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Determinants of Exclusive Breast Feeding Practice among Mothers in Gaza City

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Determinants of Exclusive Breast Feeding Practice among Mothers in Gaza City

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Dedication

To my loving parents who taught us to give God bless them and supported me all the way; to my wife who supported me on the front line wholeheartedly and love enlightened me; to my daughter, LoLo whose innocent energy was and still is a source of inspiration; to my brothers who spared no effort to help; to all of my friends and colleagues who stood beside me with great commitment; To all of them I dedicate this work, hoping that I made all of them proud.

Basel Alkhlot

Declaration

I certify that this thesis submitted for the degree of Master, is the result of my own research, except where otherwise acknowledged, this study or any its parts has not been submitted for a higher degree to any other university or institution.

Signed:

Basel Emad ALkhlot

Date: …./…./….

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Author

Basel ALkhlot

Abstract

The World Health Organization (WHO) recommends exclusive breastfeeding (EBF) for the first six months of life. However, recent study showed the proportion of EBF in Gaza strip is 24%. EBF has important protective effects on the survival of infants and decreases risk for many early-life diseases. The aim of this study was to assess determinants of EBF practice among infants less than six months age in Gaza city, Palestine. A total of 276 mothers of infants were selected to participated in the study (138 mother of infants who received EBF as a case; and 138 mothers of infants who did not received EBF as a control). Descriptive, retrospective analytical case-control study with non-probability sampling method was used. Trained interviewers collected data from the mothers of the infants. Exclusive breastfeeding was assessed based on infant feeding practice for six months age. Descriptive and Binary logistic regression analysis was used. By bivariate analysis (Qui-square test), maternal characters (young age), socioeconomic status (low income and non-refugee citizenship), cultural and contextual factors (initiative time of BF after first hour, first baby) were risk factors for non-exclusive breastfeeding. Multivariate analysis showed that feed previous baby exclusively, mother citizenship, initiating time, mother age, offered free formula sample and birth weight were determinants of exclusive breastfeeding. This study showed several determinants of EBF. The promotion of EBF practices, and developing strategies with core messages to better support for whole women in reproductive age, particularly: non-refugee mothers, mother having abnormal birth weight infant and mother with low socioeconomic status. Improving breast feeding imitation within the first hour is a significant and global recommendation to improve EBF.

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List of abbreviations

Baby-Friendly Hospital The Baby-Friendly Hospital Initiative BFHI

Exclusive Breast Feeding: EBF

GS: Gaza Strip

MOH: Ministry Of Health

NGO: Non-Governmental Organization

PCBS: Palestinian Central Bureau of Statistics

Perception Insufficiency Milk PIM:

PHC: Primary Health Care

SPSS: Statistical Package for the Social Sciences

Sudden Infant Death Syndrome (SIDS)

UNICEF: United Nations Children's Emergency Fund

UNRWA: United Nations Relief and Work Agency

WABA: World Alliance for Breastfeeding Action

WHO: World Health Organization

Chapter One

1. Introduction

1.1 Background

Breastfeeding is an unequalled way of providing ideal food for the healthy growth and development of infants. World health organization (WHO) recommend exclusive breastfeeding for the first six months of life to achieve optimal growth development and health (WHO, 2018). Exclusive breast feeding (EBF) means that the infant receives only breast milk, no other liquids or solids are given–not even water–with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines (WHO, 2011).

Center of Chronic Disease Prevention and Health Promotion (2015) reported that the rate of exclusive breastfeeding for children under 6 months was 49% in USA. The prevalence of EBF in East Asia (Bangladesh) was 64% (Joshi et al., 2014). In the State of Palestine, 96 per cent of mothers practice exclusive breastfeeding their infants at birth. However over the six following months, the rate dwindles with only 40 percent (36 per cent in Gaza and 41 per cent in the West Bank) (UNCIF, 2015). In Gaza, almost all mothers practiced BF (97.8%), whereas the low proportion of mothers (24.4%) practiced EBF for 6 months (El-Kishawi et al., 2018).

EBF having benefit for babies and their mothers. Breastfeeding is one of the most preventive intervention in child health Breastfeeding may give some protection against Sudden Infant Death Syndrome (SIDS) and other diseases (Jara-Palacios et al., 2015). These advantages include a lower risk of gastrointestinal infection for the baby, more rapid maternal weight loss after birth, and delayed return of menstrual periods (WHO, 2011). Prolonged BF is essential for the health of mothers as this practice reduces the risk of developing breast and ovarian cancers (Yeneabat et al.,

2014; and Chung et al., 2007). Research consistently offers compelling evidence that exclusive breastfeeding provides health benefits to both infant and mother throughout their lifespans, thereby substantially reducing health care costs (WHO, 2011).

The supportive programs from UNICEF, and the Government, like Baby-Friendly Hospital, continue to improve the practice of EBF, also boost women's knowledge on breastfeeding in hospitals and skin-to-skin contact in the labor room where mothers are encouraged to breastfeed their babies immediately after the birth. Despite efforts to improve EBF practice in Gaza strip, the prevalence still lower than global recommendation. A recent study conducted in Gaza, revealed that the prevalence of EBF is low in Gaza strip (El Kishawi et al., 2018). A number of internationals studies have identified a number of determinants of EBF. Some of the most common factors found to be associated with EBF are: the economic status, education level, occupation of mother, professional and personal support and cultural factors (Agho et al., 2011; Senarath et al., 2010). Aslo associated factors of EBF among the mothers were an age of mother, child's birth weight, and the number of children. Health care workers should educate and emphasize mothers, grandmothers, and mothers-in-law on the importance of EBF (El-Kishawi et al., 2018). Updated knowledge about the determinants of EBF in Gaza city could aid in the better design of infant nutrition strategies . The objectives of the current study were to identify the associated factors of EBF practice of infants less than six months according to comprehensive designed model based on findings of different studies and countries.

1.2 Research problem

Globally, the rates of exclusive breast feeding for WHO recommended period of first six months of life is far from globally optimal. Mothers practice exclusive breastfeeding secure unique and critical health benefits for their baby and themselves. The American Academy of Pediatrics and the Centers for Disease Control and Prevention both recommend six months of exclusive breastfeeding. It is more so in developing countries where it is mostly needed. In the developing world, only one out of three children is exclusively breast fed till six months of age (WHO, 2018). Internationally there are many factors associated with poor exclusive breastfeeding and must consider when investigating the reasons for lower than recommended rates and duration of breastfeeding. The associated factors of EBF were found to be socioeconomic factors, maternal factors, infants' factors, contextual and cultural factors (El-Kashiwa et al., 2017; Shifraw et al.,2015).

Despite the extensive available information on the benefits of exclusive breastfeeding both for the mother and the infant, and the continues efforts to improve breast feeding practice in Gaza, like baby friendly hospital and international Code of Marketing of Breast milk Substitutes, only 24.4% practiced EBF for 6 months (El-Kishawi et al., 2018). This fact complicated more with deterioration of socioeconomic and political factors in Gaza city. The low prevalence and short duration of exclusive breastfeeding in previous study have highlighted the need for more investigation into the problem.

1.3 Justification of the study

Breastfeeding is a well-established and recommended intervention for the improvement of child nutrition. Improving child health was result in healthy adults and break the poverty cycle (Joshi et al., 2014). High infant mortality rates associated

with diarrhoea, acute respiratory infections and poor responses to vaccinations that result from lack of exclusive breastfeeding (WHO, 2018; UNICEF, 2015) can greatly be reduced if exclusive breastfeeding of infants is encouraged. This is because human milk is the ideal nourishment for infant‟s survival, growth and development as it contains all the nutrients, antibodies, hormones, immune factors and anti-oxidants an infant needs to thrive (UNIC, 2015). Studies have demonstrated that it reduces deaths in infants and young children, it is one of the most important factors for growth and development of infants and is globally endorsed as being the best for any neonate. Although it is known that exclusive breastfeeding rates are low and efforts are made to improve, few studies have looked at part of the factors increasing or decreasing the rates. Previous studies have shown that factors associated with exclusive breastfeeding vary from place to other. Based on my knowledge, there are no adequate studies conducted on exclusive breastfeeding in Gaza Strip; most of them assess just the risk factors and did not adjust and control the other confounders to determine the exact determinants of EBF. It is important in this study to investigate the determinants of exclusive breastfeeding among mothers with children aged below six months in a holistic methodological approach. This study helped to identify the maternal, socio-economic, demographic, contextual and infant factors associated with exclusive breastfeeding. This study was provided evidence to policy makers and NGO interventions targeted at improving infant health and survival.

1.4 Main aim of the study

The overall aim of this study is to identify the determinants of Exclusive breastfeeding practice among mothers in the Gaza city.

1.5 Objectives of the study

1. To determine the influence of maternal and neonatal factors on Exclusive breastfeeding practice in Gaza city.
2. To assess the relationship between contextual factors and exclusive breast-feeding practice.
3. To explore the effect of cultural factors on exclusive breast-feeding practice in Gaza city.
4. To determine the socioeconomic and demographic factors associated with exclusive breastfeeding among mothers with children less than six months
5. To formulate recommendations to improve the practice of exclusive breastfeeding..

1.6 Research questions

1. What extent maternal factors (mode of delivery, birth control method, breast complication, and previous experience of EBF) influence exclusive breastfeeding in Gaza city?

2. Does neonatal factors (birth weight, gender, and morbidity) influence exclusive breastfeeding in Gaza city?

3. What are contextual factors affect the practice Exclusive breastfeeding?

4. Do cultural factors influence the practice Exclusive breastfeeding?

5. Is a social factor associated with exclusive breast feeding?

6. To what extend economic factor influence the EBF?
7. What are recommendations can formulate to improve exclusive breastfeeding?

1.7 Context of the study

1.7 .1 Demographic context

State of Palestine consists of two geographically separated areas, West Bank (WB) and the Gaza Strip (GS). GS is a narrow zone of land bounded on the south by Egypt, on the west by the Mediterranean Sea, and on the east and north by the occupied territories, total area of 365 sq. km with 46 kilometers long and 5–12 kilometers wide and represent 6.1% of the total area of the Palestinian state (PCBS, 2017).

The population of the Palestinian Territory (West Bank and Gaza Strip) is approximately 4.780.978 people (2.881.687 in West Bank and 1.890.929, people in the Gaza Strip) (PCBS, 2017).

The population density in Gaza governorate was the highest, while Khan Yunis was the lowest. The number of Palestinian refugees is 1.275.815 Percentage 67% the total population of the Gaza Strip. The number of males in the governorates of the Gaza Strip is 962.889, and females 936.402, where the proportion of males to females for the year 2016 was 103%. Data indicated that the highest level of education for parents was in the high school level, which reached 75% in 2017, the total number of registered Refugees in GS constitutes about 72.8% from the total population. Gaza strip consists of four cities, fourteen villages and eight refugees' camps (PCBS, 2017).

Gaza governorate of 74 sq. km, constitutes 20.3% of the total areas of GS, and 1.2% of the total Palestinian territory. The total number of population lived in Gaza governorate during 2011 was 551.832 individuals with 7.457 inhabitants/sq. km. Mid-Zone governorate with an area of 58 sq. km, constitutes 15.9% of the total area of GS, and 1.0% of the total Palestinian territory. The total number of population lived in

Mid Zone governorate during 2011 was 230.689 individuals with 3.977 inhabitants per sq. km (PCBS, 2017).

1.7.2 Palestinian newborns and child's health

The number of births rose to 58,964 in 2017. Data show that most deliveries were carried out in government hospitals, including hospitals of the Ministry of Health and Military Medical Services, with 75% for 2017. The low birth weight (less than 2500 g) percentage 6.9% in 2017, while in 2016 was 6.2% (MoH, 2017).

The system of vaccinations in the Palestinian Health ministry is one of the most important successes of the Palestinian Health Partnership. It is offered in all primary care centers, The Child Health Department provides health services for children with metabolic and nutritional problems. The total number of tourists recorded in 2017 was 1.010 visit (MoH, 2017). Breastfeeding is a key means of protecting the child against infectious diseases. The Ministry of Health has focused on this issue through mass education for mothers using various seminars, pamphlets, and brochures for pregnant and lactating mothers under the Child Friendly Hospital initiative, which relies mainly on the international code to limit the marketing of breast milk substitutes. The ministry has succeeded in implementing this initiative (MoH, 2017).

1.7.3 Women health

Antenatal care in the Gaza Strip provided for pregnant mothers through 47 private maternity clinics. The number of new pregnant mothers in primary care clinics was 59,375. The proportion of pregnant mothers under the age of 16 was 1.93%, while the number of pregnant mothers which was reported to PHC clinics was 43.025 women.

The number of women of childbearing age in the Gaza Strip reached 457.956 women, accounting 48% of all females in the Gaza Strip (MoH, 2017).

Early marriage reached 20.5% among females, and 1.0% among males of the total married population in Palestine, the rate was 19.9% of the total married population in West Bank and 21.6% of the total married population in Gaza Strip end 2016. In Gaza Strip, the highest rate of early female marriage was 42.1% in Gaza Governorate, while the lowest rate was in Dier Al-Balah 7.1% of the total number of women marriage below 18 years in Gaza Strip (MoH, 2017). The number of new beneficiaries of family planning services in the Gaza Strip is 14.745. The most popular means of use in the Gaza Strip is the IUD, which accounted 36% of the total family planning, while suppositories were the least used which account 0.9%. According to health reports, 100% of births took place in health institutions, 73% in the Ministry of Health, and 22% in non-governmental hospitals. The rate of vaginal delivery in the Gaza Strip was 79.6% of total births in the Gaza Strip, Caesarean sections increased in Ministry of Health hospitals by 21.6% in 2017, compared to 19.6% in 2010 (MoH, 2017).

1.7.4 Primary care clinics in the Gaza Strip

In the Gaza Strip, there are 147 primary health care centers, Ministry of Health run 54 centers, 22 centers for UNRWA, 70 are non-governmental organizations, and five are military medical services. The population of each center in the Gaza Strip was 37,984 for each center in 2017 (PCBS, 2017).

UNRWA operates 22 centers in the Gaza Strip. These centers provide free treatment, maternity and childhood services and other specialized services, as well as a major role in immunization programs in cooperation with the Ministry of Health, A total of 3,826,936 visits to public medicine, 31,355 visits to private medicine, and 2,358,931

nursing visits (MoH, 2017). The primary care NGOs manage 70 centers according to the criteria for accreditation of primary care centers. A total of 343,084 visits were reported in 2017 (PCBS, 2017).

1.7.5 Clinics selected for the study

This study carry out in the main four governmental clinics, which provide health service to Gaza city population.

1.7.5.1 AL Remal Clinic

AL Remal Clinic was opened in 1972. It is a specialized clinic with visiting doctors. During the era of the Authority, it was reconstructed behind the old building with methods in the advanced health centers. The new five-role building was opened under the name of Martyrs Center in 1998 at the expense of the bank. In cooperation with the Ministry of Health. The center is considered one of the most important health centers in the Gaza Strip. It covers an area with a population of more than 150,000 and employs a staff of 135 employees. The average number of visitors is 300 daily. The building also includes the General Administration of Primary Care, the Department of Administrative and Financial Affairs (MoH, 2017)

1.7.5.2 Al-Daraj Center

It started working in Bandar Gaza (Al-Daraj Martyrs Center) in 1959 and at that time provided services for births, deaths and preventive medicine, and then provided medical services in all fields in 1986. The number of employees was about 16. Provide health care service for 7 thousand people, After the arrival of the Authority, the number of employees reached 26, and the beneficiaries of this clinic were 10 thousand, and the number of visitors per day was 250, operating on a one-year basis,

and at the third level. In 2001, a new clinic building was established at the expense of the European Union. An area of about 30 thousand people and the average number of visitors about 450 cases per day (MoH, 2017).

1.7.5.3 Al-Zaytoun Center

The Al-Zaytoun Martyrs Center opened on 21/10/1997 with a staff of 27 employees and serves a residential area of 50 thousand people. The number of visitors to the center is about 300 daily. The center is equipped with several sections. The upper floor of the building was added in 2007 at the expense of l Saeb Abu Dhabi and now the number of employees reached 55 employees serving the area of population of approximately 60 thousand people and the number of visitors about 550 cases a day (MoH, 2017).

1.7.5.4 Sobha Health Center

This center started working on 1/7/1973 with the funding of Hammad Al Harazin. It provides a health service for a residential area of 40 thousand people. The number of visitors to this center is about 230. The center was developed with the addition of a second floor with an increase in the number of employees in 1995 to 43 employees. The number of employees reached 48, serving a population of 30,000 and the average number of visitors is 400. It operates on a one-day basis (MoH, 2017).

1.8 Operational definitions

1.8.1 Exclusive breastfeeding

Infant receives only breast milk. No other liquids or solids are given – not even water with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines (WHO, 2017).

In this study researcher adopted WHO definition for exclusive breast-feeding.

1.8.2 Breastfeeding

Breastfeeding is the normal way of providing young infants with the nutrients they need for healthy growth and development.

1.8.3 Breastfeeding initiation

The moment a newborn is put to the mother's breast for his or her first feeding within the first hour. Provision of mother's breast milk to infants within one hour of birth is referred to as "early initiation of breastfeeding" and ensures that the infant receives the colostrum.

1.8.4 Colostrum

Colostrum is the first fluid that comes from the breast immediately after birth. It is yellowish in color and contains high protein and anti-bodies. It is often described as the first form of 'immunization' for a newborn child.

1.8.5 Formula feeding

Feeding an infant prepared formula instead of or in addition to breast feeding .

1.8.6 Breastfeeding Support

Refers to help and encouragement to breastfeed and is categorized as follows:-

1.8.6.1 Professional support

Professional support is provided by health professionals (e.g., physicians, nurses, lactation consultants, and other allied health professionals) to mothers both during pregnancy and after they return home from their hospital stay. Support includes any counseling or behavioral interventions to improve breastfeeding outcomes, such as helping with a lactation crisis or working with other health care providers

1.8.6.2 Personal support

It is a help and encouragement to breastfeed provided by the woman's significant other(s), friends and family members.

1.8.7 Contextual factors

Factors, which reflect a particular context, characteristics unique to practice Exclusive breastfeeding like - place of child delivery, type of child delivery, breastfeeding support from family and programmers/counseling.

1.8.8 Maternal factors

Factors related mother condition such as morbidity, attitude toward breast-feeding, child spacing, age, parity, and mode of delivery.

1.8.9 Socio-economic factors

Is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation.

1.8.10 Cultural factors

Population beliefs, norms and local myths about breastfeeding and infant feeding practices.

1.8.11 Breast complications

it is a number of problems affecting the childbearing woman such as: inverted nipple, engorgement, cracked nipple, and mastitis

1.8.12 Low birth weight

Is defined as a birth weight of an infant of 2,499 g or less, regardless of gestational age.

1.9 Boundaries of the study

1. **Conceptual boundary**: assess the determinants of EBF in Gaza city.
2. **Setting boundary**: the study was done in governmental clinics of the Gaza city, namely: Al-Remal clinic, Al-Daraj clinic, and Al-Zytoon clinic and Sabha clinic.
3. **Temporal boundary**: the whole study proposed to be applied in the period between March 2018 to October 2018.
4. **Population boundary**: mothers of infant aged between six to twelve months reside in Gaza city.

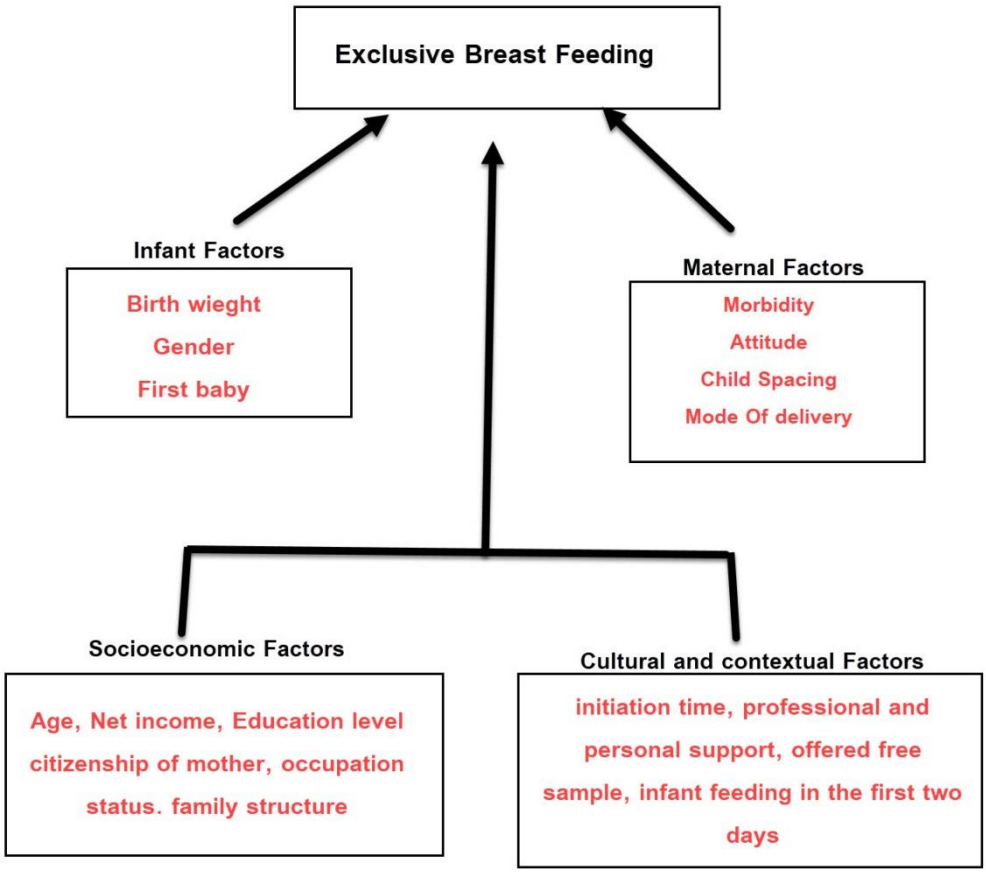
Chapter Two

Conceptual framework and Literature review

A review of the literature was performed in a systematic manner guided by the research conceptual frame work, The literature review was focused on the factors may could affect EBF A literature search was performed by using research databases from Google Scholar, Medline through PubMed and another journals of mother and child health. The inclusion criteria for articles included articles published in English, published within ten years or later, A literature review performed with different types studies and a different countries to explore and discus the findings.

2.1 Conceptual framework

The first part on the conceptual framework begins by recalling the determinants of exclusive breast feeding. Afterwards, it reviews several studies that have sought to explain relationships among factors and EBF.



Our model: Factors leading to exclusive Breastfeeding (Self-developed)

After reviewing the theoretical literature, and empirical studies, we generated a research model to explain the relationship between exclusive breastfeeding and the relevant causal factors**.**

Socioeconomic and demographic factors (SED) point to both specific features of the social and economic context that affect health. SED included age of mother, net income, educational level, maternal citizenship, maternal occupational status, paternal education level, type of family structure and occupation of father.

A number of maternal factors have been reported to influence exclusive breastfeeding. these factors include usage of birth control method, breast complications, mode of delivery and previous experience of EBF.

Infants' characteristics were found influential to mothers' decision toward breastfeeding. The infants' characteristics in this model included infant birth weight, gender of baby and first infant rank.

The contextual and Cultural factors included in this model were breast feeding initiation time, personal support, professional support, offered free sample from hospital and feeding in the first two days.

2.2 Literature review

Google scholar, Medline through PubMed and other journals of mother and child health were searched using the following key words; exclusive breast feeding or factors influent EBF or barriers of EBF or practice of EBF, articles published in the last ten years and related to key word were reviewed to explore the factors of EBF.

2.2.1 Infant factors

Characters of infant such as sex, birth weight and morbidity have been studied to identify variables determining EBF, in general birth weight seem to be associated factor for EBF, but findings of studies examining infant sex in relation to feeding practices are inconsistent.

In Gaza city, the mean age of weaning was higher-early practice in case of female children compared to male children (EL-Kishawi et al., 2017). Same study revealed that EBF practice was higher in low birth weight than older birth weight.

The age of the infant has also been significantly associated with exclusive breastfeeding. In a study carried out in Nyando, the rate of exclusive breastfeeding decreased with an increase in infant age (Nyanga et al,. 2012). Similar observations were made in a Peri-urban settlement in Nairobi where findings showed that the age of infants was associated with exclusive breastfeeding. These findings suggested that the younger the child the higher the chances of being exclusively breastfed (Ayisi et al., 2013).

Regarding the gender of infant, it was not found associated factor for EBF (Azzeh, 2017; Kishawi et al., 2017), but in a community-based cross-sectional study conducted in the catchment area, India, found the child sex is significantly associated with BF (Basu et al., 2018).

Child factors such as the age and sex of child have also been indicated to predict the practice of exclusive breastfeeding. In Nigeria, Agho and colleagues have reported that female infants are more likely to be exclusively breastfed than their male counterparts(Agho et al., 2013)

Infant complication after delivery has considered significant variable for EBF, the result of study focusing in Infants' Characteristics on Breastfeeding Attitudes among Jordanian mothers showed women who had healthy infants were more likely to have positive attitudes toward breastfeeding compared to women with ill infants (Shosha, 2015). Another study of barriers of EBF in north of Jordan has identified infant hospitalization as barriers of EBF practice (Khasawneh, W., & Khasawneh, A. 2017).

2.2.2 Maternal factors

A number of maternal factors have been reported to influence exclusive breastfeeding, Studies in different contexts have identified various factors as potential

determinants of exclusive breastfeeding, Some of these factors include attitude of mothers toward breast feeding, child spacing, mode of delivery and morbidity ((Fisher et al., 2013; Forde and Miller, 2010; Lande et al., 2003)

The conditions of childbirth and the postpartum can influence the process of breastfeeding, emotional distress during pregnancy was founded associated with practice of EBF less than two months postpartum (Cato et al., 2017; El shafei, 2014). Suffering and anxiety mentioned by the nursing mothers or breast trauma, which can lead to less, frequent feeding (Amarala et al., 2015).

Evidences found that infant feeding decisions are associated with mothers attitude and perception toward breast-feeding. Kishawi et al. (2017) conducted a study in Gaza strip founded all mothers agreed that breast milk is important for babies, in Saudi Arabia, study of knowledge and attitude showed Only 11.4% of the women had positive attitude towards EBF, while the majority 87.6% had neutral attitude and 1% had negative attitude (Arafat, 2017; Hamade et al.,2013). By using attitudinal score, across sectional study conducted in Ethiopia reported that (24%) of the study participants were categorized as having negative attitude towards EBF (Alamirew et al., 2017).

World Alliance for Breastfeeding Action (WABA) recommended Optimal birth spacing is at least 2 years, preferably 3-5 years (WABA, 2017). Breastfeeding was identified as a natural method for child spacing, results showed that EBF was significantly higher among lower number of children compared to higher number of children in the household (EL-Kishawi et al., 2017). Number of births and other variables were considered statistically significant in study focusing on factors affecting EBF in Ghana (Mensah et al., 2017). Controversy, some studies showed

household composition did not have any significance association with exclusive breastfeeding (Azzeh, 2017; Al-Akour et al., 2014).

The caesarean deliveries results in suboptimal breastfeeding outcomes, as women who have caesarean sections are significantly less likely to initiate and continue breastfeeding (Adugna et al., 2017; Elyas et al., 2017). Although other factors have been shown to affect breastfeeding initiation and duration, the relationship between mode of delivery and breastfeeding practice has been considered particularly important given the rising prevalence of caesarean sections globally (Tully & Ball, 2014; Prior et al., 2012). Previous study carried out in Nicaragua, focused on delivery mode and breastfeeding outcomes among new mothers, found that mode of delivery was not significantly associated with exclusive breastfeeding for 6 months. (Kiani et al.,2017).

2.2.3 Socioeconomic and Demographic factors

Socioeconomic factors are lifestyle components and measurements of both financial viability and social standing. They directly influence social privilege and levels of financial independence. Sociologists in terms of how they each affect human behaviors and circumstances study factors such as health status, income, environment and education. Epidemiological studies of breastfeeding in developed countries have found a relationship between socioeconomic status and duration of breastfeeding (El-Kashiwa et al., 2017; Shifraw et al.,2015).Socioeconomic factors point to both specific features of the social and economic context that affect health. Relation between socioeconomic and EBF has traditionally been studied. Relationship between marital status and exclusive breastfeeding and duration of breastfeeding have been studied, previous studies concluded that single mothers are less likely to breastfeed

their infant due to absence of partners' support (Emmanuel, 2015; Okunlade et al., 2013; Al-Hreashy et al., 2008).

2.2.3.1 Maternal age

Previous studies have identified several associated factors regard EBF, maternal age was inconstant variable for relation to practice of breast feeding, although the age cut-off value varies between studies, it was considered a significant variable to EBF (Basu et al., 2018; Kishawi et al., 2017; Rasheed, 2009; Venancio & Monteiro, 2006). In another hand maternal age was not reach significant variable (Alyousefi et al., 2017; Alzaheb, 2017; Cato et al., 2017; Shifraw et al., 2015; Ghwass& Ahmed, 2011). In Gaza city, Kishawi (2017) reported that EBF was significantly higher among younger mothers compared to older mothers, but Some previous studies showed that cessation of breastfeeding among younger mothers happened earlier (Liu et al., 2013; Hauck et al., 2011; Akter & Rahman, 2010). Study conducted by (Jara-Palacios et al., 2015) focusing on Prevalence and determinants of exclusive breastfeeding among adolescent mothers showed that prevalence of EBF among the sample of adolescent-mothers was higher than that reported for the general population of mothers in Ecuador.

2.2.3.2 Occupational status (working mothers)

Since mother and baby are always together, the likelihood of practicing EBF is high, mothers worldwide get a rest period after birth though the length of time differs with respects to mothers' occupation and the organization she works for. The period spans through weeks to months, Employed mothers may be overloaded with office and home activities so may have limited contact time with infants, study findings from Saudi Arabia, Brazil and Ethiopia, showed that unemployed mothers practiced

EBF better than employed mothers (El-Gilany et al., 2011; Alemayehu, 2009; Mascarenhas et al,. 2006;). In Brazil study showed that maternity leave is associated with an increase in the prevalence of EBF in the Brazilian capitals (Monteiro et al., 2017). Another study carried out in São Paulo, showed a higher percentage of EBF among mothers who were on maternity leave and a lower percentage among those who were working without maternity leave (Venancio & Monteiro, 2006).

UNRWA staff member shall be entitled to maternity leave for a total period of 16 calendar weeks. The staff member shall receive maternity leave with full pay for the entire duration of her absence. The pre-delivery leave shall commence no earlier than six weeks and no later than two weeks prior to the expected date of delivery upon production of a certificate from a duly qualified medical practitioner or midwife indicating the anticipated date of delivery (UNRWA, 2017). Governmental employee is granted full pay leave for a period of 70 consecutive days before and after childbirth, The nursing employee has the right to leave work before the end of one hour and for one year from the date of birth of the child and has the right to leave without a salary for one year for his care (GPC, 2017)

2.2.3.4 Educational level

Maternal level of education is among the factors that may influential the rates of breastfeeding. Level of education of the mother can either promote or reduce breastfeeding rates in different cultures (Al Juaid et al., 2014; Ago et al.,2011).

In Korea, analyzed the data from the year 2000 Korea National Fertility showed the higher the mother's education level, the shorter is the breastfeeding duration (Hwang et al., 2006). In Rural Egyptian community's study of determents of exclusive breast-feeding showed that secondary or high education was favorable factor to EBF (El

Shafei & Labib, 2014). While in Saudi Arabia, intermediate education of the mother was found to increase EBF duration as compared to mothers with higher levels of education (Azzeh, 2017). Concerning paternal education, more than 90% of fathers revealed lack of knowledge about breastfeeding, father's education level showed no difference on breast feeding practice (Cardoso et al., 2017). Comparison of Parents' Educational Level on the Breastfeeding Status between Turkman and Non-Turkman Ethnic Groups in the North of Iran showed a positive association between non-Turkman fathers' education levels and breastfeeding prevalence at 19-24 months (Veghari et al., 2014).

2.2.3.5 Income level

Global and local research report that the net income is the single most important independent economic factor associated with breastfeeding. Many studies indicate that the infant morbidity and mortality rate is inversely correlated with the distribution of higher salaries, in particular the post-neonatal mortality rate (Tarrant et al., 2010; Jahan, 2008;). Several previous studies were showed that income was significantly related to exclusive breastfeeding rate, a study of factors associated with breastfeeding considering lower family income practice EBF less than high-income level (Santana et al., 2018; Dennis et al., 2013). Contrary opinion reported that exclusive breast-feeding being more prevalent among women with higher income (Amin et al., 2011; Venancio & Monterio, 2006).

2.2.4 Contextual and cultural factors

This area include the characteristics of environment that may affect the mother practice or decision like support of professional or personal**,** previous researches that examines the joint contribution of contextual factors to breastfeeding showed different association between them (Raffle et al, 2011; Brodribb et al.,2008; Kronborg et al., 2007). How perceptions of infant breastfeeding satisfaction may interact with contextual factors such as breastfeeding informational support. Based on the above, contextual factors like professional and personal support take place through our assessment model (Raffle et al, 2011; Brodribb et al.,2008).

Concerning the professional and personal support, counseling and professional support about breastfeeding during antenatal care could improve breastfeeding, through A systematic review of professional support interventions for breastfeeding concluded Interventions expanding from pregnancy to the intrapartum period and throughout the postnatal period were more effective than interventions concentrating on a shorter period (Hannula et al., 2008). They can also be a source of negative support by providing inconsistent information and inadequate recommendations (Patel et al.,2015; Bbaale, 2014).

Lack of support from family and friends considered as barriers for practicing breast-feeding, some mothers did not feel health-care professionals had an effect on a mother's decision to discontinue breastfeeding. If they do not have support in the home (Radzyminski, S. & Callister, L. 2015). The encouragement from other family members was also associated with higher breastfeeding initiation rates, significant others such as grandmothers, mothers in-law and husbands influence the infant feeding practices pursued by mothers (Basu et al., 2018; Muchacha & Mtetwa, 2015).

Regarding cultural factors, a lot of women discontinue breastfeeding during the first few weeks because of perceptions of insufficient milk (PIM) and approximately 35% of all women that wean early report (PIM) as the primary reason (Gatti, 2008). In Gaza Strip, the most common reason for this feeding practice was the perception that breast milk was insufficient for a child's growth; also child tasted food in early age to get a good appetite in the future (El-Kishawi et al., 2017). WHO recommended Exclusive breast feeding for 6 months. Some of the beliefs align with the WHO recommendations while others do not align with the WHO recommendations. Women reported supplementing breast milk with water and teas soon after birth, as well as introducing small bites of solid food a few months after birth (Swigartet al., 2017). Among beliefs that were expressed through study conducted in Lebanon were having "bad milk", and transmission of abdominal cramps to infants through breast milk (Osman & Wick, 2009). WHO universally recommends colostrum, a mother's first milk as the perfect food for every newborn. Colostrum is frequently discarded based on cultural beliefs (WHO, 2015).

2.3 International strategies to improve breast feeding

2.3.1 The Baby-Friendly Hospital Initiative

The Baby-Friendly Hospital Initiative (BFHI) was launched in 1991. It is an effort by UNICEF and the World Health Organization to ensure that all maternities whether free standing or in a hospital, become centers of breastfeeding support. A maternity facility can be designated 'baby-friendly' when it does not accept free or low-cost breast milk substitutes, feeding bottles or teats, and has implemented 10 specific steps to support successful breastfeeding. National breastfeeding authorities, using Global Criteria that can be applied to maternity care in every country, currently control the

process. Implementation guides for the BFHI have been developed by UNICEF and WHO (WHO, 2018).

2.3.2 The international code and ten steps to successful breastfeeding through Baby-Friendly Maternity Hospitals facilities Initiative

The World Health Assembly adopted the International Code of Marketing of Breast-milk Substitutes in 1981 to protect and promote breastfeeding through the provision of adequate information on appropriate infant feeding and the regulation of the marketing of breast milk substitutes, bottles and teats. In subsequent years additional resolutions have further defined and strengthened the Code, the Code prohibits the advertisement or promotion of these products to the public or through the health care system. All governments should adopt the Code into national legislation. To date, 24 governments have adopted all of the Code's provisions into law, while a further 55 have partially adopted them (WHO, 2018).

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within one half-hour of birth.
5. Show mothers how to breastfeed and maintain lactation, even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breast milk, unless medically indicated.

7. Practice rooming in - that is, allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

2.3.3 Assessment of Baby-Friendly Maternity Hospitals facilities Initiative in Gaza strip.

In Nov. 2016, the first external evaluation had been completed for Al-Emarati Hospital to assess its adherence to the *Ten Steps* and the International Code of Marketing of breast milk substitutes (*the Code*). In Dec.24th Al-Aqsa hospital was the second facility to be assessed followed by Naser Hospital in Jan. 8th 2017, The external assessment for hospitals carryout by A team of six members plus admin person, The external assessment team represented by: MueenKariri Director of the health education and promotion department, the focal person of the BFHI. External Assessment tools provides external assessors to use both initially, to assess whether hospitals meet the Global Criteria and thus fully comply with the Ten Steps, and then to reassess, on a regular basis, whether they continue to maintain the required standards. The three hospitals have certified as BFH after they completed all of the requirements.(Kariri, 2016).

2.4 Summary

Exclusive breastfeeding means that the infant receives only breast milk. No other liquids or solids are given – not even water – with the exception of oral rehydration

solution, or drops/syrups of vitamins, minerals or medicines. The World Health Organization estimates that around 220,000 children could be saved every year with exclusive breastfeeding.

Several factors have been found to be associated with EBF, social class, level of education, age of the mother, lack of parental support, employment status, parity, place of delivery. But the way the factors influence EBF practice differ in direction from one setting to the other.

The main objective of this study is identify the determinants of exclusive breast feeding in Gaza city to improve the basic knowledge in attempt to provided evidence to policy makers and NGO interventions targeted at improving infant health and survival.

Chapter Three

Methodology

3.1 Introduction

This section clarified the important issues related to how the study was be conducted. This chapter presents the study methodology; demonstrates the study design, study population and ethical issues that were considered. In addition, it presents the instrument used in the study, its validity, data collection process, data process and analysis. Finally, it presents the limitations of the study, and statistical analysis was clarified.

3.2 Study design

The design of this study is a descriptive retrospective analytical case-control one. This study design is considered suitable in describing the variables, their distribution patterns, and examining the associations between them, and is relatively simple, requires few subjects and is logistically easy and less expensive and can study multiple risk factors. It is also intended to establish an association between the independent factors and EBF. Individual matching was applied by selection of one control for each case. We carried-out matching for location.

3.3 Study setting

This study was carried out at four major clinics in Gaza city namely, Sabha, Al-Remal، Al-Daraj and Al-Zaytoon clinics, these are governmental clinics that provide primary health care to the residents of Gaza City, researcher select those clinics to represent the rest of Gaza city population.

3.4 Study population

The study includes the mothers of infants aged between six and twelve months, who are visiting the major selected clinics in Gaza city. Age of child selected to be appropriate to study and to be sure that the child pass the period of exclusive breast feeding as WHO define, and to reduce the bias of recalling. The target population consisted of two groups, the first group was cases (mothers of infants older than six months who practiced exclusive breast feeding) and the second group was controls from mothers of infants older than six months and did not practice exclusive breast feeding.

3.5 Sample size and sampling methods

Non-probability sampling methods (convenient study). Sample was calculated by using Epi-info software V. 3.0.43.

The sample size included 276 eligible mothers having infants over than six months was divided equally into two groups; case group consist of 138 mothers practice exclusive breast feeding and 138 mothers who are not practice Exclusive breast feeding included in control group.

3.6 Selection criteria

3.6.1 Inclusion criteria for cases

- All mothers of infant aged between six and twelve months practiced exclusive breast-feeding.
- Registered and followed up in study clinics.
- Mothers who are interested to participate in this study.

3.6.2 Inclusion criteria for control

- All mothers for infant aged between six and twelve months and do not practiced exclusive breast feeding
- Registered and followed up in study sitting clinics.
- Mothers who are interested to participate in this study

3.6.3 Exclusion criteria

- Infants with some disability or malformation that made breastfeeding impossible
- Infants who were attended to the clinics without his/her mother

3.7 Instrument of the study

A structured interviewing questionnaire was used in this study to achieve the study objectives and answer questions. The questionnaire was submitted to panel of experts and knowledge of the topic to make suggestions and judgment about the adequacy of the instrument, last draft of questionnaire established after revise expert's notifications and advises. Same questionnaire was distributed to the cases and controls. The questionnaire was design in English language. Items were clear and specific to assure validity. The questionnaire used closed ended questions and a categorical scale. The items on the questionnaire was designed to identify socioeconomic and demographic characteristics of mother household, mother's attitudes towards the EBF. The questionnaire was developed by the researcher himself.

The questionnaire included the following categories of data:

- Personal and demographic data, which included questions about gender, qualifications, occupation, net-income etc….

- Maternal and infant characteristics.
- Cultural context and Personal support.

3.8 Data collection

Data collectors were four female graduated of nursing science from Al-Azher university under researcher supervision, two days of training sessions for data collectors to provide guides about data collection tool. Each nurse assigned to visit one clinic to conduct interviewed questionnaire.

Clinic visited days were selected according to vaccination Schedule to reach infants aged between six and twelve months. Four governmental clinics (Al-Remal clinic, Al-Zytoun clinic, Al-Darj clinic and Sabha clinic) were selected to recruit 276 mothers. The sample size was selected proportionally according to the total number of infant who received health and vaccinations services form each clinic. The sample size were 92 mothers form Al-Remal clinic,80 mothers form Al-Zytoun clinic, 56 mothers from Al-Darj clinic, and 48 mothers from Sapha clinic.

The mothers who provided exclusive breast feeding for their infants were selected as cases, but mothers who provided formula or they stopped exclusive breast feeding before six months were selected as control. After clearly defining cases and controls, participants were personally invited to interviewed questionnaire after obtain verbal consent, nearly all mother consented to answer the questionnaire.

3.9 Period of study

The research consumed eight months, from March 2018 to October 2018; the researcher prepared the proposal in March through April 2018. Then the researcher constructed the questionnaire in May 2018. In June 2018, ethical approval from

Helsinki Committee was obtained. Piloting and data collection was done in June 2018 for two weeks. Then, one week for data entry and analysis. Writing the research results and discussion were done in Sept. 2018. Submission for defense was done in November 2018.

3.10 Validity and Reliability

Validity determines whether the research truly measures that which it was intended to measure. In general, validity is an indication of how sound the research is. More specifically, validity applies to both the design and the methods of the research. In this study, the researcher used content validity. Content validity is defined as ″the extent to which a test reflects the variable it seeks to measure. It was conducted before data collection by the help of experts to ensure relevancy, clarity and completeness. Content validity is a subjective estimates of measurement based on judgment rather than statistical analysis. In order to validate the instrument used, the designed questionnaire with a covering letter, title and objectives of the study were sent to 10 experts from different backgrounds including, public health experts and nutritionist. The experts were asked to estimate the relevance, clarity and completeness of each item; some questions modified with the help of the supervisor if requested.

3.11 Reliability of the research

Reliability is the extent to which results are consistent over time and an accurate representation of the total population under study.

To increase the reliability in this research the following were done:

- Training of data collectors on the client interviewing steps and the way of asking questions. This assure standardization of questionnaire filling. Also data collection performed by data collectors under supervision of researcher

- Reliability coefficient was measured using Cornbrash's coefficient alpha; that a result above 0.70 accepted for pilot sample as well as for the actual study (Polit and Beck, 2012)

3.12 Pilot study

Pilot study was conducted on 26 subjects (10% of main study) before the start of actual data collection, 13 cases and 13 controls, in order to provide feedback about the questionnaire and ensure validity and reliability of questionnaire. Pilot sample was recruited from Al-Drage clinic to test questionnaire for content and face validity. The pilot study led to minor changes.

3.13 Statistical analysis

To achieve the goal of the study, the data analysis was performed by using the Statistical Package for the Social Sciences SPSS, version 24. Descriptive statistics (Frequencies and percentage) were used to describe the main features of a collection of data in quantitative terms and construct the needed tables to answer the research questions. Descriptive statistics were used to describe the basic features of the data in the study. They provided simple summaries about the sample and the measures. Together with simple graphics analysis, they formed the basis of virtually every quantitative analysis of data and simplified describing what was or what the data showed about the characteristic of population (socioeconomic and demographic status).

Thee researcher used inferential statistics Qui-square test and Binary logistic regression to clarify significant differences between the study variables. P value was considered statistically significant when it is lower than 0.05. To identify the determents of EBF practice, multivariate logistics regression model was used. Only

the variables which had a significant association with EBF in bivariate analysis were included in multivariate regression model. The results were showed as Wald, odd ratios and P value. To give a general picture about the attitude toward exclusive breastfeeding practice, the researcher assign scores for some questions that reflected the behavioral intention of the mother concerning the EBF. These scores were calculated through many steps; firstly the researcher selects the relevant questions, and secondly the researcher recoded the selected questions and gave higher scores to the favorable conditions. Afterward, the researcher computed the total mean to recoded questions in order to get the required domains (the outcome of many questions.

3.14 Administrative and Ethical Consideration

The researcher was committed to all ethical considerations required to conduct a research:

- Helsinki committee approval was obtained to carry out the study.
- An approval letter was obtained from ministry of health in the Gaza strip to visit the primary health care clinic.
- Informed consent was obtained from the mothers to fill up the questionnaire.

Chapter Four

Result &Discussion

4.1 Introduction

This chapter aims to describe and analyze the main variables of this study and assess the determinants of EBF. The place of selection of case and control was matched. The first part presents the results of bivariate analysis to assess the main risk factors hindering the successful exclusive breastfeeding practice. Afterward, all associated factors were entered in multivariate logistic regression model to identify the determinants of EBF.

4.2 Socioeconomic and demographic factors

Table 1: Cross tabulation and Chi-Square Tests – General characteristics of participants

Variables	Case		Control		Chi-square	P-value
	N.	%	N.	%		
Age of mothers						
< 19 years	6	4.3%	18	13%	6.571	0.009
≥ 19 years	132	95.7%	120	87%		
Net income						
< 1000 NIC	41	29.7%	53	38.4%	2.823	0.041
≥ 1000 NIC	97	70.3%	85	61.6%		
Educational level of mother						
University or above	27	19.6%	21	15.2%	0.908	0.214
Secondary or less	111	80.4%	117	84.8%		
Mothers citizenship						
Refugee	50	36.2%	34	24.6%	4.381	0.025
Non-refugee	88	63.8%	104	75.4%		
Occupational status						
Employed	10	7.2%	13	9.4%	1.346	0.105
Non employed	127	92.8%	126	90.6%		
Father education level						
University or above	112	81.1%	114	82.6%	0.098	0.438
Secondary or less	26	18.9%	24	17.4%		
Type of family structure						
Nuclear	107	77.5%	105	76%	.0.20	0.500
Extended	31	22.5%	33	24%		
Father have job						
Yes	114	82.6%	121	87.6%	1.404	0.155
No	24	17.8%	17	16.4%		

P < 0.05 indicates a significant association.

Table (1) showed that young mothers (< 19 years) represented 5% of case, while they represented 13% of control. Results showed that young mothers practiced EBF less than mothers aged 19 years or more. There is significant association between age of mother and EBF (P value =0.009).

Regarding net income, approximately 29% of case have income less than1000 NIS per month, while 38% of control have income less than 1000 NIS per month. The results showed that the rate of EBF increased with net income less than 1000 NIS. There was a significant association between income level and EBF (P value = 0.041).

Concerning education level of mothers, approximately 80% of participants mothers had a university degree or above and 15% of control had secondary or less. There was no a significant association between maternal education level and EBF (P value = 0.214).

According to citizenship, most of participants mothers were refugee. Refugee mothers represented 36% of case and 25% of control. There was a significant association between the citizenship and EBF (P value = 0.02).

Regarding the occupation status, employed mothers represented 7% of participants mothers, 8% of case were employed and 9% of control were employed mothers. There was not a significant association between occupational status and EBF (P value = 0.105). On other hand most of husband were employed and there is was not any difference between husband of case and control (82% of case and 87% of control; P value = 0.155).

Concerning the paternal education, the findings showed that 82% of case have been married from men have a university education or above. There was not significant association between Paternal education level and EBF (P value = 0.438).

Approximately 76% of total participants live in nuclear family (77% of them were case and 76% were control). There is no significant association between family structure and EBF (P value = 0.500).

4.3 Infants Factors

Table 2: Cross tabulation and Chi-Square Tests: Infants factors associated with BF

Variables	Case		Control		Chi-square	P-value
	N.	%	N.	%		
Birth weight						
Low birth weight	8	5.7%	20	14.4%	5.72	0.013
Normal birth weight	130	94.3%	118	85.6%		
Gender						
Male	63	45%	75	54.3%	2.087	0.093
Female	75	55%	63	45.7%		
Is this your first baby						
Yes	41	29%	52	37.6%	1.962	0.101
No	97	71%	86	62.4%		

P < 0.05 indicates a significant association.

In table 2, the low birth weight was 10% of total participants (8% among case and 14% among control). There was a significant association between EBF and birth weight (*P value* = 0.013).

According to gender, the percentage of male infants was 50%, nearly 45% of male infants received EBF while 54% of female infants received EBF. The results show that mothers practiced non EBF with male infants more likely than female, but this association did not reach significance difference (*P value*=.093).

Regarding the first baby, 29% of mothers practiced EBF with first baby, and 37% of them practiced non-exclusive breastfeeding with first baby. This difference did not show a significant association with EFB (*P value = .101*).

4.4 Maternal factors

Table 3: Cross tabulation and Chi-Square Tests: maternal associated factors with EBF

Variables	Case		Control		Chi-square	P-value
	N.	%	N.	%		
Do you use birth control method?						
Yes	47	34.1%	44	31.8%	0.148	0.399
No	91	65.9%	94	68.2%		
Did you have a breast complication?						
Yes	23	16.7%	26	18.8%	.223	0.376
No	115	83.3%	112	81.2%		
Mode of delivery						
Vaginal	120	87%	99	71.7%	9.751	0.001
Cesarean	18	13%	39	28.3%		
Previous child was fed exclusively						
Yes	84	86%	51	59.3%	17.552	0.00
No	14	14%	35	40.7%		

P < 0.05 indicates a significant association.

Table (3) showed that less one third of mothers used birth control method regularly (34.1% among case, and 31.8% among control). There was no a significant association between EBF and usage of birth control methods (*P value =0.399*).

Concerning breast complication, 16% of case had breast complication, and 18% of control had breast complication. A breast complication had not a significant association with EBF (*P value = 0.376*).

The mothers who delivered vaginally represented 80% of our sample (87% among, and 29% among control). There was significant association between the mode of delivery and EBF (*P value =0.001*).

Regarding the feed of previous child, 84% of case had successful experience with the previous baby, while 59% of control did not feed previous baby exclusively. There was a significant association between previous baby breast feeding and EBF (*P value = 0.00*)**.**

4.5 Mothers' perception regarding EBF

Table 4. Perception of the mothers related to Exclusive breast feeding

Statements	Case mean	Control mean	Total mean
Breast milk is more easily digested than formula.	4.8	4.6	4.7
Breastfeeding helps mothers to lose weight after pregnancy	3.9	3.60	3.75
Breastfeeding helps the uterus to return to its pre- pregnancy state more quickly	4.4	4.10	4.25
Infant formula and breast milk have the same health benefits.	4.4	4.20	4.30
Breast milk contains all the essential nutrients for a newborn child	4.7	4.50	4.60
Colostrum contains essential antibodies necessary to help the child's immune system.	4.7	4.50	4.60
Breast milk alone without even water is sufficient for baby for six months	4.2	3.20	3.75
Average of total score	4.42	4.10	4.27

The attitude scale consisted of seven items assessing mothers' attitude toward EBF. Mothers were asked to rate their response on a five-point Likert scale measuring the intensity of the mother's attitudes. Each attitude item had five response options including strongly disagree, disagree, neutral, agree and strongly agree, results showed that participants mothers in this study have positive attitude toward EBF, responds mean=29.295 with weight percentage = 85.5% (88.8% among cases and 82% among controls). This table also showed that the mother perceived that EBF is good for infant, while the least score was among the benefit of breastfeeding toward mothers in which lose weight after pregnancy (mean = 3.75; 3.9 among case and 3.6 among control).

4.6 Contextual and cultural factors

Table 5: Cross tabulation and Chi-Square Tests: Contextual and cultural factors associated with Exclusive breast feeding

Variables	Case		Control		Chi-square	P-value
	N.	%	N.	%		
Initiation time						
Within first hour	102	73.9%	73	52.8%	13.132	0.001
After one hour	36	26.1%	65	47.8%		
Get professional support						
Yes	108	78.2%	98	71%	1.914	0.106
No	30	21.8%	40	29%		
Offered free infant formula from the hospital						
Yes	3	2%	24	17.3%	18.104	0.001
No	135	98%	114	82.7%		
Baby fed after two days						
Breast milk at all feedings	56	40.6%	46	33.3%	2.098	0.096
Combination of breast milk and other fluid/furmula	82	59.4%	92	66.7%		

P < 0.05 indicates a significant association.

In table 5, approximately most of the total participants initiated breast feeding within first hour, 73% of case initiated breast feeding within first hour, 52% of control fed their baby within first hour. Results showed that mothers who initiated breast feeding with first hour practiced EBF more than whose initiated after one hour. There was a significant association between initiative time and EBF (*P value* = 0.001)

Mothers who received support from professional staff members represented 74% of total participants (78% among case and 71% among control). There is no significant association between professional support and EBF (*P value* = 0.106)

Regarding free sample from hospital, 2% of cases have been offered free sample from hospital, while 17% have been offered free sample among control. Results showed that mothers who offered free sample from hospital practiced EBF less than mothers

who have not offered. There was a significant association between the offered free sample and EBF (*P value* = 0.001)

In addition, table (5) showed that most of mothers did not practice exclusive breastfeeding in the first two days after birth. There was not a significant difference between case and control regarding the practice of EBF in the first two days (*P value* = 0.096).

4.7. Determinants of Exclusive breast feeding

Table 6: Logistic regression- associated factors with EBF (multivariate analysis)

Variables	Case		Control		Crude OR	Wald	Adj. OR	P-value
	N	%	N	%				
Previous baby received EBF								
Yes	84	86.1%	51	59.3%	5.839	9.441	3.479	0.002
No	13	13.9%	35	40.7%				
Offered formula at hospital								
Yes	3	2.1%	24	17.3%	3.417	7.746	2103.	0.005
No	135	97.9%	114	82.7%				
Citizenship								
Refugee	50	36.2%	34	24.6%	2.914	6.329	1.081	0.062
Not-refugee	88	63.8%	104	75.4%				
Birth weigh								
LBW	8	5.7%	20	14.4%	2.419	5.368	2.057	0.027
Normal birth weight	130	94.3%	118	85.6%				
Breastfeeding initiation								
First hour	102	73.9%	73	52.8%	3.102	5.242	2.512	0.022
After first hour	36	26.1%	65	47.2%				
Maternal age								
< 19 years	6	4.3%	18	13%	2.091	3.252	1.432	0.045
≥ 19 years	132	93.7%	120	87%				
Income level								
< 1000 NIS	41	29.7%	53	38.4%	2.495	2.283	1.174	0.073
≥ 1000 NIS	97	70.3%	85	61.6%				
Mode of delivery								
Vaginal section (V/S)	120	86.9%	99	71.7%	1.453	0.372	0.735	0.542
Cesarean section (C/S)	18	13.1%	39	28.3%				

P < 0.05 indicates a significant association
Crude OR: a variable was assessed without adjustment to other factors entered in the model
Adj. OR: All variables were entered in one model with adjustment for other factors

In table 6, all factors that had a significant association with EBF in bivariate analysis (chi-square test) were entered in multivariate logistic regression model to identify the determinants of EBF after adjustment and controlling the confounding factors.

Maternal age, breastfeeding initiation, low birth weight, offered formula at hospital, and previous babies who received EBF had a significant association with exclusive breastfeeding in the final model. So, after adjustment in final model, income level, mode of delivery and natural of citizenship lost their significant association with EBF (p- value = 0.073; 0.542; and 0.092, respectively).

Mothers who had a previous experience with EBF were more likely to breastfeed exclusively three time and half than mothers had not any previous experience of EBF. Young mothers were less likely to practice exclusive breastfeeding one time and half than normal age mothers. Mothers who had LBW baby or received offered formula at hospital were less likely to practice EBF two times than mothers with normal birth weight baby or they did not received formula at hospital. In addition, mothers who initiated breastfeeding during the first hour were more likely to practice EBF two times and half than the mothers did not breastfeed during the first hour.

Discussion

4.8 Infant characteristics

In this study we have identified and tracked several important factors regard EBF practice. A recent study conducted in Saudi Arabia supported our findings that pointed out those infants born with low birth weight had a higher risk for non EBF than those born normal birth weight. it concluded that low birth weight was one of hindrances for EBF (Azzeh, 2017). Another study carried out in Jordan; found that delivering low birth baby was strong barriers to breast feeding (Khasawneh & Khasawneh, 2017). The reasons that may influential with this fact, that low birth Weight infant have additional risk for hospital admission.

Despite, the gender of infant had not a significant association of EBF, our results showed that mothers intended to feed male infant non-exclusively more than female infant. Previous study carried out in Gaza Strip pointed that female infant had higher proportion than male infant regarding EBF (Kishawi et al., 2017). This finding may be attributed to fact that families are biased to pay for artificial formula in case of male infant more than female based on misconception about the importance of artificial milk within the first 6 months. Also our study showed that mothers intended to feed her first baby non EBF. In Lebanon, study of EBF concentrating on primiparous concluded that EBF among first time mothers was extremely low (Hamade et al., 2013). Possible explanation that mothers may have little experience about EBF in case of the first baby, also family have additional interest for the first baby that may lead them to pay for artificial formula based on misunderstanding about the advantage of formula.

4.9 Maternal factors

The usage of birth control method did not have any significant effect on EBF according to our findings. A recent study in Mecca city is in agreement with our result, in which it did found any influence for the birth control method on EBF (Azzeh, 2017). Some recent studies do not support these findings, in which they were a significant association between the method of family planning used and type of infant's feeding during the first six months (Al-Juaid et al., 2014; Al-Hreashy et al., 2008).

In general, mother with pregnancy complication have additional risks to practice non EBF rather than healthy mothers. Our finding showed that mothers without breast complication had a higher proportion regarding EBF than mothers with complicated breast. The perception of mothers could be hindering the EBF, because they think that the milk may be harmful for their infants. This was supported by different previous studies (Cato et al., 2017; Amara et al., 2015; El shafei, 2014)

By bivariate analysis, mode of delivery was as influential factor of breast feeding. Our findings showed that mothers who delivered vaginally practiced EBF more than mothers who delivered by caesarian section, but the association did not reach significant level statistically by logistic regression analysis, because there was a high correlation with other independent factor (breast feeding initiation time; r = .45). Previous studies showed that mothers giving birth at vaginal practiced EBF more than mothers who delivered by caesarian section (Adugna et al., 2017; Elyas et al., 2017).

Our findings showed that mothers who fed previous infant exclusively had higher chance to breast feed the next infant exclusively, because the mothers with no previous breastfeeding experience require additional support to be able to practice

breast feeding (Raffle et al, 2011; Kronborg et al., 2007). In this context Australian study reported that mothers with more breast feeding experience had the highest knowledge and positive attitude than the mothers who had low experience (Brodribb et al.,2008) .

Our results are in agreement with previous study demonstrated a positive attitude toward EBF among mothers in Gaza strip (El-Kishawi. 2018). Despite positive attitude the rate of EBF still low as reported by Kishawi. Attitude toward any concept is a person's general feeling of favorableness or un favorableness for that concept, In the State of Palestine, 96% of mothers breastfed their infants at birth (UNCIF.,2015), but most mothers stop EBF before six months due to the impact of other factors.

4.10 Socioeconomic factors

The findings of this study showed that mothers older than 19 years practiced EBF more than younger than 19 year, this is consistent with different studies over the world (Fisher et al., 2013; Forde and Miller, 2010; Lande et al., 2003). All these studies identified the maternal age as significant factor regard the practice of EBF, and agreed that older maternal age significantly succeeded in practice EBF more than younger maternal age. Younger mothers intend to cessation EBF faster when compare to older mothers or have shorter duration breast feeding (Dennis et al., 2013; Amin et al., 2011; Tarrant et al., 2010). This study indicated that when income level more than 1000 NIS the rate of EBF practice increased, but the association did not reach the significant level, these finding did not match with another studies showed that high income level indicated less practicing of EBF (Asemahagn, 2016; Shifraw et al.,2015). The possible explanation is that high income level mother may leave home at day time and that may compromise the practice of EBF, also formula is not affordable unless the family have higher income level, (Shifraw et al .,2015). In

Gaza city the poorest family are candidate to receive Humanitarian aid which usually contain artificial milk, that may compromise the practice of EBF.

The present study indicated that no association between educational level of mother and EBF, this finding supported by another recent study carried out in Gaza strip indicated that no association between mother education level and EBF (Kashiwa et al., 2017). The same is true of fathers, father level education had not any association with EBF. but some of previous studies pay attention toward less educated mothers as risky group to practice non EBF, while their findings revealed that higher educated mothers practice EBF more likely than lower educated mothers significantly (More et al., 2016 ; Ago et al.,2011). Controversy, previous study carried out in Saudi Arabia, revealed that one of determents for EBF was lower education level of mother (Al Juaid et al., 2014).

The present study identified the nature of citizenship was not a significant factor regarding the practice of EBF, refugee mothers practiced EBF higher than non-refugee mothers in Gaza city, but without any significant association, because the Gazan community is a homogeneous one (Gallegos et al., 2015; Woldeghebriel, 2015; Issaka et al., 2014; Musmar&Qanadeelu 2012).

The relationship between occupation status of mother and EBF did not reach significant level, wherever the findings revealed that employed mothers practiced EBF with the same rate of non-employed mothers, same findings reported by recent study carried out in Gaza (El-Kishawi et al.,2018).

Mothers who leave their home for several hours will not able to breast feed her infants this explanation is possible to found unemployed mothers practice EBF higher than employed mothers according to previous study(Asemahagn, 2016; Adugna et al.,2017).

4.11 Contextual and cultural factors

WHO reported ten steps to improve breast feeding rate, one of this step is initiation breast feeding, present study showed initiation breast feeding within first hour associated significantly with EBF, mothers who succeed to initiate breast feeding within first hour practiced EBF higher than those fed their infant later than one hour after delivery, this finding support with another previous study (Patel et al.,2015; Bbaale, 2014).

EBF practice affected by mother attitude and conception value, so misunderstanding and misconception toward breast feeding may play affected role in determining EBF, healthcare professionals providing maternity care for infants should give mothers information about breastfeeding and support the breastfeeding. Base of knowledge can influence mothers' decisions to initiate and continue breastfeeding (Grassley and Eschiti, 2008). Our finding showed that mother who got professional support practiced EBF more likely than who did not get professional support but the association did not reach the significant level statistically.

In contrast, the negative effect of commercial promoters of artificial formula may present in the delivery sections have significant affect regarding EBF, mothers who offered free sample of artificial formula practiced EBF less than mothers who did not offered. The study conducted in America supported our findings, in which they showed that Commercial hospital discharge pack distribution should be reconsidered in light of its negative impact on exclusive breastfeeding (Rosenberg, Eastham, Kasehagen, and Sandoval, 2008).

WHO recommended Exclusive breast feeding for 6 months, Some of the beliefs align with the WHO recommendations while others do not align with the WHO recommendations, the results of this study showed that 30% of all participants did not

aligned with WHO recommendations such as they used fluids and formula to fed their babies in the first two days, this fact may influent led with cultural value (Agunbiade, & Ogunleye, 2012; Wojcicki et al.,2010)

Chapter Five

5.1 Conclusion

Regarding socio demographic characteristic, the study illustrated that exclusive breast feeding was more reported among maternal age older than 19 years, and also increased with more net income of household.

Regarding infant and maternal factors, the study illustrated a positive statistically significant associated between exclusive breast feeding and normal birth weight of baby, whereas it showed an inverse association between exclusive breast feeding and first baby.

Regarding contextual and cultural factors, the study illustrated a positive statistically significant associated between exclusive breast feeding and initiation breast feeding within first hour, also inverse significant association between exclusive breast feeding and offered free formula sample from hospital.

Finally, this study showed and ranked the main factors influencing the exclusive breastfeeding as a following: the most influential factor was mother with previous experience with EBF, followed by initiation of breastfeeding, offered formula at hospital, birth weight and age of the mother.

5.2 Recommendation

The study results might help in developing deep understanding of the issues that may influence exclusive breast feeding, Moreover, due to significant decrease EBF practice rate in Gaza city, recommendations to emphasize on increasing and directed the efforts toward risk groups in order to improve EBF practice as following:

- More attention toward young mothers as results showed they practice EBF less than older mothers
- Coordinate between Ministry of Health and nongovernmental organization to apply effective supportive programs
- Marketing formula in hospitals had negative effects, should be managed
- Fathers can play supportive role, Can they be included in supportive plans?
- Health care providers should identify employed mothers, young aged mothers and provide appropriate screening, counseling and health education for them.
- Special attention is needed to provide support to non-refugee mothers. Therefore, different strategies and interventions should be directed to these special categories.

Recommendations for health care providers

- Health care providers play an important role in reducing non EBF by educate lactate women and family members on factors that affect infant health development.
- As results showed positive association between good attitude and EBF, more efforts needed to enhance mothers attitude toward EBF.

Recommendation for further research

- Further studies are needed to estimate the relationship between exclusive breast feeding and other factors as the data of this study was collected in unstable political and economic situation; where irregular salary paid and these situations may play a role in the result of this study.
- The results of previous studies about the relationship between mixed feeding and male baby were widely controversial. For further clarification, a cohort studies, in

which mixed feeding incidence is assessed together with repeated number of male baby are required.

- A last recommendation for future research focuses on the importance of international comparative research in socioeconomic differences in EBF. Finally, it may be important for the development of broader based guidelines.

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Annexes

Annex (1) : Consent form

محددات ممارسة الرضاعة الطبيعية الخالصة لدى الأمهات في مدينة غزة

نموذج موافقة

الأخت الفاضلة .. السلام عليكم ورحمة الله وبركاته

تحية طيبة وبعد،

نأمل من سيادتكم التكرم والمشاركة في تعبئة هذا الاستبيان والذي يهدف إلى دراسة العوامل التي تؤثر على الرضاعة الطبيعية الحصرية في مدينة غزة.

ستتم هذه الدراسة من خلال جمع البيانات من المقابلة الشخصية وتعبئة الاستبانة والملاحظة، ومن المقدر أن تستغرق جمع البيانات 10 دقائق وستكون لمرة واحدة مع كل شخص.

يجب أن يكون واضحا لديكم بأن المقابلة لن تتم الا بموافقتك وسيكون لك الحق في قبول أو رفض الاجابة عن الاسئلة، كما ستحترم بالكامل سرية المعلومات التي ستدلى بها ولن تنشر هذه الدراسة أي أسماء أو عناوين أو أن يلمح بشي من ذلك.

ستفيد نتائج الدراسة في تحديد وتقييم المشاكل والثغرات المتعلقة بالرضاعة الطبيعية الحصرية في مدينة غزة، مما يساعد على تحسين الرعاية التي تقدم للأمهات لتحسين معدلات الرضاعة الطبيعية في مدينة غزة.

ليست هذه الدراسة ممولة من أي جهة كانت، ولا تستهدف تحقيق مكاسب مادية، ولن يترتب عليك أي التزامات مادية معينة.

شاكرين لكم حسن تعاونكم،

الباحث /

باسل عماد الكحلوت

Annex 2: Questionnaire

Determinants Of Exclusive Breast Feeding Practice Among Mothers In Gaza City

ADMINISTRATIVE DETAILS

Questionnaires ID NO……. Clinic name…….....

Name of the interviewer…….. Date of interview……

Time started……Time finished…….

Questionnaire checked……...

1.Gender	□ Male	□ Female	
2. Baby's current age	……. Months		
3. No. of baby.	□ One	□ Twins	□ Trible
4. Gestational age (at birth)	□ Less than 37 weeks	□ 37-42 weeks	□ More than 42 weeks
5. Birth weight	□ Less than 2500g	□ 2500g-4000g	□ Greater than 4000g
6. Method of childbirth (delivery)	□ Vaginal Birth	□ Cesarean Section	
7. Is this your first baby?	□ Yes	□ No	
8. If No, did you breastfeed your Previous child/ exclusively?	□ Yes	□ No	

Socioeconomic and Demographic Data of the parent

Maternal History

9. Current age	……. Years		
10. Your age when this baby was born	……. Years		
11. What was your marital status at the time of infant birth?	□ Married	□ Divorce	□widow

12. What is the nature of your citizenship?	□ Refugee	□non Refugee
13. Do you use birth control method ?	□ Yes	□ No
14. What is your education level ?	□ Illiterate	□ Primary school
	□ Middle school	□ High school
	□ Intermediate Post high school	□ Graduation (BA)
15. Occupation status	□ Employed	□ Unemployed
16. If yes, can you tell us in which sector you work?	□Government	□UNRWA
	□ NGO	□ other
17. Does your workplace permit beast-milk hour?	□ Yes	□ No

18. What is the date of birth of your husband (D-M-Y)?	□ Day/Month/Year ……/……/……		
19. What is the nature of citizenship of your husband?	□ Refugee	□non Refugee	
20.What is the level of education of your husband?	□ Illiterate	□ Primary school	
	□ Middle school	□ High school	
	□ Intermediate Post high school	□ Graduation (BA)	
21.Dos your husband have a job ?	□ Yes	□ No	
22. If yes, can you tell us in which sector he works?	□Government	□UNRWA	
	□ NGO	□ other	
23. What is the occupation of your husband?			
24. What is your place of residence	□City	□Village	□Camp
25. Is the residence rented or owned?	□ Rented	□Owned	

Paternal history

26. Type of family structure	□Nuclear	□ Extended
27. Net income of household	…….NIS	
28. How many people live in your house?		

Feeding Information's

29. After your baby was born, how long did you stay in the hospital?		
30. How soon after birth did you try to breastfeed your baby for the first time?		
31. In the first two days after your baby was born, what was your baby fed?	□ Breast milk at all feedings	□ Combination of breast milk and other fluid
	□ Formula at all feedings	□ Don't Know
32. Did you have a breast complication?	□ Yes	□ No
33. Do you have chronic Illness?	□ Yes	□ No
34. While in the hospital, did you receive any help from hospital staff regarding	□ Yes	□ No

feeding your baby?		
.If YES, how useful was the help that35 you received with feeding your baby?	□ Very useful	□ Somewhat useful
	□ Not very useful	□ Don't remember

36.Were you offered free infant formula from the hospital	□ Yes	□ No
37.Have you received any formula samples discharge from the hospital?	□ Yes	□ No
38.Where would you go for support in case you experienced breastfeeding problems?	□ Husband or partner	
	□ Mother or Other family member	
	□ Friends	
	□ Health specialist	
	□ Social media	
	□Other(specify)……..	

39.Who do you think are more important people to help in problems related to breastfeeding?	

The following statements pertain to your attitude about breastfeeding.

Survey scale: Strongly disagree=1, Disagree=2, Neutral=3, Agree=4, strongly agree =5 .

Breast milk is more easily digested than formula.	1	2	3	4	5
Breastfeeding helps mothers to lose weight after pregnancy.	1	2	3	4	5
Breastfeeding helps the uterus to return to its pre- pregnancy state more quickly	1	2	3	4	5
Infant formula and breast milk have the same health benefits.	1	2	3	4	5
Breast milk contains all the essential nutrients for a newborn child	1	2	3	4	5
Colostrum contains essential antibodies necessary to help the child's immune system.	1	2	3	4	5
Breast milk alone without even water is sufficient for baby for six months	1	2	3	4	5

Annex 3: Approval letter

State of Palestine
Ministry of health

دولة فلسطين
وزارة الصحة

التاريخ:09/04/2018
رقم المراسلة 207938

السيد : رامي عيد سليمان العبادله المحترم

مدير عام بالوزارة /الإدارة العامة لتنمية القوى البشرية - /وزارة الصحة

السلام عليكم،،،

الموضوع/ تسهيل مهمة الباحث//باسل الكحلوت

التفاصيل //
بخصوص الموضوع أعلاه، يرجي تسهيل مهمة الباحث: **باسل عماد الكحلوت**
الملتحق ببرنامج ماجستير التمريض – تخصص صحة الأم والطفل- جامعة القدس أبوديس في إجراء بحث بعنوان:-
"Determinants of Exclusive Breast Feeding Practice among Infants Less Than six Months in Gaza City"
حيث الباحث بحاجة لتعبئة استبانة من عدد من أمهات الأطفال الذين يتغذون على حليب الام فقط وكذلك عدد اخر من أمهات الأطفال الذين يتغذون على حليب صناعي من المترددات على مراكز الرعاية الأولية في مدينة غزة التي تقدم خدمات التطعيم للأطفال، وكذلك تعبئة استبانة من عدد من الممرضات اللاتي يقدمن الخدمات الصحية لهؤلاء الأطفال.
نأمل توجيهاتكم لذوي الاختصاص بضرورة الحصول على الموافقة المستنيرة من النساء اللاتي هن على استعداد للمشاركة في البحث ومن ثم تمكين الباحث من التواصل معهن، بما لا يتعارض مع مصلحة العمل وضمن أخلاقيات البحث العلمي، ودون تحمل الوزارة أي أعباء أو مسئولية.
وتفضلوا بقبول التحية والتقدير،،،
ملاحظة/ البحث حصل على موافقة لجنة اخلاقيات البحث الصحي
ملاحظة / تسهيل المهمة الخاص بالدراسة أعلاه صالح لمدة 6 شهر من تاريخه.

محمد ابراهيم محمد السراوي
مدير دائرة/الإدارة العامة لتنمية القوى البشرية -

11/4/2018

Gaza Tel. (+970) 8-2846949 Fax. (+970) 8-2826295

غزة تلفون (+970) 8-2846949 فاكس (+970) 8-2826295

Annex 4: Helsinki Committee

المجلس الفلسطيني للبحث الصحي
Palestinian Health Research Council
تعزيز النظام الصحي الفلسطيني من خلال مأسسة استخدام المعلومات البحثية في صنع القرار
Developing the Palestinian health system through institutionalizing the use of information in decision making

Helsinki Committee
For Ethical Approval

Date: 05/02/2018 **Number:** PHRC/HC/305/18

Name: BASEL E. ALKHLOT الاسم:

We would like to inform you that the committee had discussed the proposal of your study about: نفيدكم علماً بأن اللجنة قد ناقشت مقترح دراستكم حول:

Determinants Of Exclusive Breast Feeding Practice Among Infants Less Than six Months in Gaza City.

The committee has decided to approve the above mentioned research. Approval number PHRC/HC/305/18 in its meeting on 05/02/2018 و قد قررت الموافقة على البحث المذكور عاليه بالرقم والتاريخ المذكوران عاليه

Signature

Member **Member**

Chairman

Genral Conditions:-
1. Valid for 2 years from the date of approval.
2. It is necessary to notify the committee of any change in the approved study protocol.
3. The committee appreciates receiving a copy of your final research when completed.

Specific Conditions:-

E-Mail:pal.phrc@gmail.com
Gaza - Palestine غزة - فلسطين
شارع النصر - مفترق العيون

محددات ممارسة الرضاعة الطبيعية الخالصة لدى الأمهات في مدينة غزة

إعـداد: باسل عماد الكحلوت

إشراف: د. مازن أبو قمر

ملخص الدارسـة

مقدمة: توصي منظمة الصحة العالمية بالرضاعة الطبيعية الخالصة خلال الأشهر الستة الأولى من الحياة. ومع ذلك ، أظهرت دراسة حديثة أن نسبة الرضاعة الطبيعية الخالصة في قطاع غزة هي 24 الرضاعة الطبيعية الخاصة لها تأثيرات وقائية مهمة على بقاء الرضع وتقليل المخاطر بالنسبة للعديد من الأمراض المبكرة. كان الهدف من هذه الدراسة هو تقييم محددات ممارسة الرضاعة الطبيعية الخالصة بين الأطفال الذين تقل أعمارهم عن ستة أشهر في مدينة غزة ، فلسطين.

هدف الدارسة: دراسة محددات الرضاعة الطبيعية الخالصة في مدينة غزة

المنهجية:

دراسة استكشافية تحليلية بأثر رجعي مع طريقة أخذ العينات غير الاحتمالية ، أجريت هذه الدراسة بين مارس 2018 وحتى أكتوبر 2018 ، قام الباحثون المدربون بجمع بيانات من أمهات الرضع. تم تقييم الرضاعة الطبيعية الخالصة على أساس ممارسة تغذية الرضع لمدة ستة أشهر. تم استخدام تحليل الانحدار اللوجستي ثنائي. وقد وشارك فيها ما مجموعه 276 سيدة مع أطفال رضع تزيد أعمارهم عن ستة أشهر.

النتائج:

أظهرت النتاج أن الأمهات اللواتي مارسن الرضاعة الطبيعية الخالصة مع الطفل السابق مارسنها أيضا مع الطفل الحالي أكثر من الأمهات التي لم تمارسها، أيضا تمارس الأمهات اللاجئات هذه الرضاعة على الأرجح أكثر من غير اللاجئين. الأمهات اللواتي بدأن الرضاعة الطبيعية في الساعة الأولى مارسن هذه الرضاعة أكثر من الأمهات اللواتي أرضعن أطفالهن فيما بعد. كانت الأمهات اللواتي عرض عليهم عينيات الحليب الصناعي داخل المستشفى أقل ممارسة للرضاعة الخالصة من الأمهات اللواتي لم يعرض عليهن، من المرجح أن تمارس الأمهات اللواتي لديهن طفل طبيعي بوزن الولادة ممارسة الرضاعة الخالصة أكثر من الأمهات اللواتي لديهن طفل بوزن غير طبيعي عند الولادة. الأم التي لديها توجه إيجابي ممارسة الرضاعة الخالصة أكثر من الذين لديهم توجه سلبي

الخلاصة:

أظهرت هذه الدراسة العديد من محددات الرضاعة الطبيعية الخالصة هي ممارسة الرضاعة الطبيعية الخالصة مع الطفل السابق ، الأمهات اللاجئات ، بدء الرضاعة الطبيعية خلال الساعة الأولى ، ولادة طفل بوزن طبيعي وتجنب الترويج التجاري للحليب الصناعي وأخيراً التوجهات الإيجابية للرضاعة الطبيعية الخالصة .

التوصيات: نظرا لانخفاض معدلات الرضاعة الطبيعية الخالصة مدينة غزة حسب نتائج الدراسات السابقة، أيضا لأهمية الرضاعة الطبيعية الخالصة وتأثيرها الشديد على مؤشرات الصحة العامة للمجتمع نوصي بتكيف الجهود من أجل تعزيز هذه الممارسة بين الأمهات من خلال التركيز على الفئات التي ظهرت من خلال هذه الدراسة تمارس هذه الرضاعة بمعدلات منخفضة مثل الأمهات صغيرات السن، السيدات المواطنات (غير لاجئ)، الأمهات التي تلد طفل بوزن أقل من الطبيعي، كما نشير لأهمية توحيد البرامج بين مقدمي الخدمة الصحية في قطاع غزة (وزارة الصحة، وكالة الغوث، القطاع الخاص) من أجل الحصول على أفضل النتائج