠባ እናት በማትኖርበት ጊዜ ህፃኑ የጡት ወተት ተልቦ በማከማቸት ጡት ብቻ ማጥባት ሊቀጥል ያስፋልጋል	1=አዎ	0=አይ	
15	በእናቶች ወይም በልጅ ህመም ጊዜ እንኳን ጡት ማጥባትዎን SkÖM ›Kuƒ;	1=አዎ	0=አይ	
16	የፕሪላክቴል/ Prelacteal/ ምግቦች መሰጠት የለባቸውም	1=አዎ	0=አይ	

2. የሕፃናት አመጋገብ አመለካከት

ለእያንዳንዱ የሚከተሉት መግለጫዎች፣ እባክዎን አዲሱን ልጅዎን ጡት በማጥባት ምን ያህል እንደተስማሙ የሚገልፅውን መልስ ይምረጡ። እባክዎን ለሚሰማዎት ስሜት ቅርብ የሆነውን ቁጥር በመክበብ መልስዎን ምልክት ያድርጉበት። ትክክለኛ ወይም የተሳሳተ መልስ የለም

1. በጽኑ አልስማማም 2. አልስማማም 3. ያልተወሰነ/ ገለልተኛ 4. እስማማለሁ 5. በጽኑ እስማማለሁ

}.I	ጥያቄ	ምላሽ				
1	ጡት ማጥባት ያለው ጥቅም ህፃኑ ጡት እስኪያጠጣ ድረስ ብቻ ነው የሚቆየው	1	2	3	4	5
2	በፋብርክ ¾ታዘገጃ ወተት መመገብ ጡት ከማጥባት የበለጠ ምቹ ነው	1	2	3	4	5
3	ጡት ማጥባት የእናትን የሕፃናት ትስስር ይጨምራል	1	2	3	4	5
4	የብረት(iron) በእናት ጡት ወተት ውስጥ ይጎድላል	1	2	3	4	5
5	ፎርሙላ የሚመገቡ ሕፃናት ጡት ከሚጠቡ ሕፃናት የበለጠ የመጠጣት ዕድላቸው ከፍተኛ ነው።	1	2	3	4	5
6	እናት ወደ ሥራ ለመመለስ ካቀደች ፎርሙላ መመገብ የተሻለ ምርጫ ነው።	1	2	3	4	5
7	ፎርሙላ የሚመግቡ እናቶች ከእናትነት ታላቅ ደስታ ውስጥ አንዱን ይናፍቃሉ	1	2	3	4	5
8	ሴቶች እንደ ምግብ ቤቶች ባሉ የህዝብ ቦታዎች ጡት ማጥባት የለባቸውም	1	2	3	4	5
9	ጡት ያጠቡ ሕፃናት ከፎርሙላ ከሚመገቡት ሕፃናት የበለጠ ጤናማ ናቸው።	1	2	3	4	5
10	ጡት ያጠቡ ሕፃናት ከፎርሙላ ከሚመገቡት ሕፃናት በላይ የመጠጣት ዕድላቸው ከፍተኛ ነው።	1	2	3	4	5
11	እናት ጡት ብታጠባ አባቶች እንደተገለሉ ይሰማቸዋል	1	2	3	4	5
12	የጡት ወተት ለህጻናት ተስማሚ ምግብ ነው	1	2	3	4	5
13	የጡት ወተት ከፎርሙ ይልቅ በቀላሉ ሊዋሃድ ይችላል።	1	2	3	4	5
14	ፎርሙላ ለአራስ ሕፃናት ልክ እንደ የጡት ወተት ጤናማ ነው	1	2	3	4	5
15	ጡት ማጥባት ከፎርሙላ የበለጠ ምቹ ነው	1	2	3	4	5
16	የጡት ወተት ከፎርሙላ ይልቅ ርካሽ ነው።	1	2	3	4	5
17	አልፎ አልፎ አልኮል የምትጠጣ እናት ልጇን ጡት ማጥባት የለባትም።	1	2	3	4	5

3. የወንድ አጋር ደጋፊ ልምምድ

ተ.ቁ	ጥያቄ	ምላሽ		አስተያየት
1	በባልደረባ እርግዝና ወቅት በቅድመ ወሊድ ሂደት ውስጥ ይሳተፋሉ	1=አዎ	0=አይ	
2	የትዳር ጓደኛዎ ጡት እንዲታጠባ የመርዳት ፍላጎት አለህ?	1=አዎ	0=አይ	
እንደ አባት ፣ የእርስዎ ተሳትፎ የትኛው ነው?		1=አዎ	0=አይ	
3	የቤት ውስጥ ሥራዎች እና ኃላፊነቶች	1=አዎ	0=አይ	

4	ህፃኑን መንከባከብ	1=አዎ	0=አይ	
5	ህፃኑን መመገብ	1=አዎ	0=አይ	
6	እናትን መንከባከብ	1=አዎ	0=አይ	
7	ማበረታቻ እና ተነሳሽነት	1=አዎ	0=አይ	
8	ስምምነት ላይ መሆን	1=አዎ	0=አይ	
9	ተስማሚ አካባቢ	1=አዎ	0=አይ	
	አባቶች በጡት ማጥባት ሂደት ውስጥ የበለጠ እንዲሳተፉ ተጽዕኖ ለማድረግ መርሃ ግብር ለመቅረጽ ምክሮች	1. ፕሮግራሞች/ኮርሶች/ንግግሮች/ወርክሾፖች 2. በቅድመ ወሊድ ወቅት አባቶች እንዲሳተፉ የበለጠ ማበረታቻ 3. በርዕሱ ላይ ተጨማሪ መረጃ 4. በመገናኛ ብዙሀን የሚወጡ ማስታወቂያዎች 5. በፅንሰ-ሀሳብ እና በመለማመጃ ትምህርት በእናቶች እና በጋራ ክፍል 6. ሌሎች ጥቆማዎች 7. መልስ የለም		

4. የባል ድጋፍ ልኬት

ከዚህ በታች ስለ ባለቤትዎ/ባልደረባዎ እና ልጅዎን ከወለዱ በኋላ የተደረገው ድጋፍ ተከታታይ መግለጫዎች አሉ? እባኮትን ባለፉት ሳምንታት ውስጥ ከተሰማዎት ስሜት ጋር የትኛው ቁጥር ቅርብ እንደሆነ ያመልክቱ።

1 = በጣም አልስማማም 2 = አልስማማም 3 = እስማማለሁ 4 = በጣም እስማማለሁ

ተ.ቁ	በአጠቃላይ፣ ባለቤቴ/ባልደረባዬ፡-	ምላሽ			
1	እንደ እናት የማደርጋቸውን ውሳኔዎች ያከብራል።	1	2	3	4
2	እሱን ስፈልግ ለእኔ አለ	1	2	3	4
3	ሕፃኑን ለመንከባከብ ይረዳኛል	1	2	3	4
4	በምፈልግበት ጊዜ እርዳታ እንዳገኝ ያበረታታኛል።	1	2	3	4
5	ጥሩ እናት እንደሆንኩ እንዲሰማኝ አድርጎኛል	1	2	3	4
6	ሕፃኑን እንዴት እንደምከባከብ ይስማማል	1	2	3	4
7	ስጋቴን ያዳምጣል	1	2	3	4

8	ጭንቀቶቼን ለመቋቋም የሚረዱኝ ጠቃሚ ምክሮችን ይሰጣል	1	2	3	4
9	ስለ እኔ እና እንዴት እያደረግኩ እንደሆነ ያስባል	1	2	3	4
10	ጥሩ እናት በመሆኔ ላይ ያለኝን እምነት ይጨምራል	1	2	3	4
11	የቤት ውስጥ ሥራዎችን ይረዳኛል።	1	2	3	4
12	የእናትነት ፍላጎቶች በሚጨነቁበት ጊዜ ያበረታታኛል።	1	2	3	4
13	የሚያጋጥሙኝን ማንኛውንም ችግሮች እንድቋቋም ይረዳኛል።	1	2	3	4
14	እንዴት እየሠራሁ እንደሆነ አስተያየት ይሰጠኛል።	1	2	3	4
15	ሕፃኑ ከተወለደ ጀምሮ ከእኔ ጋር የበለጠ አይስማማም።	1	2	3	4
16	እናት በመሆኔ አዎንታዊ ስሜት እንዲሰማኝ ረድቶኛል።	1	2	3	4
17	የሚያጋጥሙኝን ችግሮች ለመፍታት ይረዳኛል	1	2	3	4
18	ለጥያቄዎቼ መልስ እንዳገኝ ይረዳኛል።	1	2	3	4
19	ነገሮችን ለራሴ ለማድረግ እድሎችን ይሰጠኛል	1	2	3	4
20	ከእሱ ጋር ከተነጋገርኩ በኋላ ጥሩ ስሜት እንዲሰማኝ አድርጎኛል	1	2	3	4
21	እርዳታ ካስፈለገኝ በእርሱ ልተማመንበት እንደምችል እንዲሰማኝ አድርጎኛል።	1	2	3	4
22	የተለያዩ ነገሮችን ለመስራት ጓደኝነትን ይሰጠኛል	1	2	3	4
23	እኔን እና ሕፃኑን እንዴት እንደምከባከብ ይወቅሰኛል	1	2	3	4
24	የነገሮችን አወንታዊ ጎን እንድመለከት ረድቶኛል።	1	2	3	4
25	በአጠቃላይ፣ ከባልደረባዬ/ከባለቤቴ/ በሚደረግልኝ ድጋፍ ረክቻለሁ	1	2	3	4

ክፍል አምስት: ጡት ማጥባት ራስን የመቻል መጠን - አጭር ቅጽ

ለእያንዳንዱ የሚከተሉት መግለጫዎች፣ እባክዎን አዲሱን ልጅዎን ጡት በማጥባት ምን ያህል በራስ መተማመን እንዳለዎት በተሻለ የሚገልፀውን መልስ ይምረጡ። እባክዎን ለሚሰማዎት ስሜት ቅርብ የሆነውን ቁጥር በመዞር መልስዎን ምልክት ያድርጉበት። ትክክለኛ ወይም የተሳሳተ መልስ የለም.

1 = በፍፁም አለመተማመን 2 = በጣም በራስ መተማመን 3 = አንዳንድ ጊዜ በራስ መተማመን 4 = በራስ መተማመን 5 = በጣም በራስ መተማመን

ተ.ቁ	ጥያቄ	ምላሽ				
1	ልጄ በቂ ወተት እያገኘ መሆኑን ሁልጊዜ ማወቅ እችላለሁ	1	2	3	4	5

2	እንደ ሌሎች ፈታኝ ስራዎች ጡት በማጥባት ሁሌም በተሳካ ሁኔታ መቋቋም እችላለሁ	1	2	3	4	5
3	ፎርሙላ እንደ ማሟያ ሳልጠቀም ሁል ጊዜ ልጄን ማጥባት እችላለሁ	1	2	3	4	5
4	ሁል ጊዜ ልጄ ለሙሉ መመገብ በትክክል መያዙን ማረጋገጥ እችላለሁ	1	2	3	4	5
5	ሁል ጊዜ የጡት ማጥባት ሁኔታን እስከ እርካታ ማስተዳደር እችላለሁ	1	2	3	4	5
6	ልጄ እያለቀሰ ቢሆንም ሁልጊዜ ጡት ማጥባት እችላለሁ	1	2	3	4	5
7	ሁልጊዜም ጡት ማጥባት መሻቴን መቀጠል እችላለሁ	1	2	3	4	5
8	የቤተሰቤ አባላት በሚገኙበት ጊዜ ሁል ጊዜ በምቾት ጡት ማጥባት እችላለሁ	1	2	3	4	5
9	በጡት ማጥባት ልምዴ ሁል ጊዜ ረክቻለሁ	1	2	3	4	5
10	ጡት ማጥባት ብዙ ጊዜ የሚወስድ የመሆኑን እውነታ ሁልጊዜ መቋቋም እችላለሁ	1	2	3	4	5
11	ወደ ሌላኛው ጡት ከመቀየርዎ በፊት ሁል ጊዜ ልጄን በአንድ ጡት ማጥባትን መጨረስ እችላለሁ	1	2	3	4	5
12	ሁልጊዜም ልጄን ለእያንዳንዱ አመጋገብ ጡት ማጥባቱን መቀጠል እችላለሁ	1	2	3	4	5
13	የልጄን የጡት ማጥባት ፍላጎቶች ሁልጊዜ ማሟላት እችላለሁ	1	2	3	4	5
14	ልጄ ጡት ማጥባት መቼ እንደጨረሰ ሁልጊዜ ማወቅ እችላለሁ	1	2	3	4	5

ክፍል ስድስት: የልጆች የበሽታ ሁኔታ

ተ.ቁ	ጥያቄ	ምላሽ		ስንት ግዜ	አስተያየት
1	ህጻኑ ባለፉት 2 ሳምንታት ውስጥ ተቅማጥ ነበረው?	1=አዎ	0=አይ		
2	ህፃኑ ባለፉት 2 ሳምንታት ውስጥ በማንኛውም ጊዜ ትኩሳት ታሞ ያውቃል?	1=አዎ	0=አይ		
3	ህጻኑ ባለፉት 2 ሳምንታት ውስጥ በማንኛውም ጊዜ በሳል ህመም አጋጥሞታል?	1=አዎ	0=አይ		
4	እሱ/ሷ ከወትሮው በበለጠ ፍጥነት በአጭር፣ ፈጣን መተንፈስ ወይም የመተንፈስ ችግር ነበረባቸው?	1=አዎ	0=አይ		
5	ፈጣን ወይም አስቸጋሪ የመተንፈስ ችግር በደረት ውስጥ ባለ ችግር ወይም በተዘጋ ወይም በአፍንጫ ፍሳሽ ምክንያት ነበር?	1=አዎ	0=አይ		

አማሰግናለሁ!

መጠይቁን የደረገ ሰዉ ሥም----------

ፈርማ---------- ቀን----------

ክፍል ሰባት፡ የኮልቴትፍ ጥናት ቁልፍ መረጃ ሰጪ መመሪያ

1. ጡት ማጥባትን እንዴት ይገልጹታል?
2. ልጆቻችሁ ጡት ጠብተው ነበር? ለምን ወይም ለምን አይሆንም?
3. አንድ ልጅ ለተወሰነ ጊዜ ጡት ማጥባት እንዳለበት ተከራክሯል. በዚህ ላይ የእርስዎ አስተያየት ምንድን ነው? ስለ ጡት ማጥባት ጥሩ ነገሮች ምንድን ናቸው? ስለ ጡት ማጥባት መጥፎ ነገሮች ምንድን ናቸው?
4. ጡት ማጥባትን እንዴት ይረደሉ?
5. ጡት በማጥባት አንዳንድ ጥቅሞች ምንድ ናቸው? ማንኛውም ጉዳቶችስ?
6. ልጆቻችሁ ጨቅላ ሳሉ ስለመመገብ በተሰጠው ውሳኔ ላይ ተሳትፈዋል?
7. በቤተሰብ ውስጥ ስለ ሕፃናት አመጋገብ በሚደረጉ ውሳኔዎች ውስጥ ማን መሳተፍ አለበት?
8. ለወንዶች ጡት ማጥባትን መደገፍ አስፈላጊ ነው ብለው ያስባሉ? እንዴት? ወይም ከልሆና ለምን?
9. አንዲት ሴት ጡት ማጥባት ሲኖርባት እና የማትጠባበት ጊዜ ስለ ባህልህ አመለካከት እና እምነት የበለጠ ንገረኝ
10. በአካባቢያችሁ ሕፃናትን በመንከባከብ ረገድ የአባቶች እና የወንዶች ሚና ምንድን ነው?
11. በአካባቢያችሁ ካለው ጨቅላ አመጋገብ ጋር በተያያዘ የአባቶች እና የወንዶች ሚና ምን ይመስላል?
12. ሴት ቅድመ ወሊድ፣ ከወሊድ በኋላ እና በወሊድ ጊዜ እንዴት መደገፍ እንደምትችል የበለጠ ንገረኝ (ስለሌሎች የቤተሰብ አባላት ሚና ብቻ ከጠቀሰ በህፃን አባት ሚና ጠይው)
13. በተለይ ጨቅላ ሕፃናት በነበሩበት ጊዜ ልጆቻችሁን በመንከባከብ ረገድ የበለጠ ተሳትፎ ማድረግ ይፈልጋሉ? እንዴት? ወይም ከልሆና ለምን? አዎ ከሆነ፣ ከዚህ የተለየ ምን ማድረግ ይፈልጋሉ?
14. ለወንድ አጋሮች ብቻ የተፈጠረ ትምህርታዊ ፕሮግራም ካለ፣ ምን መረጃ ተካቶ ማየት ይፈልጋሉ?
15. ከመዘጋታችን በፊት ሌላ ሀሳብ አለ?

ክፍል ስምንት: የቡድን ውይይት መመሪያ ለእናት

- የጡት ማጥባት ልምድዎ ምን ይመስል ነበር?
  - ✓ ምን ያህል ጊዜ? በአጠቃላይ ጥሩ/መጥፎ?
- ባጠቃላይ፣ ባልሽ/ባልደረባሽ ስለ ጡት ማጥባት ያለውን አመለካከት እንዴት ይገልጹታል?
  - ✓ ጡት በማጥባት ዙሪያ ያለውን የድጋፍ ደረጃ እንዴት ይገልጹታል?
  - ✓ ጡት እንድታጠቡ ፈልጎ ነበር?
  - ✓ ይህ የጋራ ውሳኔ ነበር ወይንስ የእርስዎ ውሳኔ?
- ባለቤትሽ/ባልደረባሽ ጡት በማጥባት ረገድ ምን ሚና ተጫውተዋል?
  - ✓ ባለቤትሽ እንዳደረገው የምትመኝውን ያላደረገው ነገር አለ?
  - ✓ ባለቤትሽ ያደረጋችሁት ያልፈለጋችሁት ወይም እንዲሳተፍበት የማትፈልጉት ነገር አለ?

- ጡት ማጥባት የበለጠ የተሳካ እንዲሆን ሴቶች ከባሎቻቸው/ጓደኞቻቸው ምን የሚያስፈልጋቸው ይመስልዎታል? አካላዊ ድጋፍ? ስሜታዊ ድጋፍ? በሌሎች የቤተሰብ ህይወት ዘርፎች እገዛ?
- ጡት ለማጥባት እንዴት ተዘጋጅተዋል? ባልሽ/ባልደረባሽ በዝግጅት ላይ እንዴት ተሳትፈዋል? ዝግጅትሽ በቂ ነበር ብለሽ ታስባለሽ? ባለቤትዎ/ባልደረባዎ በበቂ ሁኔታ ተዘጋጅተዋል? እንዴት? ወይም ከልሆና ለምን?
- ባልዎ/ባልደረባዎ ጡት በማጥባት ጊዜ እርስዎን ለመደገፍ ሲሞክሩ ፈታኝ ሁኔታ አጋጥሟቸዋል?
- ልጅዎ ከተወለደ ጀምሮ የድጋፍ ወይም ተጨማሪ ድጋፍ የሚያስፈልጋቸው ያልተጠበቁ ሁኔታዎች ነበሩ?
- ከሆነ፣ ከእነዚህ ሁኔታዎች መካከል የትኛውም ሁኔታ ድጋፍ ለመስጠት የበለጠ አስቸጋሪ ያደርገዋል?
- ባለቤትዎ/ባልደረባዎ ተጨማሪ/የውጭ ድጋፍ ያስፈልጋቸዋል ብለው ያስባሉ?
- አንዲት ሴት ጡት ማጥባት ሲኖርባት እና የማትጠባበት ጊዜ ስለ ባህልህ አመለካከት እና እምነት የበለጠ ንገረኝ
- በአካባቢያችሁ ሕፃናትን በመንከባከብ ረገድ የአባቶች እና የወንዶች ሚና ምንድን ነው? በአካባቢያችሁ ካለው ጨቅላ አመጋገብ ጋር በተያያዘ የአባቶች እና የወንዶች ሚና ምን ይመስላል?
- ከመዘጋታችን በፊት ሌላ ሀሳብ አለ?

DECLARATION FORM

Letter for Declaration (Dissertation proposal work)

I, the under signed, declared that this is my bona fide original work, has never been presented in this or any other University, and that all the resources and materials used for the thesis, have been fully acknowledged.

Name: *Mulatu Abageda Anamo*

Signature: _____

Date: _____

Place: Jimma University, Jimma Ethiopia

Date of submission: _____

This dissertation proposal has been submitted for examination with my approval as Candidate's Promoter (supervisor).

Name: *Tefera Belachew Lema* Signature: _____ Date: _____

Co-promoter (Co supervisor)

Name: *Mubarek Abera* Signature: _____ Date: _____

Team Leader, Dep't of Population & Family Health JU

Name: _____

Signature: _____

Date: _____

Director, Research Office, IOH,

Name: _____

Signature: _____

Date: _____