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FACTORS ASSOCIATED WITH EXCLUSIVE BREASTFEEDING DURATION AMONG FIRST TIME MOTHERS IN KUALA LUMPUR

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BY

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A project submitted as a partial fulfillment of the requirement for the degree of Bachelor of Science (Nutrition and Community Health) form the Faculty of Medicine and Health Sciences, Universiti Putra Malaysia

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ABSTRACT

FACTORS ASSOCIATED WITH EXCLUSIVE BREASTFEEDING DURATION AMONG FIRST TIME MOTHERS IN KUALA LUMPUR

Amanina Husna Binti Mohamad Ariff

Breastfeeding is a natural way of providing an infant with nutrients that essential for optimal growth, health, and cognitive development. However, the rate of exclusive breastfeeding up to 6 months in Malaysia still below the Global Nutrition Aim 2025 (to achieve 50% of the population) even though there was an increase from 23.3% in 2011 to 47.1% in 2016. Psychological, social demographic factor, emotional, economic status, support system, and the environmental factor could be a part of the factors that could influence the mother's decision to breastfed their baby. This present study were to determine the association of socio-demographic factors, maternal psychology state, breastfeeding education and breastfeeding support with exclusive breastfeeding duration among first time mothers who attended Klinik Kesihatan Kuala Lumpur. A set of self-administered questionnaire was used in this study to determine the factors that associated with exclusive breastfeeding duration among 145 first time mothers. There were consist of 5 section (A, B, C, D and E). Section A was to identify the socio-demographic (age, ethnicity, education level, marital status, employment status, and monthly income) by using self-develop questionnaire. Section B was determined the infant feeding practises that can observed the prevalence of exclusive breastfeeding among respondents. Section C was access the maternal psychological state by using Depression, anxiety and stress (DASS-21) which consists of 21 items. In addition, for section D was to assess the breastfeeding knowledge of mothers. This section have two part which part A was obtained breastfeeding information or resources of mothers during their pregnancy while part B was to determine the knowledge of breastfeeding covered the general knowledge of breastfeeding. Section E was to assess the breastfeeding support levels from the paternal by using Partner Breastfeeding Influence Scale (PBIS). From the result obtained, majority of the respondents were Malay (91.7%), have tertiary education (67.6%) and gained moderate monthly income RM1000-RM1999 (28.3%). Only 47.1% of the respondents were exclusively breastfeeding their infants at 6 months. There were no significant association between socio-demographic factors, maternal psychological stated, breastfeeding education and breastfeeding support among first time mothers in Kuala Lumpur ($p>0.05$). However, maternal psychological state score were negatively associated with breastfeeding knowledge ($r= -0.21$, $p=0.012$) and support ($r= -0.261$, $p= 0.002$) showing that mothers who have higher breastfeeding knowledge and and support tend to have less stress. As conclusion, this finding suggest that there were no significant association of maternal psychological state, breastfeeding education and breastfeeding support with exclusive breastfeeding duration probably because this population have good psychological stated, good breastfeeding knowledge and high support from the partner.

ABSTRAK

FAKTOR FAKTOR YANG MEMPENGARUHI TEMPOH PENYUSUAN EKSKLUSIF ANTARA IBU KALI PERTAMA DI KUALA LUMPUR

Amanina Husna Binti Mohamad Ariff

Penyusuan susu ibu adalah cara semulajadi bagi menambah dan memberikan nutrien yang penting untuk pertumbuhan optimum, kesihatan, dan pembangunan kognitif kepada bayi. Walau bagaimanapun, kadar penyusuan eksklusif sehingga 6 bulan di Malaysia masih di bawah Pemakanan Global Aim 2025 (untuk mencapai 50% penduduk) walaupun terdapat peningkatan dari 23.3% pada tahun 2011 kepada 47.1% pada 2016. Psikologi, demografi sosial faktor, emosi, status ekonomi, sistem sokongan dan faktor alam sekitar boleh menjadi sebahagian daripada faktor yang boleh mempengaruhi keputusan ibu untuk menyusu bayi mereka. Kajian ini bertujuan untuk menentukan faktor sosio-demografi, keadaan psikologi ibu, pendidikan penyusuan susu ibu dan sokongan menyusu dengan tempoh penyusuan eksklusif di kalangan ibu-ibu kali pertama yang menghadiri Klinik Kesihatan Kuala Lumpur. Satu set soal selidik yang dijalankan dalam kajian ini untuk menentukan faktor-faktor yang berkaitan dengan tempoh penyusuan eksklusif di antara 145 orang ibu kali pertama. Terdapat 5 bahagian (A, B, C, D dan E). Bahagian A adalah untuk mengenal pasti sosio-demografi (umur, etnik, peringkat pendidikan, status perkahwinan, status pekerjaan, dan pendapatan bulanan). Bahagian B telah menentukan amalan pemakanan bayi yang dapat melihat kelaziman penyusuan eksklusif di kalangan responden. Bahagian C adalah memfokuskan keadaan psikologi ibu dengan menggunakan ujian saringan minda 'Depression, Anxiety and Stress' (DASS-21) yang terdiri daripada 21 item. Selain itu, bagi bahagian D adalah untuk menilai pengetahuan menyusukan ibu. Seksyen ini mempunyai dua bahagian di mana A mendapat maklumat menyusukan atau sumber ibu semasa kehamilan mereka manakala bahagian B adalah untuk menentukan pengetahuan menyusukan meliputi pengetahuan umum penyusuan susu ibu. Bahagian E adalah untuk menilai sokongan penyusuan bayi dari pihak ayah dengan menggunakan Skala Pengaruh Penyusuan Bayi (PBIS). Dari hasil kajian yang diperoleh, majoriti responden adalah Melayu (91.7%), mempunyai pendidikan tertiari (67.6%) dan mendapat pendapatan bulanan sederhana RM1000-RM1999 (28.3%). Hanya 47.1% daripada responden secara eksklusif menyusukan bayi mereka pada usia 6 bulan. Tiada persefahaman yang ketara antara faktor sosio-demografi, pendidikan psikologi ibu, pendidikan penyusuan susu ibu dan sokongan menyusukan di kalangan ibu-ibu kali pertama di Kuala Lumpur ($p > 0.05$). Walau bagaimanapun, skor keadaan psikologi ibu dikaitkan secara negatif dengan pengetahuan menyusu ($r = -0.21$, $p = 0.012$) dan sokongan ($r = -0.261$, $p = 0.002$) menunjukkan bahawa ibu-ibu yang mempunyai pengetahuan dan penyusuan yang menyusu lebih tinggi cenderung mempunyai tekanan yang kurang. Kesimpulannya, kajian ini mendapati tiada signifikan terhadap psikologi ibu, pendidikan menyusu dan sokongan penyusuan dengan tempoh penyusuan eksklusif mungkin kerana ibu-ibu ini mempunyai pengetahuan psikologi yang baik, pengetahuan penyusuan yang baik dan sokongan yang tinggi dari pasangan.

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CHAPTER 1
INTRODUCTION

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1.1 Background

According to the World Health Organization (WHO) definition, breastfeeding is a natural way of providing an infant with nutrients that essential for optimal growth, health, and cognitive development. The yellowish and sticky of breast milk, the colostrum, is vital food for new-born and must be fed in the first hour after birth because it contains important nutrients and immune-active components that are essential for infant survival and health in early life (WHO,2013). Breastfeeding protects the infant against infectious disease such as pneumonia and diarrhoea which these two diseases are the main cause of expanding the child mortality world wide. Breastfeeding also may help to decline the number of people overweight and obesity and can assure maternal health from breast and ovarian cancer (Victora et al., 2016). Exclusive breastfeeding advocating by

WHO for mothers to practice exclusive breastfeeding in the first six months of life, of which infant just only receive breast milk without of addition other supplemental sources such as water, other liquids or solid baby food (WHO, 2011).

Malaysia is currently undergoing the transition development as it rapidly increase the number of the mother breastfeeding their children. The rate of exclusive breastfeeding up to 6 months in Malaysia is still below the Global Nutrition Aim 2025 (to achieve 50% of the population) even though there was an increase from 23.3% in 2011 to 47.1% in 2016 (Rosuzeita, Che Rabiaah, Rohani, & Mohd Shukri, 2018). According to the Third National Health and Morbidity Survey 2016, data showed the mother who exclusively breastfeeds their infant for six months was slightly declined from 49.4% in 2015 to 47.1% in 2016 (Rosuzeita et al., 2018). Although they seem similar, the exact current rate is still a question.

In the United States, the number of infants who initiate breastfeeding after delivery was increased to 77% based on the Centers for Disease Control and Prevention's (CDC) Breastfeeding Report Card (2016) as similar with Malaysia data from 2010, there was rise of breastfeeding up to 6 months from 35% to 49% and breastfeeding rate at 12 months had also rise on the same year from 16% to 27% (Fatimah, Siti Saadiah, Tahir, Hussain Imam, & Ahmad Faudzi, 2010). Besides, the previous research has shown that the global trends in exclusive breastfeeding prevalence at 6 months has increased 33% in 1995 to 39% in 2010 in the developing countries. While in the West and Central Africa have seen the biggest

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improvement in the prevalence of exclusive breastfeeding from 12% in 1995 to 28% in 2010 (Cai, Wardlaw, & Brown, 2012).

Breastfeeding also can be challenging to learn especially for the first-time mothers and it is part of the learning process of becoming a parent. A review article reported that every week, there were two to three cases report having early breastfeeding problems (Kronborg, Harder, & Hall, 2015). The first time mothers could experience sore nipples and always worries about the milk production either enough or not feed their infant, and at the same time, they were really concern and anxious about their infant safety. For the first time mothers, they need to have the new special abilities and energy that required in doing the new task involved caring a baby and make sure the nipple latching to the baby mouth as this can affect the maternal stress. Moreover, first-time mothers also need additional support from other especially from their husband and family (Cronin, 2003).

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1.2 Problem Statement

In Malaysia, achieving exclusive breastfeeding at six months would be challenging especially among first time mothers. Therefore, this study will be conducted to determine factors that associated with the duration of exclusive breastfeeding among first time mothers. The previous study reported that breastfeeding practices infant up until 6 months in Malaysia, which is 47.1%, is still considered insufficient compared to other countries like South-East Asian (Draman, Mohamad, Yusoff, & Muhamad, 2017). There are many factors that affect the initiation of breastfeeding and also the duration of breastfeeding itself. Psychological, social demographic factor, emotional, economic status, support system, and the environmental factor could be a part of the factors that could influence the mother's decision to breastfed their baby.

One of the factors that may influence the duration of breastfeeding among first time mother is the socio-demographic factor this including the employment status, education level and overall socioeconomic status (SES). A study conducted in Sarawak has shown that 95% of an unemployed mother was having longer duration of breastfeeding compared to employed mother (Hafizan Ms, Zainab, & Sutan, 2014). The finding was also similar with the Los Angeles Country Health Survey (LACHS) in United State that found employed mother had a short duration of breastfeeding. Working mothers were less likely to practice exclusive breastfeeding compared to non-working mothers (odds ratio of 3.75, 95% Cl: 1.64, 8.55) (Leong, 2009).

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Education levels were also could be one of the factors that affect the duration of breastfeeding. Most of the previous studies identified that higher education had a strong association compared to mother who has no formal education (Egwuda, Akpan, & Igbudu, 2015). According to the Nepal Demographic and Health Surveys (NDHS) 2011 survey, mother with primary education (OR: 1.52; 95 % CI: 1.21, 1.91) and secondary or higher education (OR: 2.20; 95 % CI: 1.76, 2.76) had higher early initiation of breastfeeding compared to mother without education (Acharya & Khanal, 2015).

In the study of 1745 women from Australia, those mothers who experienced depression were significantly had a tendency to stop breastfeeding (McCarter-Spaulding & Horowitz, 2007). Depression can cause of disease of a burden for women at the reproductive age stage and also may lead to serious effect for mother and the baby (Yusuff, Tang, Binns, & Lee, 2015). From the review article, in the total 1078 mother in Sabah, the mother with an antenatal depression were more likely to stop breastfeeding before 6 months (OR: 1.95, 95% CI; 1.26,3.01) (Yusuff et al., 2015). Postpartum depression is one of the disorders that just not affect mothers but it also could affect family, economic and social. A study conducted at Postnatal Clinic at University Malaya Medical Centre, Kuala Lumpur found that the mother who has postpartum depression were non-exclusive breastfeeding (P<0.01, OR=23.7%, 95% CI: 3.1-179.7) (Zainal, Kaka, Ng, Jawan, & Singh G., 2012). On the other hand, anxiety also could lead to discontinuing breastfeed. An Australian cohort study found that anxiety

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symptoms reported to weaned early and have insufficient milk production (Fisher et al., 2013).

Breastfeeding knowledge has been a serious component of the public health to support exclusive or longer breastfeeding duration. Breastfeeding education may not only provide knowledge to mothers, but it must also include lactation skill and practices (Ishak et al., 2014). Lack of knowledge and negative attitude towards breastfeeding could make the mother unable to continue exclusive breastfeeding. A study in Pahang has shown that just only 287 respondent over 500 (56.8%) aware that breastfeeding can prevent cancer, and 16.3% source of breastfeeding knowledge came from the family (A. Aye et al., 2014). Hence, 10 steps of baby- friendly hospital initiative stated that step 3 and step 10 which are prenatal education and postnatal breastfeeding support were the most difficult for the community to implement (Munn, Newman, Mueller, Phillips, & Taylor, 2016). Overall, it is important to identify both breastfeeding knowledge and support among mother, and their relation with breastfeeding status and duration.

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1.3 Significance of Study

These findings of this study may contribute to the prevalence data toward factors that affect the exclusive breastfeeding among first time mother in Malaysia. Hence, the study can fill in the gaps within the existing study related to breastfeeding issues. This study may add new knowledge in the area chosen which was in Kuala Lumpur. The finding can be useful because it was just only focusing on the first time mother which this group of the population could have had many issues on the breastfeeding practice and early postnatal care.

This study also emphasizing the factors related to the paternal support during breastfeeding and maternal knowledge on the practice on breastfeeding. Previously, studies investigated the overall family and hospital support and promotion on breastfeeding, but not emphasizing on the influence of paternal factors, although studies have been suggested that maternal spouse (or husband) helps to improve breastfeeding duration, in addition to family members (Phua, 2018). The study will also identify the main sources of knowledge on breastfeeding and also the levels or maternal understanding on the practical aspect of lactation. Previously, study focusing on the knowledge regarding the benefits of breastfeeding (Ahmad Nizal Mohamad Ghazali, 2018), which this might have been improved at the present time, but yet, the practical aspect is still lacking. This was especially many mothers perceived that they are producing insufficient milk (Ti et al., 2012), hence may increase their stress and anxiety towards breastfeeding,

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which consequently could affect the breastfeeding performance. Therefore, this study encompasses important factors (paternal support, breastfeeding knowledge and sources, as well as maternal psychological state) that were considered to be critical among first time mothers, which could influence breastfeeding duration and exclusivity.

Furthermore, the study outcomes can be used by the researchers to plan an intervention study, focusing on the modifiable factors such as education level and psychological stated and support that affect the exclusive breastfeeding, especially among first time mothers. The government and non-government (NGO) sectors could have the opportunity to plan the program to support education guide adding new informations for the first time mother to have practice exclusive breastfeeding for their babies in the first six months of life. This is especially important among first-time mothers, as successful breastfeeding during the first child will likely help mothers to also successfully practice exclusive breastfeeding for their future or next child. This study could also very beneficial to the nutritionists and other health care professionals in providing advice to the community on the advantages of breastfeeding through the knowledge, attitude and practice. It can also be used as education material and guidleline that can enhance the knowledge to the community to give a support to the mother to continue breastfeeding.

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1.4 Objectives

General Objective

To determine factors associated with exclusive breastfeeding duration among first time mothers in Klinik Kesihatan Ibu dan Anak in Kuala Lumpur

Specific Objectives

1. To identify the socio-demographic (age, ethnicity, education level, marital status, employment status, and monthly income) of first time mothers.
2. To access the maternal psychological state among first time mothers.
3. To assess the breastfeeding knowledge of first time mothers.
4. To assess the breastfeeding support levels of first time mothers.
5. To determine the association between socio-demographic, maternal psychological state, breastfeeding knowledge and breastfeeding support with the duration of exclusive breastfeeding among mothers attending Klinik Kesihatan in Kuala Lumpur.

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1.5 Hypothesis

1.5.1 Null Hypothesis

There were no significant associations of socio-demographic, maternal psychological state, breastfeeding education and breastfeeding support with exclusive breastfeeding duration.

1.5.2 Alternative Hypothesis

There were a significant associations of socio-demographic, maternal psychological state breastfeeding education and breastfeeding support with exclusive breastfeeding duration

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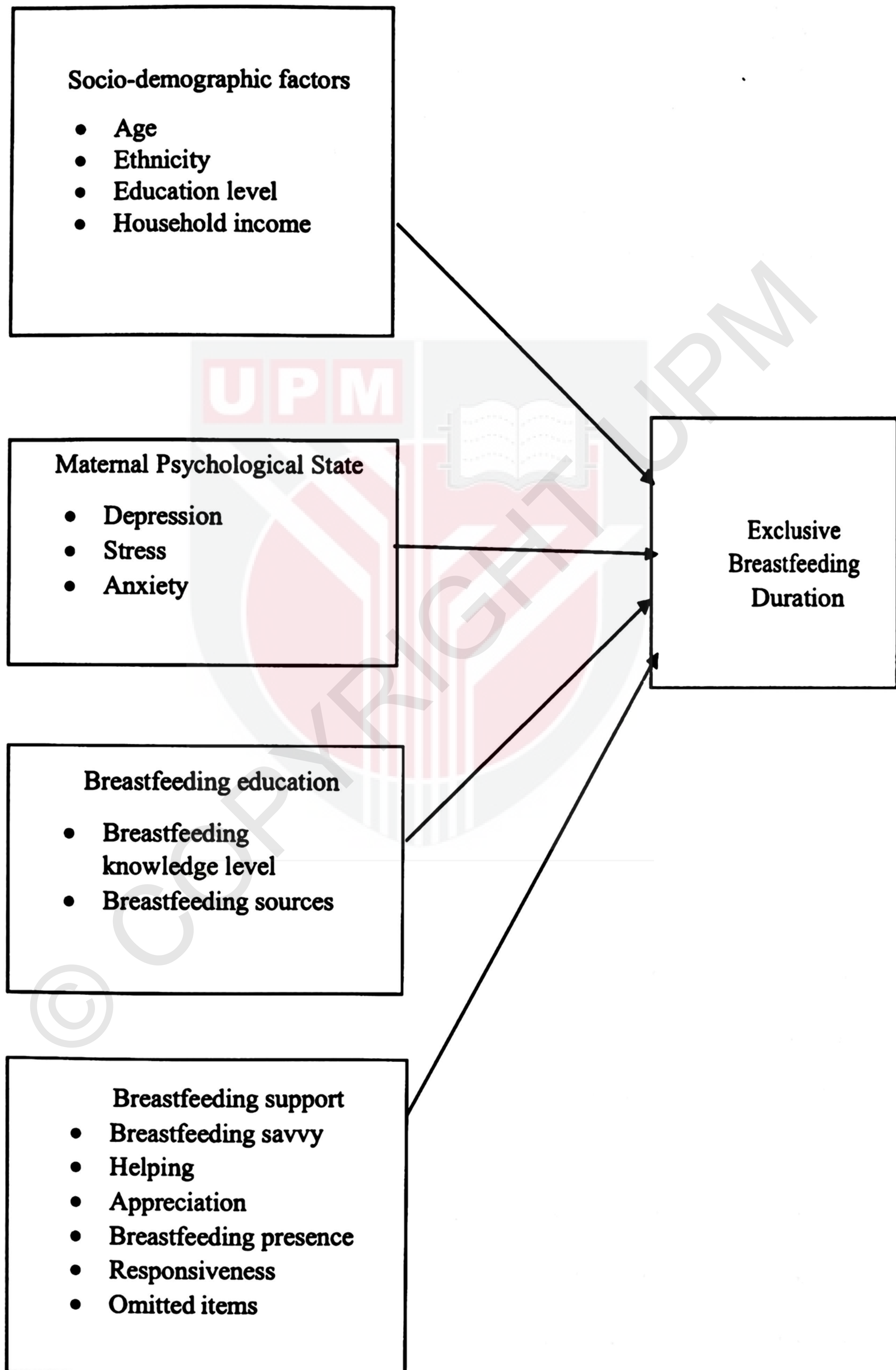
1.6 Conceptual Framework



CHAPTER 2

LITERATURE REVIEW

2.1 Importance of exclusive breastfeeding duration

Exclusive breastfeeding means that the infant only receives breast milk without any additional food or drink, not even water, but only allow the infants to receive medication, vitamin and mineral while for mixed breastfeeding, it can be categorized into two types which predominant breastfeeding means that giving the infant breast milk and may also received water, fruit juice, Oral Rehydration Salt (ORS),medicine, vitamin and mineral and for partial breastfeeding means that infant received some breast milk and some artificial feeds such as formula milk or cereal.

Breastfeeding has many advantages for mother and infant which can help in improving their quality of health. Based on WHO 2018 recommendation, infants should be received exclusive breastfeeding in first six months to obtain the

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optimal growth and development and received well nutrition intake up to 6 months by introducing safe complementary foods while breastfeeding must sustain for up to two years of life or longer. According to the study, infants in developing countries who continued exclusive breastfeeding after 6 months more arose to reduce the risk of respiratory infection in the early 12 months (Ho, 2013). NHMS 2016 also stated that 47.1% of the infant under 6 months were received exclusive breastfeeding from mother, only 39.4% of children aged 20 to 23 months were continued on breastfeeding.

One of the meta-analysis studies found that infants who have a longer duration of breastfeeding can have lower infectious morbidity and mortality and higher IQ level compared to those that have a short breastfeeding duration or not breastfeed (Victora et al., 2016). This study also found that breastfeeding can also benefit to mother. When mothers have a longer duration of breastfeeding, it can prevent breast cancer, decrease the risk of diabetes and ovarian cancer. In addition, when mother practice breastfeeding, it also helps mothers to improve birth space in the family. However, in this study also stated that developed countries (high-income countries) tend to have short breastfeeding duration compared to developing (middle-income countries) and less developing countries (low-income countries) (Figure 2.1). But, in developing and less developed country shows a low prevalence which only 37% of mothers were breastfeeding their infants up to 6 months. The similar result reported that European country (high-income country) also was reported that the rate of exclusive breastfeeding was decreased after 4 months and was very low at age 6 months and above 6 months (Tulay, Bosi, Eriksen, Sobko, & Wijnhoven, 2015).

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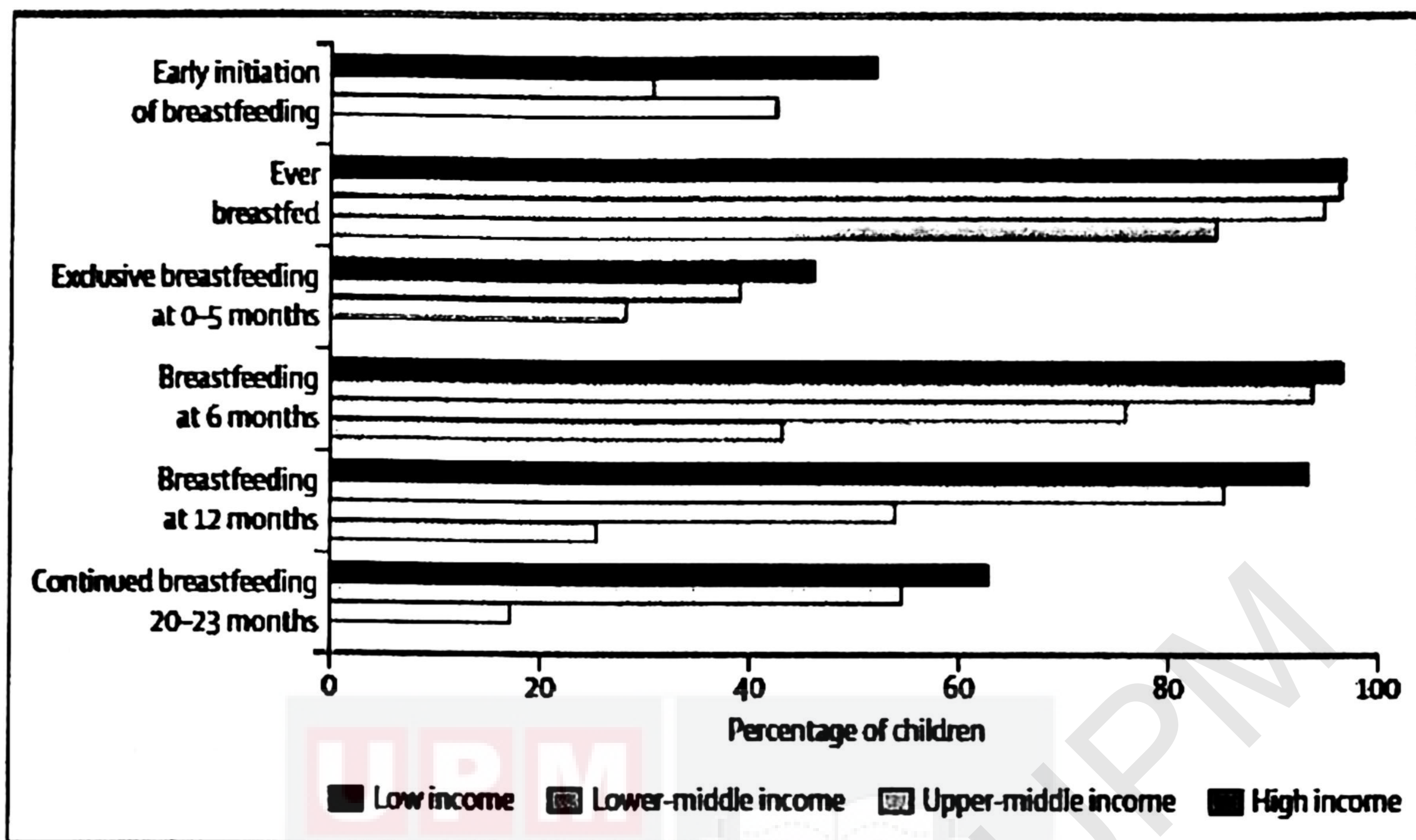

Figure 2.1: Prevalence of breastfeeding duration in lower income countries, lower-middle countries, upper-middle countries and high income countries (Victora et al., 2016)

In addition, one of the previous studies was to determine the number of new breast cancer and ovarian cancer cases attributed to the duration of breastfeeding in France (Shield et al., 2018). Before conducted the study, historical breastfeeding data were collected from the population which was among women age more than 25 years old. As the finding found that 3.2% of new cases of breast cancer and 8.6% of new cases of ovarian cancer were had a short breastfeeding duration which was less than 6 months breastfeed per child. This study was concluded that mothers who have historically low breastfeeding duration may lead to the possible cause of cancer cases. This finding supported by one of the Australia studies that show 1.7% of new breast cancer cases could be attributed to the mothers that breastfeed shortly below than 12 months(Jordan et al., 2015). This can be alarming data for the health government sector to improve the policies to

enhance the mothers to longer the duration of breastfeeding which can help to prevent breast cancer.

According to Gunderson (2008), breastfeeding also can help mothers to decline the type 2 diabetes as the finding found that mothers who prolonged exclusive breastfeeding can protect against the development of type 2 diabetes. Mothers who have breastfed at least 4 months and more had a 25% decrease in diabetes type 2. However, mothers who were exclusively breastfeeding was significantly associated to reduce 35% to 40% in diabetes risk. In a line with (Appel, 2006) study stated that breastfeeding has an association with the reduced risk of diabetes mellitus. This was explained in this study that breast milk consists of a higher percentage of DHA and PUFA (polyunsaturated fat). Higher PUFA in skeletal muscle membrane cause decline of fasting plasma glucose concentration which can result in insulin resistance. Thus, an adequate supply of PUFA from breast milk can maintain normal blood glucose in the body.

Moreover, mothers who breastfeed their infants can have a birth spacing. This evidence was shown in the Tommaselli, Guida, Palomba, Barbato, & Nappi (2000) study that was conducted in Italy which this study was to determine the effectiveness of lactational amenorrhoea and the association between extended breastfeeding and the return of fertility. There were 40 respondents that involved in this study and were evaluated their breastfeeding pattern, body temperature, cervical mucus, vaginal blood discharge and the frequency of having sexual intercourse. As the result showed, breastfeeding proved to be a good practice in birth spacing. Breastfeeding also was a recommended of natural ways of having birth space instead of taking supplementation and contraceptive pill.

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Previous studies in European which was one of the developing countries also found the association of breastfeeding that can protect from child gastrointestinal infection, asthma and sudden death infants syndrome (Tulay, Bosi, Eriksen, Sobko, & Wijnhoven, 2015). This evidence also supported by (Edmond, Zandoh, Quigley, Amenga-etego, & Owusu-agyei, 2005) stated that the risk of neonatal death was 40% higher in infants that received other than breast milk (formula milk, cow's milk) compared to infants who breastfeed.

Mccrory & Murray (2013) was conducted a study to determine the relationship between breastfeeding with children neuro-development at age 9 months by using the Ages and Stages Questionnaire in Ireland. In their study revealed that breastfeeding is associated with neurodevelopment with neuro-development on gross motor, fine motor, personal social skill (exclude communication) and problem-solving even though the mother could not sustain exclusively breastfeed at 6 months. Similar finding with Hediger, Levine, Na, & Vik (2002) which this study was to determine the duration of exclusive breastfeeding and cognitive development among 220 infants born small for gestational age (SGA) and 299 infants born appropriate for gestational age (AGA). As the finding found that higher duration of exclusively breastfeeding shown the effect on cognitive development among infant born small of gestational age (SGA). This study also recommends that mothers should breastfeed exclusively until 6 months to improve cognitive development.

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2.2 Factor that contributes to exclusive breastfeeding duration

Previous studies have shown many factors that influence exclusive breastfeeding duration such as socio-demographic factor (education level, monthly household income, urban versus rural residence), biosocial factor (breastfeeding support), cultural factors (belief, norms, and attitude towards breastfeeding) and employment policies (Tan, 2011). Besides, maternal psychological state such as depression, anxiety, and stress also will contribute to one of the factors associated with exclusive breastfeeding.

2.2.1 Socio-demographic factor (age, ethnicity, education level, occupation, and monthly income)

There were many factors in socio-demographic that will be affected by the duration of breastfeeding among mother. Age is one of the cofactors that may affect the duration of exclusive breastfeeding between mother and infant. A longitudinal study by (Leviniene et al., 2013) stated that 246 women gave birth at the maternity unit of Manoel Goncalves Hospital which age (<20 years old) was significantly associated with the shorter breastfeeding duration ($p<0.005$) while maternal age (>35 years old) not significantly associated with exclusive breastfeeding initiation ($p=0.37$) (Kitano et al., 2016). Fisher et al. (2013) stated that there were no significant ($p=0.153$) different between maternal age (>30 years old) and breastfeeding. They suggested that the maternal age of more than 30 years old have a high chance of Caesarean births which consequently may decline the rate of breastfeeding among older mother.

In addition, education level also one of a cofactor that can be associated with the duration of exclusive breastfeeding among mother. Breastfeeding practices were better among mother that have at least secondary education because education could help the mother to use current health information that they have received (Ogunlesi, 2010). Ogunlesi (2010) also stated that mother with poor education level strongly contributed to pre-lacteal feeding (P = 0.004) and unsuccessful to practice exclusive breastfeeding (P = 0.008). One of the studies that had been conducted in East Malaysia indicated for education level, the mother who had completed secondary school or tertiary level of education was categorized under high education (27.7%), while the rest were categorized as low education (72.7%) Hafizan et al. (2014). This study also found that higher maternal educational level was associated with the duration of exclusive of breastfeeding. This study also shown that mothers who have higher education were always attended antenatal couselling which may helps them to improve and make more easier to breastfeed their infants.

Acharya & Khanal (2015) stated that education mother was significantly associated to have early initiation of breastfeeding. According to the result of this study also, early initiation breastfeeding higher in mother that has the primary education (OR: 1.52, % CI: 1.21, 1.91) and with mothers that have secondary or higher education (OR: 2.20; 95 % CI: 1.76, 2.76) compared to mothers with no education. This study also found the mother with primary education, secondary education or higher education tend to breastfed newborn babies within the first hour after delivery compared to mother with no education level. However, this study has a limitation due to the study being cross-sectional between maternal education level and early initiation of breastfeeding.

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2.2.2 Maternal psychological state

Maternal psychological distress were one of the factors that affects breastfeeding discontinuation. One of the studies assessed the relationship between breastfeeding difficulties, maternal psychological state and breastfeeding pattern that had been carried out among 358 mothers. As the result showed the correlation between the maternal psychological state in 3 stages of trimester pregnancy and postpartum and breastfeeding difficulties, there were positively correlated (r=0.270, p=<0.001) with severe depression in postpartum towards breastfeeding difficulties. In this study, mothers who were less satisfied with breastfeeding were at risk of depression at week 4 and 8 postpartum (Mortazavi, Mousavi, Chaman, & Khosravi, 2015). As studied by Hamdan & Tamim (2012) investigated the correlation relationship between breastfeeding and postpartum depression which includes 137 Arab women during pregnancy and postpartum. Women who were breastfed at 2 months and 4 months had a significantly lower score of depression (p=<0.0037). The higher score of depression was diagnosed with postpartum at 2 months which they were predicted to have discontinuation breastfeeding at 4 months.

A previous prospective cohort study in Sabah showed that postnatal depression can be a serious cause for the mother to stop breastfeeding (Mohamad Yusuff, Tang, Binns, & Lee, 2015). From the finding, there was a significant association between maternal depression during the first six months postpartum (p<0.001). However, this study also has a limitation that should be considered which the result may not be hypothesized because of the multicultural between ethnic minority groups. Other limitations that can be found were mostly the

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respondent were lost to follow up. As studies by Adedinsewo, Fleming, Steiner, Meaney, & Girard (2014) utilized data collection from 18 to 23 weeks gestation through 12 months postpartum by using Hamilton Anxiety Scale (HAM-A) and State-Trait Anxiety Inventory (STAI), mother who were not exclusively breastfeeding their infant at 6 months postpartum had significantly higher HAM-A scores compared to mother who were exclusively breastfeeding at 6 months (p=0.04).

Moreover, one of studies from Iran which to determine the factor associated with early cessation of exclusive breastfeeding and decline of quantity of breast milk among mothers (Rahman, A., Hafeez, A., Bilal, R., Sikander, S., Malik, A., Minhas, F., Tomenson, B., & Creed, F. 2016). This study was conducted by using a prospective cohort study which 132 indicated having depression and 147 not having depression from the third trimester of pregnancy until 6 months postnatal by using Structure Clinical Interview. As the result shown that only 24 depressed mothers and 31 non-depressed mothers were exclusively breastfeeding their infant. However, this study found that depressed mother was more likely to have insufficient milk and ceased exclusive breastfeeding earlier.

Furthermore, a prospective cohort study in Portugal examined the effect of prenatal and postpartum depression on breastfeeding (Figueiredo, Canário, & Field, 2019). The Edinburgh Postpartum Depression Scale (EPDS) was used in this study to administrate among 145 mothers that were followed up from pregnancy until 12 months of postpartum. These findings found that mothers who have depression symptoms during pregnancy were at risk of having a short

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duration of breastfeeding. However, exclusive breastfeeding can help mothers to reduce symptoms of depression from childbirth until 3 months of postpartum. This was because when mothers breastfeed their baby for a longer period, it causes the skin to skin contact with may stimulate hormone to reduce and psychological stated that can contribute to depression.

Stress also found one of the factors that may affect the breastfeeding duration among mothers. This evidence was found in Dozier, Nelson, & Brownell (2012) study which was conducted among low-income mother in the US. There were 700 urban low-income mothers at 5 to 7 months of postpartum participated in this study. This study determined the association between life stress and breastfeeding outcomes and they found that there was a significant association of stress with short duration of exclusive breastfeeding.

One of the previous studies from Australia determines the experience of stressful life and social support in women had an effect on breastfeeding duration. By using data from the Western Australian Pregnancy Cohort Study, 2420 women were involved in this study. This study has followed the participants from 18 weeks of gestation until 4 months of postpartum. As this study found that mothers who experience the stressful event in their life (financial problem, divorce and residential move during pregnancy) tend to early cessation breastfeeding. This study recommended some of the intervention plan to decline the sustained stress life in pregnancy among mothers by giving lactation consultation to who have low support social from partners which could help them to improve the duration of breastfeeding.

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According to Mezzacappa (2004) study found that mothers who exclusively breastfeed their infants were associated with lower perceived stress and reduce depressive symptoms compared to non-breastfeeding mother. Exclusive breastfeeding also can improve mothers physiologic and psychological functioning. This study was proved that when mothers breastfeed, it was associated with a decline of the neuroendocrine response to stressors which result in decreasing of negative mood.

As studies by Fallon et al. (2016) also found that postpartum anxiety associated with the duration of breastfeeding in this systematic review. The results found that mothers who have a symptom of postpartum anxiety were less likely to exclusively breastfeed their infants and tend to cessation earlier. However, this study also came out with a few evidence that agreed postpartum anxiety mothers might have low self-efficacy, higher difficulties to breastfeed and low milk production.

Next, similar findings from Adedinsewo, Fleming, Steiner, Meaney, & Girard (2014) study had access the mothers who experience anxiety during pregnancy and postpartum will increase the risk of reduction of breastfeeding duration. There were 255 Canadian pregnant mothers from Maternal Adversity, Vulnerability and Neurodevelopment (MAVAN) were participated in this study in between June 2004 to February 2009 by using Hamilton Anxiety Scale (HAM-A) and State-Trait Anxiety Inventory (STAI) questionnaires from 18 weeks of gestational until 12 months of postpartum. As the results found that prenatal anxiety was not significantly associated with the breastfeeding outcomes. But, the result showed that at 3 months postpartum were significantly associated with a 11% decrease in exclusive breastfeeding at 6 months. This can be concluded that

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maternal anxiety can lead to the reduction of exclusive breastfeeding and short duration of breastfeeding. Thus, maternal anxiety must be monitored and do some intervention to ensure optimal breastfeeding practices.

2.2.3 Breastfeeding Education

Breastfeeding education is important for the mother to breastfeed her infant, especially for primigravida mothers. Mothers have an alternative way to get the resources of breastfeeding knowledge likes going to the antenatal class, visited the clinic or maybe can participate in a program that focuses on breastfeeding topic. By gaining this information, a mother could gain the knowledge on how to breastfeed in a good position, how the way to increase the production of milk by taking enough nutrition from diet and also know how to cure the pain when having the sore, cracked and bleeding nipples. Biks, Tariku, & Tessema (2015) indicated that having good antenatal care positively associated with exclusive breastfeeding. This could be due to the mother directly obtain the nutritional education, counseling advantages of breastfeeding, correct position and attachment from the obstetric and postnatal care.

Besides, as mentioned by Biks et al. (2015) that had done his study to find whether the mother who attends antenatal counseling on breastfeeding could improving the exclusive breastfeeding rate compare to mother who did not attend the antenatal counseling. There were statistically significant ($p<0.001$) in counseled mothers who practice exclusive breastfeeding for the first six months of life compared to not counseled mothers. In addition, there were also one of the

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previous studies had evaluated the effect of using internet intervention on breastfeeding outcomes on women lived in Western Australia (Dalgleish et al., 2007). This intervention design study used 'Regional Infant Feeding Study (RIFS)' to examine the effect of an internet support website. From the result obtained, the intervention was positively significant associated among women in Western Australia to exclusively breastfeeding their infant until six months postpartum. Similarly, a study by Huang et al. (2007) that evaluated the web-based breastfeeding program to primigravida in the third trimester of pregnancy to wider the breastfeeding knowledge and increase skills. Women who received web-based breastfeeding education appear had significantly positive (p=0.019) effect on exclusive breastfeeding during follow up periods. This study has two limitations which firstly the sample size was small as there were limited to one hospital. Secondly, the effect of the measured only convenience sample. Through knowledge, especially on skilled may be important for a mother to improving breastfeeding rates.

Similar to the previous finding found that breastfeeding knowledge and source about breastfeeding positively significant to practice breastfeeding (Ihudiebube-splendor et al., 2019). This study also found that mothers who have good education level have positive significant to continue breastfeeding and have exclusive breastfeeding because these educated mothers will follow the antenatal instructions whereby can change their attitude to practice exclusive breastfeeding. However, mothers who access antenatal service more likely to have a longer duration of breastfeeding. Health care advisor such as a doctor, midwife, nurse, media, and friends can also enhance the decision to practice exclusive

breastfeeding and also can improve breastfeeding knowledge.

According to one of the previous studies from Ghana which determined the knowledge and practice of exclusive breastfeeding among mothers in Ghana. 399 mother-infant participated in this study (Nukpezah, Nuvor, & Ninnoni, 2018). As the result showed that the majority of mothers were had low knowledge of breastfeeding and the prevalence of exclusive breastfeeding was low. This was shown that mothers who delivered in the hospital could possible to have a longer duration of breastfeeding instead of mothers who delivered at house. This was because, in the hospital, there has a health care advisor to help them to breastfeed easily and also initiated early breastfeed after 30 minutes delivered. Somehow, in Ghana, there was also a lack of baby-friendly program that can initiate the mothers to practice at hospital-centered. As a recommendation, they need to provide individual counseling that telling them the advantages of breastfeeding to mothers and infants as well as improve their knowledge.

However, not even mother only need to increase knowledge of breastfeeding, paternal also need to gain the knowledge as this were very important factors that can contribute to the success of exclusive breastfeeding practices. One of the studies in Kelantan had conducted to compare the knowledge and attitude towards breastfeeding among paternal whose infants were exclusively and non-exclusively breastfeeding (Mohamad, Draman, Muhamad, & Yusoff, 2015). This comparative cross-sectional study was conducted among 200 fathers. A self-administrated questionnaire was distributed among father whose infant exclusively breastfeed (cases) and infant non-exclusively (control). However, the finding was found that there was no significant association of father between

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exclusively breastfeeding and non-exclusive breastfeeding group. This study limitation was found that they used a close-ended questionnaire which might not be reflected in the true and exact knowledge and attitude of respondents. This study also had supported the finding from another journal that stated father should be encouraged to be involved in the antenatal class attended by their partner as important to improve breastfeeding duration.

2.2.4 Breastfeeding support

Support from husband, family, friends and social was very important for the mother to continue breastfeeding. Higher support from paternal will lead to a long duration of exclusive breastfeeding. Partner support during breastfeeding may be increase maternal satisfaction and confident. Based on the previous study reported that positive support from the partner was significant (p=0.019) by using Breastfeeding Self-Efficacy Scale (BSES) score compared to ambivalent partner support (Mannion, Hobbs, McDonald, & Tough, 2013). Similar finding by Abbass-Dick, Stern, Nelson, Watson, & Dennis (2015) that study the effectiveness of the co-parenting intervention on exclusive breastfeeding in a randomized controlled trial shown there were significantly associated (p=0.002) that partners provided help for mother to breastfeeding in the first 6 weeks. In one of the previous study in southern Brazil included 586 mother-father- infant triad stated that paternal inclusion significantly increased the rate of exclusive breastfeeding duration (Susin & Giugliani, 2008).

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As mentioned by Prates, Schmalfuss, & Lipinski (2015) social support strongly influenced breastfeeding based through on interview with 21 mothers. The important social support like the grandmother is the main fact that formed a family and have many experience and knowledge over the years about motherhood and breastfeeding. However, social support for adolescent mother mostly from their family and husband which tend to be positive but still low because inadequate information about exclusive breastfeeding can be the challenges factor for both adolescent partner (Palupi & Devy, 2018). This problem can be solved by improved the health campaign to enhance the knowledge of exclusive breastfeeding to those closest adolescent mothers. Similar to one study was carried out on 22- breastfeeding mother with infants aged 4-6 months, there was significant association between social support and breastfeeding self-efficacy ($p<0.001$, $r=0.306$) and there was significant association between social support, husband's job and breastfeeding self-efficacy ($p<0.05$) (Faridvand, Mirghafourvand, Malakouti, & Mohammad-Alizadeh-Charandabi, 2017). Continuing breastfeeding can be enhanced by sensitizing families and society to support the mother.

One of the previous studies was determined the maternal perception of partner support towards breastfeeding (Mannion, Hobbs, Mcdonald, & Tough, 2013). This cross-sectional study used Breastfeeding Self-efficacy Scale (BSES) in 76 mothers who attended health clinics in Alberta. The report showed that women who have a higher score on BSES have positive support from the partner. When the mothers have higher support from the partner, the mother would feel more confident about breastfeeding. The common support plan that can help to

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incline support from paternal was to have one-one communication during the prenatal and postpartum period.

Tsai (2014) study was to access the influence of partner support on working mother (intention to breastfeed after back from work). This study was conducted at an electronic manufacturing plant in Taiwan which 608 mothers participated in this study. This study found that partner support was positively associated to continue breastfeeding after returning to work. This study proves that the partner gives a strong impact on mothers to decide either to discontinued or continued. A partner that always give negative option can be one of the most factors in mother to early stop breastfeed. The recommendation of this study suggested was to have an antenatal education or programs at the workplace that can increase partner support and mothers to continued breastfeed longer.

As a conclusion, socio-demographic, maternal psychological stated, breastfeeding education and breastfeeding support were the major factor that reflects to the current studies which could lead to discontinuing exclusive breastfeeding duration.

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CHAPTER 3

METHODOLOGY

3.1 Study Design

This was a cross sectional study that aimed to determine factors associated with exclusive breastfeeding duration among first mothers in government health clinics in Kuala Lumpur.

3.2 Study Location

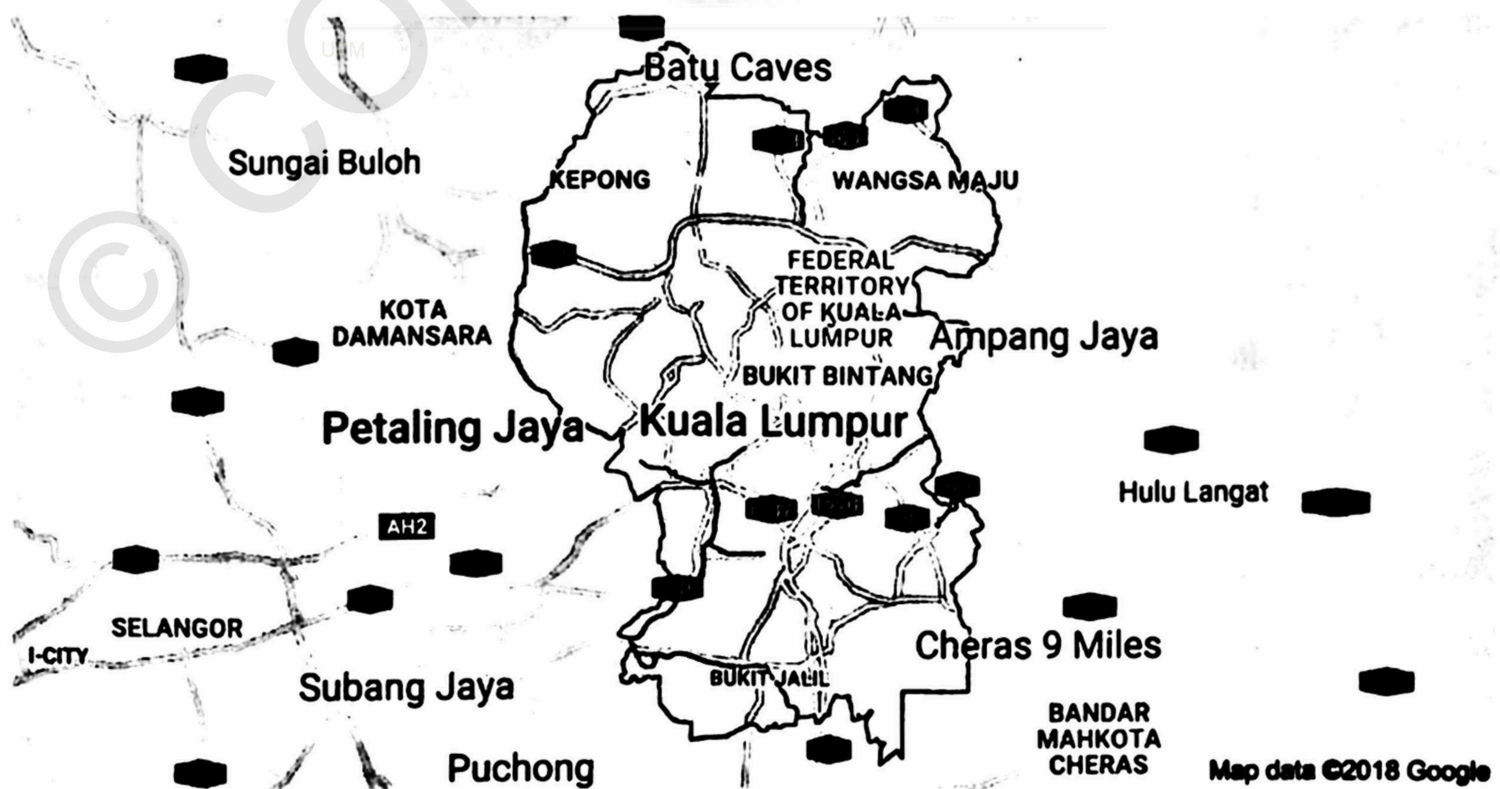

Figure 3.1: Location of Federal Territory Kuala Lumpur in Malaysia

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The study was conducted in Kuala Lumpur. Kuala Lumpur is the federal capital of Malaysia and the fastest growing metropolitan area of country. Kuala Lumpur has an estimated 1.80 million people in 2018 population (Department of Statistics Malaysia, 2018). This give this city very high population density of 17,310 people per meter square. On the other hand, based on (NHMS, 2016), Kuala Lumpur has the lowest prevalence of continued breastfeeding among children at 20-23 months (28.8%) compared to other stated in Malaysia.

3.3 Sample Size Determination

The sample size was calculated based on the formula to determine the associations between main variables. Thus, this formula below was used to estimate the number of participants in this study Hulley, Cummings, Browner, Grady, & Newman (2013).

$$N = [(Z\alpha+Z\beta)/C]2 + 3$$

$$C = 0.5 * \ln[(1+r)/(1-r)]$$

Where,

N = the

calculated

sample size

$Z\alpha = 1.96$

$Z\beta = 0.84$

r = the expected correlation coefficient

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Table 3.1: Sample size calculation of each independent variables from previous studies that correlated with breastfeeding outcomes

Correlation studies	Correlation, r*	p-value, p*	Sample size, N
Socio demographic factor and duration of breastfeeding (Liu, Shi, Spatz, Loh, & , Guiju Sun, 2008)	0.30	<0.001	85
Maternal psychology state and duration of breastfeeding (Lee, Bae, & Park, 2016)	-0.38	<0.001	52
Breastfeeding knowledge and duration of breastfeeding (Chezem, Friesen, & Boettcher, 2003)	0.455	0.001	20
Breastfeeding support and duration of breastfeeding (Abu-abbas, Kassab, & Shelash, 2016)	0.28	0.01	98

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Table 3.2: Adjustment in computing sample size in this study.

Criteria	Adjustment	Sample Size, n
Adjust for the estimated sample effect Aday, L. A., & Cornelius, L. J. (2006).	nadj*DEFF DEFF=1.2 n= 98 x 1.2 = 118	118
Adjust for the expected proportion response rate	Response rate= 0.90 n = 118 ÷ 0.90 = 131	131
Adjust for the expected proportion eligible	% Eligible = 0.90 n = 131 ÷ 0.90 = 145	145

By comparing the sample size from the three correlation previous studies, the minimum sample size was 98. After calculated the appropriate adjustment, the sample size needed for the study is 145 participants.

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3.4 Subject

The subjects of this study were among first time mothers who have an infant aged 6 to 12 months that attended selected Klinik Kesihatan in Kuala Lumpur. The inclusion and exclusion criteria were shown in Table 3.1.

Table 3.3: Inclusion and exclusion criteria for the selection of subjects

Inclusion criteria	Exclusion criteria
First time mother	Woman with chronic disease
Has an infant aged 6 to 15	Handicapped or with physical and mentally disability
months Malaysian citizen	
No illness that would contraindicate breastfeeding after delivery	Infant on illness or impaired nutritional status which prevent from breastfeeding
	Woman on medication that prevented her from breastfeeding
	Woman on medication on mental illness

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3.5 Sampling Design

Figure 3.2 shows the sampling design of this study. Random sampling was used in this study to fulfil the criteria. There are 16 government health clinics under administration of Jabatan Kesihatan Wilayah Persekutuan Kuala Lumpur. Four clinics in Kuala Lumpur were randomly selected for the data collection. Convenient sampling was used by invited all first time mother to participate in this study during data collection period. Pre-test was also had done on January 2019, as part of the practice in ensuring standardization data collection such as in asking questions or provide instructions to respondents, in addition to seek for any necessary amendment or improvement in the questionnaire or data collection process.

All information from the questionnaire during the study will be kept strictly confidential. The data will be anonymized and stored into a computer that is password protected and maintained for a minimum 5 years after the completion of the study until destroyed. The data collection will be analyze and writing up for a Final Year Project thesis and potential publications. The study findings will not be provided to the mother individually, but the summary of the study finding is planned to be published, hence the published data will be available for the public after study has completed. During publication, no personal information of respondents involved in this study will be disclosed in the thesis or paper to keep their privacy and confidential.

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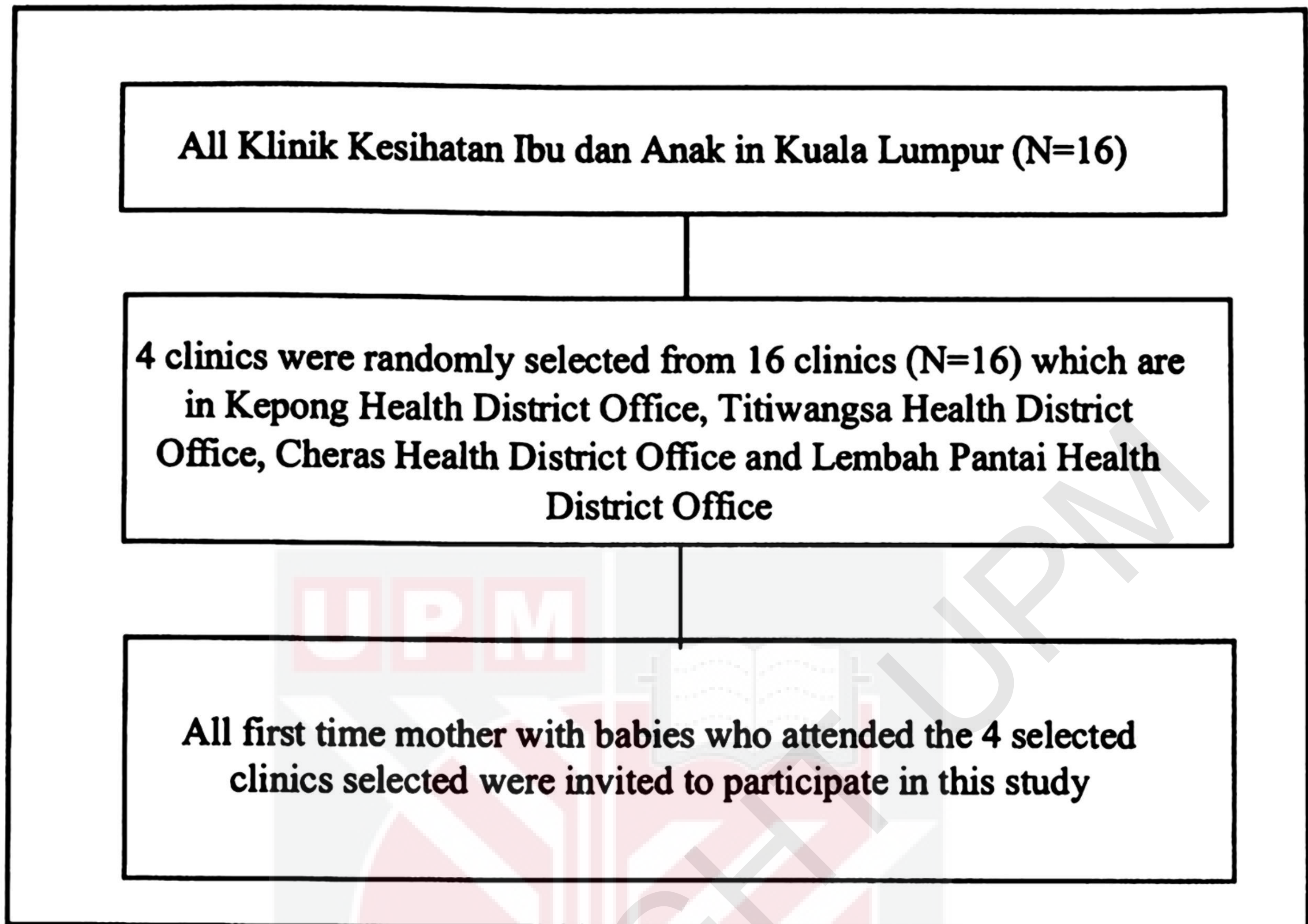
Figure 3.2: The sampling method to determine the selected respondents



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3.6 Measure

3.6.1 Socio-demographic factor

All participants received a self-administrated questionnaire which contain some information such as name, age, identification card number, date of birth, ethnicity, phone number, marital status, education level, employment status and monthly income. All the information obtained in this study will be kept and handled in a confidential manner as stated in 3.5.

3.6.2 Breastfeeding status

Participants (mothers) also were asked about their initiation and duration of exclusive breastfeeding. This question had been an indicator to determined either the mothers had an exclusively breastfeeding their babies or not. Besides, mother need to answer how often did the mother feed the infant from the food item listed in average number of feedings per day.

3.6.3 Maternal Psychological State

Maternal psychological state were measured using Depression, Anxiety and Stress Scale version 21-item (DASS 21) in order to obtain the level of depression, stress and anxiety of the participants. The shorter version of DASS, 21-item version probably take about 5- 10 minutes to be completed. The score on DASS-21 need to multiply by 2 to get the final

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score. DASS-21 questionnaire consist of questions with Likert scale of 0 (did not apply to me all), 1 (for me some time), 2 (for me quite some time) and 3 (for most of the time), which appraise the feeling and thought of mothers when breastfeeding their baby (Ramli, AbdullRamli, Abdullah, Saiful, & Fahmi, 2010).

DASS is very suitable to measure in clinical setting and non-clinical setting (Parkitny & McAuley, 2010). The Bahasa Malaysia version of DASS-21 has very a good Cronbach's alpha values of depression, anxiety and stress which are 0.84, 0.74 and 0.79 respectively (Ramli et al., 2010). Table 3.2 shows the score marks for depression, anxiety and stress (Parkitny & McAuley, 2010). If any of the participants are found to have significant scores of severe and extremely severe (>21 for depression, >15 for anxiety and >26 for stress) on DASS 21, they would be advised to seek medical doctor or psychologist for consultation.

Table 3.2: The scoring of Depression, Anxiety and Stress Scale (DASS)

	Depression	Anxiety	Stress
Normal	0-9	0-7	0-14
Mild	10-13	8-9	15-18
Moderate	14-20	10-14	19-25
Severe	21-27	15-19	26-33
Extremely Severe	28+	20+	34+

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3.6.4 Breastfeeding knowledge

This part of questionnaire (Part C) was adapted and modified from CDC questionnaire and National Health Morbidity Survey 2016 (Ahmad Nadzri et al., 2016; Fein et. al, 2008). This part contains of 49 questions which divided into two parts. The first part is for the mother to choose the breastfeeding information or resources. This part was taken from CDC Questionnaire (Infant Feeding Practices Study II). For part two, the questionnaire was adapted from Modified Breastfeeding Evaluation Scale, the Breastfeeding Attrition Prediction Tool, and the Breastfeeding Self-Efficacy Scale and was tested among a team of pediatric nurse at the Hospital Universiti Sains Malaysia (HUSM) (Ismail&Sulaiman, 2010). The questionnaire is available in both Malay and English version, and was reported to have a good reliability with Cronbach's alpha of 0.70 (Ismail & Sulaiman, 2010). To complete the question, the mothers need to identify the correct information of each statement with the choice of answer of 'correct', 'wrong' or 'not sure' column for each of the following question. Then the answers of each question created total mean score. A correct response scored as '1', while a wrong and a not sure response scored as '0'. Total knowledge score ranged from 0 to 46, which the higher scores (above 23 points) indicate more knowledge on breastfeeding. This questionnaire covered the general knowledge of breastfeeding, colostrum, benefits to mothers and babies, effective feeding method, duration of feeding, expressed breast milk (EBM), storage of EBM, complementary feeding and problems of breastfeeding.

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3.6.5 Breastfeeding Support

Partner Breastfeeding Influence Scale (PBIS) have been used to assess the breastfeeding support. This is a self-report that contains 34 items (5 subscale which were Breastfeeding savvy, Helping, Appreciation, Responsiveness & Breastfeeding presence). Each item is rated on 5 point scales which are 0 (not at all), 1 (rarely), 2 (sometimes), 3 (often) and 4 (very often). This questionnaire consist of five subscale, breastfeeding savvy (Cronbach's alphas: men=0.87, women=0.82), helping (Cronbach's alphas: men=0.79, women=0.82), appreciation (Cronbach's alphas: men=0.86, women=0.84), breastfeeding presence (Cronbach's alphas: men= 0.88, women=0.82), responsiveness (Cronbach's alphas: men=0.77, women=0.76) and omitted items (Rempel, Rempel, & Moore, 2017). The total support score of 170 points and higher score indicated higher support, whereas score ranged 32 to 95 is categorized as low support and score of 96 to 128 points is categorized as moderate and lastly, more than 128 points is categorised as high support from the partner.

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3.7 Pre Testing

Ten participant among first time mother which met the selection criteria from selected government antenatal clinics completed the questionnaire. All of ten selected mother would be excluded in the study sample. Pre-testing had conducted in January 2018. Duration of time taken to complete the questionnaire had assessed. Estimation of participants to

complete the questionnaires was about 15-20 minutes. Feedback on the clarity of instruction were be asked. Problem or issue raised were identified and correction have be made based on the feedback from the mothers. Pre-testing was also important before running the real data collection as the researcher may modify the questionnaire where necessary.

3.8 Data Collection

Data collection were conducted from January 2019 to May 2019. Prior to commencement of the study, approval for the data collection obtained from Medical Research and Ethics Committee (MREC) (ID No: NMRR-18-3183-44914) and permission to conduct research in antenatal health clinics was obtained for data collection. Once permission has been obtained, the researchers approached potential participants (mothers) at the clinic during their waiting time at the clinic. All potential participants were received an oral and written information sheet to inform them regarding the objective of this study. Consent form then have obtained once the mothers understand the information of the research and agreed to participate. If there, after that, the researchers will give self-administrated questionnaire that consist of five parts on their socio-demographic background, infant feeding practices, maternal psychological, breastfeeding knowledge and breastfeeding support that will be assess from the participants. The researchers assist the mothers in answering the questionnaires at the clinic during while mothers are waiting for their baby's health check-up.

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Once the mothers have completed the questionnaire (at the clinic), the researchers collected it back from the mothers. If the mothers need an assistance in completing the questionnaire, the researchers will be available at the clinic to assist the mothers.

3.9 Ethics Approval

Ethical approval have been obtained from the Medical Research and Ethics Committee (MREC). After the MREC has approved the study protocol, permission letter to conduct the study in health clinics have been sent to Jabatan Kesihatan Wilayah Persekutuan Kuala Lumpur prior to of data collection.

3.10 Data Analysis

All the data have been analyzed by using IBM SPSS Statistic 22 , with statistical significance level set at $p<0.05$. Descriptive data presented as frequency and percentage. All data analyzed using univariate analysis. The results for continuous variable (maternal psychological state, breastfeeding knowledge level and breastfeeding support level) was checked for normality and presented as means and standard deviations for normal distribution data or median and interquartile range for non-normal distributed data. For the inferential statistics, the chi-square test of independent used to ascertain any significant associations of breastfeeding duration with groups of socio-demographic variables (age, education level and employment status), as well as by the categorical group of breastfeeding information sources. Whereas,

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the correlation between continuous variable have been tested by using Pearson's product moment correlation for maternal psychological state levels (DASS-21 scoring), breastfeeding support levels, and breastfeeding knowledge score with duration of exclusive breastfeeding among mothers. For non-normal distribution data, Spearman Rank test have been using to seek correlation between continuous data.

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CHAPTER 4

RESULT AND DISCUSSION

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4.1 Introduction

In this chapter, all the result are presented in the sequence starting from socio-demographic factor of the respondents, infant feeding practice and followed by maternal psychological stated of the respondents, breastfeeding education and paternal breastfeeding support (mother's spouse). At the end, the correlation seek between independent variables (socio-demographic, maternal psychological stated, breastfeeding education and breastfeeding support) and dependent variable (duration of exclusive breastfeeding among first time mothers).

Out of 160 respondents that have been approached during data collection, 145 respondents agreed and qualified with inclusion criteria. 15 of the respondents were excluded in this study due to the respondents were not Malaysian citizen, infant age below 6 months and mothers or infants were taking medication. Hence, the total response rate was 100%

4.2 Socio-demographic characteristic

Table 4.1 shows that there were 145 of respondent with age mean of 27.81 (27.81±3.54) years old in this study. All respondent were married (100%). The majority ethnicity of the respondents were Malay (91.7%) followed by Indian (4.8%) and Chinese (3.4%) and majority of their religion were Islam (91.7%) and others were Buddha and Hindu (3.4% and 4.8%).

More than half of the respondents of this study were highly educated with 67.6% of the respondents had pursued their study until tertiary education in Diploma, Degree, Master or PhD while the 30.3% of the respondents were completed finished their secondary school followed by respondents who only received in primary education (0.7%) and no formal education (1.4%). On the other hand, a total of 49.0% of the respondents worked in the private sector, 26.2% were unemployed, and 12.4% worked in public sector while 11.0% were self-employed and minority were a university students (11.4%). Meanwhile, one-third of the respondents were moderate monthly household income which range RM1000-RM1999 (28.3%), followed by RM2000-RM2999 (24.8%) and there were similar percentage of household monthly income in RM4000-RM4999 and above RM5000 which this two were only 7.6% respectively.

There were 45.5% of male and 54.5% female infants in this study population with the mean age of 9.59±3.4 months respectively. Majority of them were age range 6 to 9 months (55.6%), 10 to 12 months (20.0%) and 13 to 15 months (24.1%).

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Table 4.1: Socio-demographic characteristic of the respondents and infants in population (*n*=145)

Characteristics	Mother (n=145)	
	n (%)	Mean±SD
Age		27.81±3.54
Maritul Status	145 (100.0)	
Married		
Ethnicity		
Malay	133 (91.7)	
Chinese	5 (3.4)	
Indian	7 (4.8)	
Religion		
Islam	133 (91.7)	
Buddha	5 (3.4)	
Hindu	7 (4.8)	
Education Level		
No formal education	2 (1.4)	
Primary education	1 (0.7)	
Secondary education	44 (30.3)	
Tertiary education	98 (67.6)	
Occupation		
Public sector	18 (12.4)	
Private sector	71 (49.0)	
Self-employed	16 (11.0)	
Unemployed	38 (26.2)	
Student	2 (1.4)	
Monthly household income		
≤ RM 1000	26 (17.9)	
RM 1000 – RM 1999	41 (28.3)	
RM 2000 – RM 2999	36 (24.8)	
RM 3000 – RM 3999	20 (13.8)	
RM 4000 – RM 4999	11 (7.6)	
RM 5000 and above	11 (7.6)	
Child's sex		
Male	66 (45.5)	
Female	79 (54.5)	
Child's age		9.59±3.42
6-9 months	80 (55.6)	
10-12 months	29 (20.0)	
13-15 months	35 (24.1)	

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4.3 Infant feeding

4.3.1 Breastfeeding status

Table 4.2 determined the breastfeeding status in the population among respondents (n=145). Half of this population still breastfed their infants, 57.9% and 42.1% were no longer breastfed at this study time. The mean age of infants when mother stopped to breastfeed were 2.03±2.8 months.

Table 4.2: Breastfeeding status in the population among respondents (*n*=145)

Items	*n* (%)	Mean±SD
Total of child are currently		
breastfeed	84 (57.9)	
Yes	61 (42.1)	
No		
Age of the child when mother stopped to breastfeed (*n* = 61)		2.03±2.8

Figure 4.1 shows the percentage (%) of infants that were stopped breastfeeding by age groups (n=61). Encompassed by 61 infants that were no longer breastfed, half of the infants (50.0%) had been stopped breastfed at age less than 4 months, followed by infants stopped breastfed at 4-6 months (38.9%) and infants stopped breastfed at age more than 6 months (11.1%)

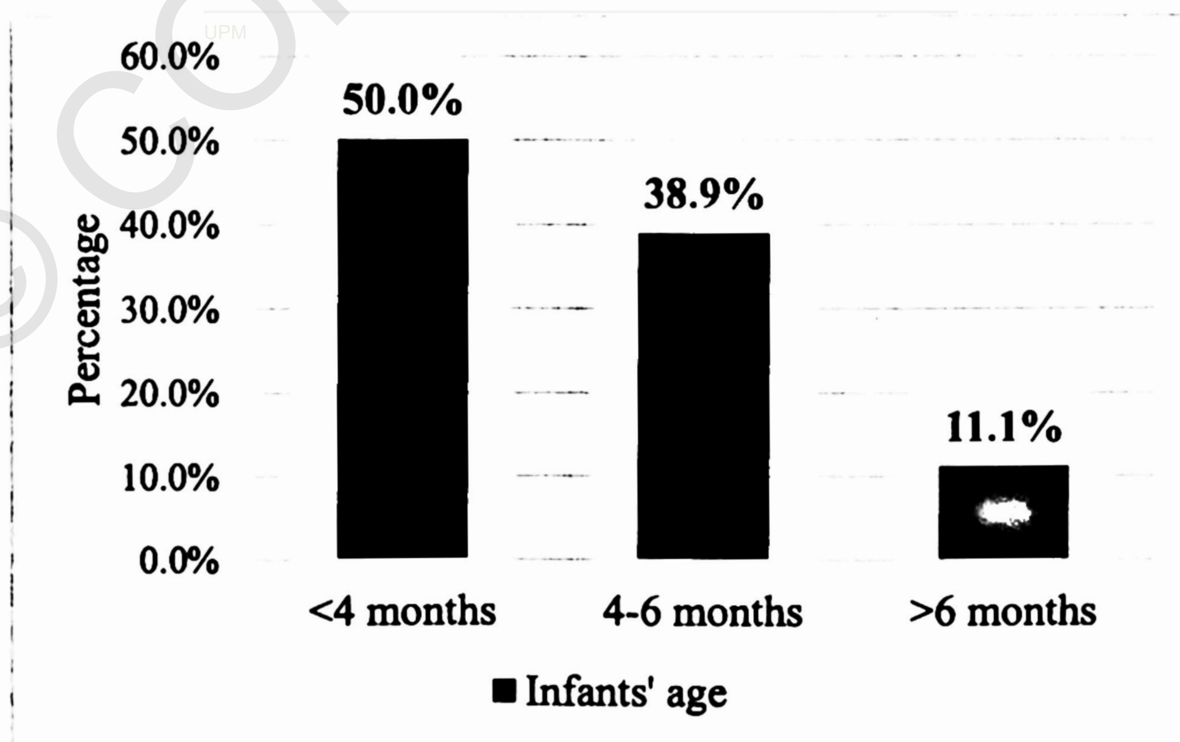

Figure 4.1: Percentage (%) of infants that were stopped breastfeeding by age group (*n*=61)

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Figure 4.2 show the percentage (%) of exclusive breastfeeding status. As reported, there were 41.4% of respondents were exclusively breastfeeding their infant up to 6 months and half of respondents (58.6%) were non-exclusively breastfeeding their infants. This finding was similar to the national prevalence of exclusive breastfeeding (47.1%) based on the findings of NHMS 2016 data. Majority of the respondent introduced early of other fluids such as formula milk, cow's milk, plain water and solid food which the mean of mother started introduce other fluids were 3.97±2.16.

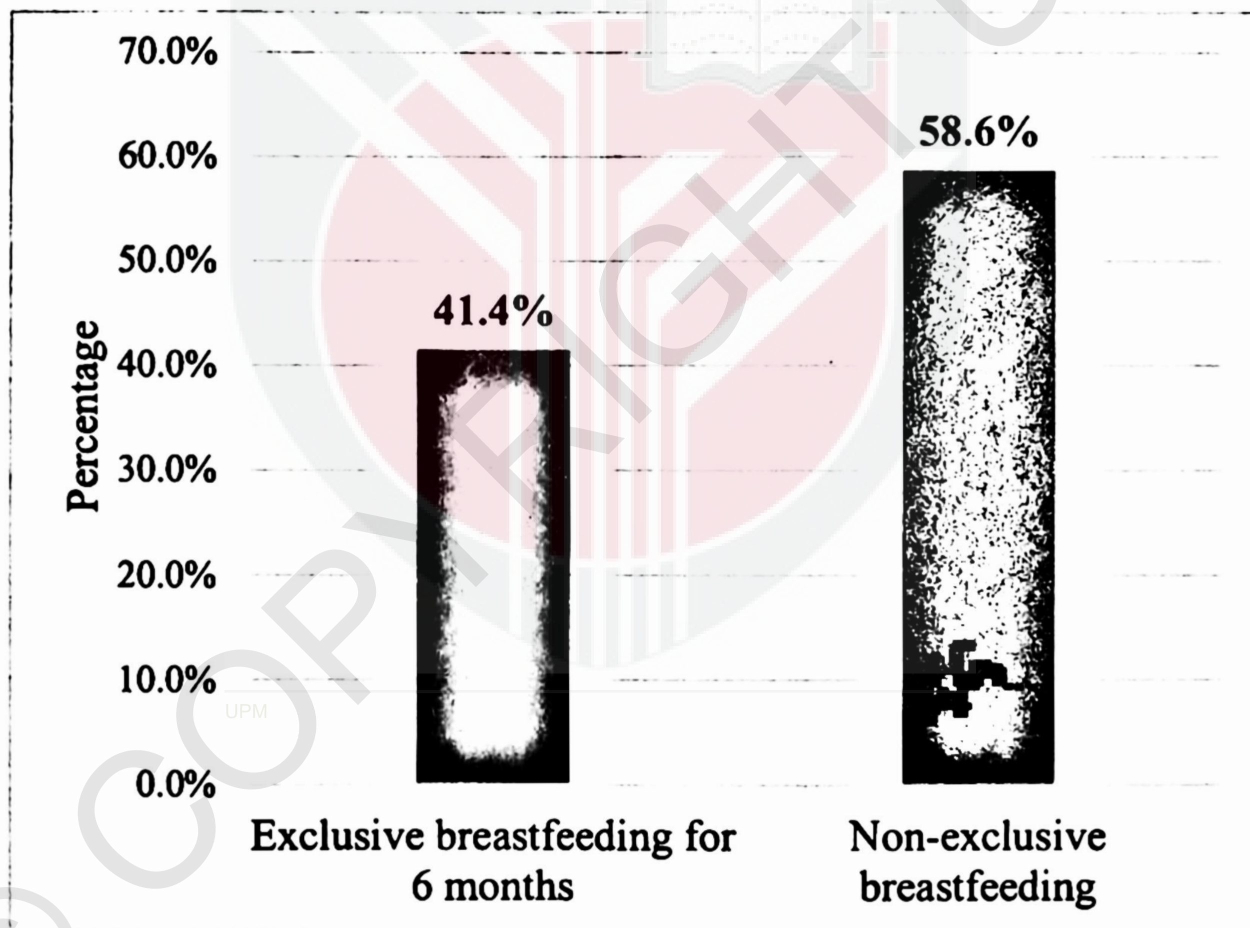

Figure 4.2: Percentage (%) of exclusive breastfeeding status (*n*=145)

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4.3.2 Other infant feeding

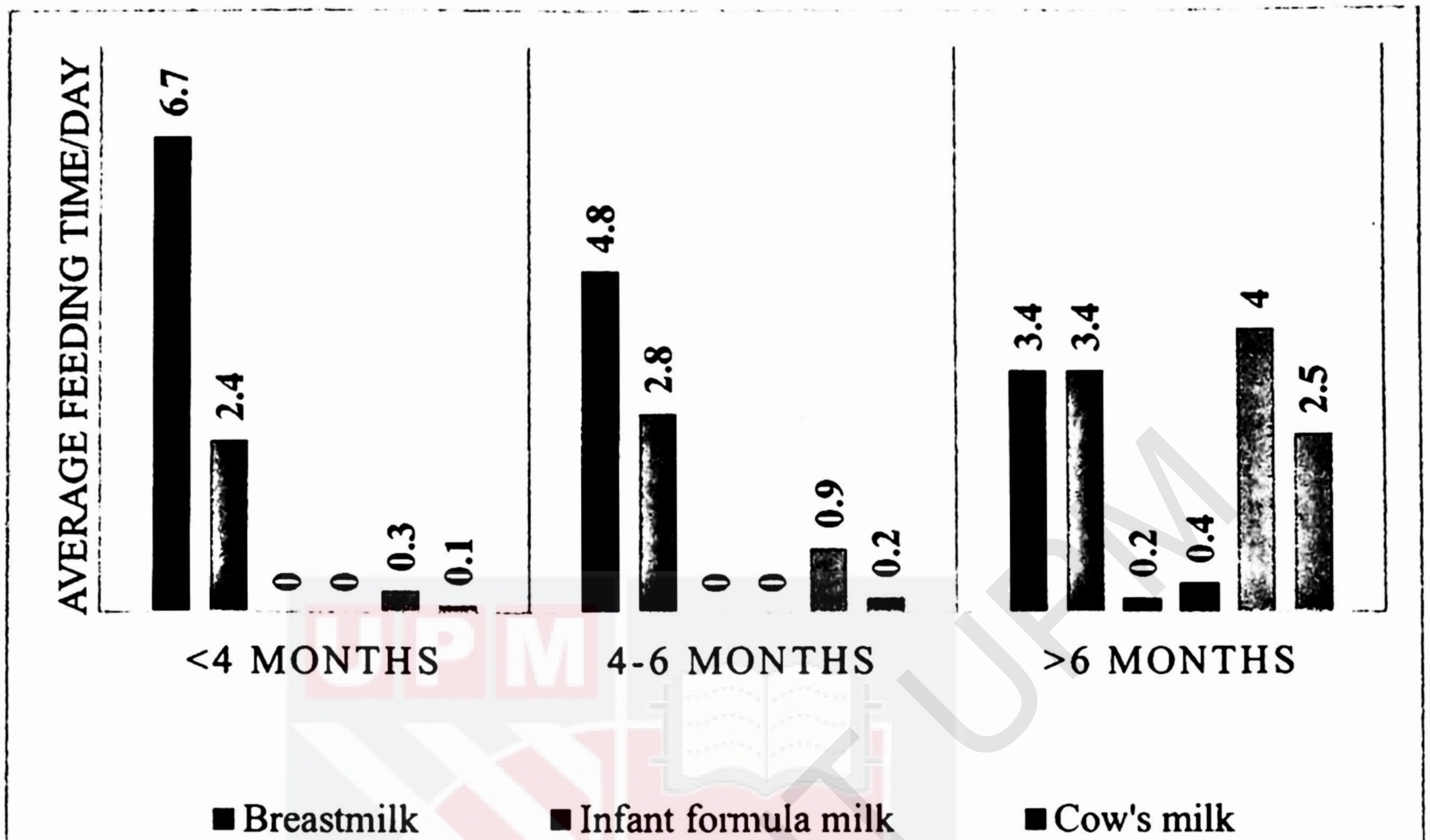

Figure 4.3: Average daily feeding of food other than breast milk

Every baby is different. How much and how often the baby feed must depend on baby's need (CDC, 2018). Usually at first day baby borns, babies do not need a lot of milk because their belly was tiny as baby need to breastfeed every 1-3 hours which may helps to increase milk supply and mothers can improve baby practice at sucking. As the babies grow up to first week and months, their belly also grows which able them to drink frequently and started to get a longer duration at least 8 to 12 times in 24 hours. Up to 6 months, their breastfeeding pattern had slightly reduce because at this stage, they were started to eat more solid food. So, based on Figure 4.3 shows that the average daily feeding of food others than breast milk in this study was mostly infant received 6.72±4.01 times per day breast milk from the mother at below 4 months. However, the average daily feeding decrease to 3.41±3.41 at age more than 6 months as at this age stage, as mothers started to introduce complementary feeding.

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Infant formula milk increase the average daily feeding from below of 4 months until above of 6 months (2.37±3.18 times per day to 3.43±2.84 times per day). At age below 4 months, only 0.30±0.61 times per day infants received plain water and it was increasing at age above 6 months which reach 4.24±1.75 times per days.

Complementary feeding was also important for babies to achieve optimal growth and development of health which gave sufficient energy, protein to the babies to meet their evolving nutritional requirements while contuining to breastfeed up to two years and beyond. Similar with solid food intake result in Figure 4.3, the data shows that only 0.10±0.05 times per day infants eat solid food at age below 4 months. However, it was increase at age above 6 months until 2.46±0.91 times per day. This data had shown that majority of the respondents had follow the WHO recommendation which to start the complementary feeding at 6 months. In addition, WHO also recommend at least 2-3 times per day at age 6-8 months, increasing to 3-4 times per day at 9-11 months and adding nutritious snack at least 1-2 times per day at age 12-24 months. Thus, this data was also in a line with the recommendation of WHO which mostly the respondents had give at least 2 serving per day of the solid foods to their babies.

However, cow's milk seen a very little average intake in daily feeding which were no intake for below 4 months and 4 to 6 months, but above 6 months was 0.21±0.54 times per day. Cow milk have disadvantages to the babies which it could lead to iron deficiency and high rsik of severe dehydration (Ziegler, 2007). This were because cow milk contains high concentration of protein and minerals which can harm baby's immature kidney that lead to severe dehydration.

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4.4 Maternal Psychological Stated

Table 4.3 below shows the total score of depression, anxiety and stress obtained from DASS-21 questionnaire. Overall, the respondent's majority had higher percentage score in normal depression (86.2%), anxiety (69.7%) and stress (88.3%) (Figure 4.4). This data shows that the majority of the respondents were having a normal maternal psychological stated. The mean score for depression, anxiety and stress were 4.79±5.44, 5.93±6.42 and 7.31±6.38. In addition, the mild level (9.0%) was the second higher in the depression level and the least score in depression were in the moderate (1.4%) and extremely severe (1.4%) level. For anxiety level, the second higher was moderate (16.6%) followed by mild (4.8%), extremely severe (4.8%) and the least was severe (4.2%). For stress level, the second higher was in mild (4.8%) and followed by moderate (4.1%) and severe (2.8%). However, the data show that there were no respondents having extremely severe in stress.

Table 4.3: Percentage (%) and mean score of maternal psychological stated level (depression, anxiety and stress)

Items	*n (%)*	Mean score±SD
Depression level		4.79±5.44
Normal (0-9)	125 (86.2)	
Mild (10-13)	13 (9.0)	
Moderate (14-20)	2 (1.4)	
Severe (21-27)	3 (2.1)	
Extremely Severe (28 and above)	2 (1.4)	
Anxiety level		5.93±6.42
Normal (0-7)	101 (69.7)	
Mild (8-9)	7 (4.8)	
Moderate (10-14)	24 (16.6)	
Severe (15-19)	6 (4.1)	
Extremely Severe (20 and above)	7 (4.8)	

Stress level		7.31±6.38
Normal (0-14)	128 (88.3)	
Mild (15-18)	7 (4.8)	
Moderate (19-25)	6 (4.1)	
Severe (26-33)	4 (2.8)	
Extremely Severe (34 and above)	0 (0)	

4.5 Breastfeeding Education

Table 4.4 below stated that the sources of respondents obtained information during pregnancy about breastfeeding and infants formula milk. Majority of the respondents obtained the information sources from the doctor, nurses and other health professional (42.8%) and also from internet (30.3%). Meanwhile, infant feeding program at health clinic (6.9%), relative or friend (13.1%), books or videos (2.8%) and newspaper (3.4%) respectively contributed to the sources to obtain information about breastfeeding and infants feeding practices knowledge during pregnancy.

Thus, mainly respondents access the internet (55.9%) to read, hear and seen anything related to gain the breastfeeding knowledge, followed by one-third of the respondent watched television (26.2%) and only 0.7% of respondent hear from the radio. Meanwhile, majority respondents also reported to gather the breastfeeding knowledge of the formula milk from the internet (53.1%) and television (30.3%). However, only one respondent received the education on breastfeeding from the radio. This show that breastfeeding sources and the media in Malaysia still at a lower stage as this was due to influence of journalist still not familiar in their writing of this breastfeeding topic(Mohamad & Mohamad, 2011). On the other hand, they also have to promote formula milk advertisments to generate their incomes instead of promote breastfeeding.

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Futhermore, based on the knowledge scoring, majority of the respondent (80.7%) achieve above 23 points and the rest was achieve below 23 points. Thus, this data shown that this population had a good knowledge on breastfeeding.

Table 4.4: Breastfeeding education sources obtain and the knowledge score.

Item	*n* (%)	Mean±SD
Obtained information from any following source during pregnancy?		
Doctor, nurse or other health professional	62 (42.8)	
Internet	44 (30.3)	
Relative or friend	19 (13.1)	
Infant feeding program at health clinic	10 (6.9)	
Newspaper	5 (3.4)	
Books or videos	4 (2.8)	
Television or radio	1 (0.7)	
Have you seen, hear or read anything about breastfeeding from following sources?		
Internet	81 (55.9)	
Television	38 (26.2)	
Magazine	21 (14.5)	
Newspaper	2 (1.4)	
Billboards or posters	2 (1.4)	
Radio	1 (0.7)	
Have you seen, hear or read anything about infant formula from following sources?		
Internet	77 (53.1)	
Television	44 (30.3)	
Magazine	18 (12.4)	
Newspaper	4 (2.8)	
Billboards or posters	2 (1.4)	
Radio	0 (0)	

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Breastfeeding knowledge score		30.98±8.57
Breastfeeding knowledge category		
High knowledge level (above 23 points)	117 (80.7)	
Low knowledge level (below 23 points)	28 (19.3)	

Table 4.5 below shows that there were 10 distributions of items to access the breastfeeding education of the respondents. This distributions of the general knowledge on breastfeeding comprised benefits to mothers and babies, colostrum, effective feeding method, expressed breast milk (EBM), duration of feeding, complementary feeding, storage of EBM, and problems of breastfeeding.

For the advantages to baby part, the majority of respondents know that breastfeeding can reduces lung infection (77.2%), less getting diarrhea (55.9%), helps to avoid child abuse (89.0%), increase baby's intelligence (89.0%) and can protect from allergy (82.8%). There were also similar with the benefits to mother part which mainly respondents have knowledge on the benefits of breastfeeding to mother. Most of the respondents answered correct on the impact of breastfeeding on reducing breast cancer risk (82.8%), beneficial in spacing birth (80.7%), help to stimulate uterine contraction (82.1%) and preventing breast engorgement (83.4%). This indicates that respondents had enough knowledge about advantage of breastfeeding toward themselves.

However, for colostrum part, most of the respondents answered wrong which most of the respondents did not know that colostrum can be avoid from constipation (46.9%). From the data WHO (2011) stated that colostrum can help

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baby to prevent constipation and can protect from jaundice because colostrum can strength the immune system in the body. In addition, majority of the respondents know that to initiate the breastfeeding was 30 minutes after delivery (77.2%) and baby should allowed to breastfeed at least 10-20 minutes (82.8%) in the duration of feeding part.

For the complementary feeding, 11.7% of the respondents not sure to introduced complementary feeding at 6 months of age and for the practical aspect of breastfeeding part, 8.3% did not sure that babies who get enough feeding will pass urine frequently. On the other hand, when baby received breastmilk, they will secreated urine frequently because in breastmilk contain of high secretory IgA that could helps to increase the IgA into urinary tract and provide a protection from infection.

Table 4.5: Distribution of the respondents by each items in the breastfeeding education (n=145)

Statement	*n*(%)			Mean±SD
	Right	Wrong	Not Sure	
Advantages to baby				
1. Breastfeeding reduces the risk of lung infection among babies	112 (77.2)	9 (6.2)	24 (16.6)	1.39±0.76
2. Baby who received breastfeeding is less prone to get diarrhoea	81 (55.9)	48 (33.1)	16 (11.0)	1.55±0.69
3. Breastfeeding helps to reduce the incidence of child abuse and neglect	125 (86.2)	2 (1.4)	18 (12.4)	1.26±0.67
4. Breastfeeding increase baby's intelligence	129 (89.0)	6 (4.1)	10 (6.9)	1.18±0.54
5. Breastfeeding causes good development of baby's teeth and gum	68 (46.9)	59 (40.7)	18 (12.4)	1.66±0.69
6. Breast milk provides baby with more protection from allergy compared to formula milk	115 (79.3)	11 (7.6)	19 (13.1)	1.34±0.70

Benefits to mother				
7. Mother who practised breastfeeding has a low risk of getting breast cancer	120 (82.8)	9 (6.2)	16 (11.0)	1.28±0.65
8. Exclusive breastfeeding is beneficial in spacing birth	117 (80.7)	7 (4.8)	21 (14.5)	1.34±0.72
9. Breastfeeding helps to stimulate uterine contraction	119 (82.1)	7 (4.8)	19 (13.1)	1.31±0.70
10. Mother who practiced breastfeeding may achieve pre-pregnancy weight faster	120 (82.8)	11 (7.6)	14 (9.7)	1.27±0.63
11. Breastfeeding may protect against osteoporosis	99 (68.3)	13 (9.0)	33 (22.8)	1.54±0.84
12. Frequent breastfeeding may prevent breast engorgement	121 (83.4)	8 (5.5)	16 (11.0)	1.28±0.65
Colostrum				
13. Colostrum is the mother's early milk, which is thick, sticky and yellowish in colour	130 (89.7)	3 (2.1)	12 (8.3)	1.19±0.57
14. Colostrum is difficult to digest and needs to be discarded	64 (44.1)	65 (44.8)	16 (11.0)	1.67±0.67
15. Colostrum avoid constipation among babies	56 (38.6)	68 (46.9)	21 (14.5)	1.76±0.69
16. Colostrum is able to protect babies from jaundice	52 (35.9)	68 (46.9)	25 (17.2)	1.81±0.71
Effective feeding				
17. Babies will gain weight if they receive effective feeding	125 (86.2)	4 (2.8)	16 (11.0)	1.25±0.64
18. Correct positioning helps to achieve effective breastfeeding	126 (86.9)	9 (6.2)	10 (6.9)	1.20±0.55
19. Babies sleep well after they receive adequate breastfeeding	124 (85.5)	8 (5.5)	13 (9.0)	1.23±0.60
Breast milk expression				
20. Breast milk expression may be done every 3 hours	104 (71.7)	13 (9.0)	28 (19.3)	1.48±0.80
21. It is necessary to express breast milk from one side of the breast	77 (53.1)	36 (24.)	32 (22.1)	1.69±0.81
only	94 (64.8)	18 (12.4)	33 (22.8)	1.58±0.84
22. Expressed breast milk may be stored for 3 months in a freezer of a 2-door refrigerator	99 (68.3)	19 (13.1)	27 (18.6)	1.50±0.79
23. Expressed breast milk may be stored for 24–48 hours in a lower part of a refrigerator	77 (53.1)	44 (30.3)	24 (16.6)	1.63±0.75
24. Expressed breast milk may be mixed with the previous expressed milk	70 (48.3)	44 (30.3)	31 (21.4)	1.73±0.79
25. Expressed breast milk may be warmed on a fire	69 (47.6)	45 (31.0)	31 (21.4)	1.74±0.79

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26. Expressed breast milk may be warmed in a microwave	67 (46.2)	44 (30.3)	34 (23.4)	1.77±0.81
27. The leftover expressed breast milk that has been used may be stored again				
Duration of feeding				
28. Breastfeeding should be initiated within 30 minutes after delivery	112 (77.2)	14 (9.7)	19 (13.1)	1.36±0.70
29. Breastfeeding should be given on demand	120 (82.8)	11 (7.6)	14 (9.7)	1.27±0.63
30. Baby should be allowed to breastfeed for at least 10–20 minutes for each feeding	120 (82.8)	12 (8.3)	13 (9.0)	1.26±0.61
31. Breastfeeding should be continued up to 2 years even though the baby has received complementary food	131 (90.3)	4 (2.8)	10 (6.9)	1.17±0.53
Complementary feeding				
32. Complementary feeding should be introduced at 6 months of age	114 (78.6)	14 (9.7)	17 (11.7)	1.33±0.68
33. Mothers may mix breastfeeding and formula feeding once baby starts taking complementary food	103 (71.0)	19 (13.1)	23 (15.9)	1.45±0.75
Problem with breastfeeding				
34. Breast milk production is influenced by breast size	66 (45.5)	49 (33.8)	30 (20.7)	1.75±0.78
35. Mothers with inverted nipples cannot breastfeed their babies	74 (51.0)	35 (24.1)	36 (24.8)	1.74±0.83
36. Breastfeeding must be discontinued if mother has cracked nipple	86 (59.3)	26 (17.9)	33 (22.8)	1.63±0.83
37. Breastfeeding must be discontinued if baby has jaundice	69 (47.6)	49 (33.8)	27 (18.6)	1.71±0.76
38. Breastfeeding must be discontinued if mother has breast engorgement	84 (57.9)	36 (24.8)	25 (17.2)	1.59±0.77
Breast engorgement				
39. Breast engorgement may be reduced with cold packs	85 (58.6)	15 (10.3)	45 (31.0)	1.72±0.91
40. The use of cabbage may help to reduce breast engorgement	74 (51.0)	9 (6.2)	62 (42.8)	1.92±0.97

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Practical aspect of breastfeeding				
41. Exclusive breastfeeding must be practiced until the infant is 6 months old	106 (73.1)	12 (8.3)	27 (18.6)	1.46±0.79
42. Giving water to baby is encouraged after every breastfeeding	78 (53.8)	45 (31.0)	22 (15.2)	1.61±0.74
43. Belching after feeding shows that the baby is full	115 (79.3)	15 (10.3)	15 (10.3)	1.31±0.65
44. Babies who get enough feeding will pass urine more frequently	83.4 (83.4)	12 (8.3)	12 (8.3)	1.25±0.60
45. Babies may also be given formula milk in the first 6 months of life	97 (66.9)	32 (22.1)	16 (11.0)	1.44±0.67
46. Oral thrush frequently happens to babies who breastfeed	77 (53.1)	25 (17.2)	43 (29.7)	1.77±0.89

4.6 Breastfeeding Support

Table 4.6 shows the breastfeeding support score and category of high or low support from partner. The mean score of breastfeeding support was 115.45±25.1. As the result shows, that mostly of the respondents were having the high support from the partner (62.8%) while more than a third of the respondents have low support from the partner (37.2%).

Table 4.6: Breastfeeding support mean score and category (%)

Items	*n*(%)	Mean score±SD
Breastfeeding support score		115.45±25.1
Breastfeeding support category		
High support from partner (above 128 points)	91 (62.8)	
Low support from partner (below 128 points)	54 (37.2)	

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Table 4.7 below shows the distribution of the respondents by each items in breastfeeding support assessed by using Partner Breastfeeding Influence Scale (PBIS). PBIS consist of five subscales, Breastfeeding Savvy, Helping, Appreciation, Breastfeeding Presence, and Responsiveness.

Based on the Breastfeeding Savvy subscale, only 12.4% very often discuss or negotiate with their husband on how long to continue breastfeeding and 29.0% of the respondent's husband very often support them to attend breastfeeding support group. However, majority of the husband were not at all learn about breastfeeding by reading book or article (42.8%) and only 12.4% husband read book or article about breastfeeding. For helping subscale, most of the husband (very often) will take care of the baby during and after breastfeeding is done (49.7%) and also try to improve the mother health and nutrition by cooking healthy food for them (37.2%).

Besides, majority of the husband claimed that they encourage the mother to do the best when she feels like to quitting (42.8%) and listen to the partner when she feel frustrated (53.1%) for the appreciation subscale. Among all the breastfeeding presence subscale items, almost majority of the partner were very often try to improve the breastfeeding experience by getting equipment ready (38.6%) and show pleasure and satisfy while mother breastfeed (48.3%). Last but not least, for the responsiveness subscale items, father very often shows to make easy for mother to breastfeed while entertaining company or visiting others (47.6%) and be patient and understand if the other housework is not done as breastfeed it takes time (49.7%). 31.7% of the husband also discourage the partner desire to stop breastfeed.

Table 4.7: Distribution of the respondents by each items in breastfeeding support.

Statement	*n*(%)					Mean±SD
	Not at all	Rarely	Some times	Often	Very often	
Breastfeeding Savvy						
1. Discuss or negotiate with your partner about how long to continue breastfeeding	61 (42.1)	14 (9.7)	25 (17.2)	27 (18.6)	18 (12.4)	2.50±1.49
2. Discuss with your partner ideas for trying to solve breastfeeding problems or make suggestions for creative or different ways to make breastfeeding work better.	61 (42.1)	13 (9.0)	23 (15.9)	30 (20.7)	18 (12.4)	2.52±1.51
3. Learn more about breastfeeding by reading books or articles on breastfeeding.	62 (42.8)	13 (9.0)	23 (15.9)	30 (20.7)	18 (12.4)	2.51±1.53
4. Tell your partner your opinion about how long you think that she should breastfeed.	53 (36.6)	10 (6.9)	22 (15.2)	26 (17.9)	33 (22.8)	3.03±2.91
5. Speak up in support of your partner or defend breastfeeding when someone makes a negative breastfeeding comment.	17 (11.7)	12 (8.3)	28 (19.3)	35 (24.1)	53 (36.6)	3.66±1.36
6. Help your partner get assistance from others for solving breastfeeding problems or improving breastfeeding.	16 (11.0)	10 (6.9)	33 (22.8)	37 (25.5)	49 (33.8)	3.63±1.36
7. Remind your partner of the	25 (17.2)	13 (9.0)	31 (21.4)	31 (21.4)	45 (31.0)	3.40±1.45

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benefits that breastfeeding has for her or for your baby.						
8. Show patience and a willingness to wait for your opportunity to feed the baby.	1 (0.7)	6 (4.1)	28 (19.3)	40 (27.6)	70 (48.3)	4.19±0.94
9. Support your partner's attendance at a breastfeeding support group.	34 (23.4)	10 (6.9)	30 (20.7)	29 (20.0)	42 (29.0)	3.24±1.52
Helping						
10. Give something up in order to make breastfeeding easier.	11 (7.6)	4 (2.8)	34 (23.4)	41 (28.3)	55 (37.9)	3.86±1.18
11. Care for your baby during and after breastfeeding is done	4 (2.8)	8 (5.5)	23 (15.9)	38 (26.2)	72 (49.7)	4.14±1.05
12. Try to improve your partner's health and nutrition.	27 (18.6)	15 (10.3)	23 (15.9)	26 (17.9)	54 (37.2)	3.45±1.53
13. Give your partner a break from the baby.	4 (2.8)	9 (6.2)	33 (22.8)	30 (20.7)	69 (47.6)	4.04±1.09

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Appreciation						
14. Encourage your partner to do her best when it comes to breastfeeding and let her know that she is not less of a mother if she feels like quitting.	7 (4.8)	14 (9.7)	28 (19.3)	34 (23.4)	62 (42.8)	3.90±1.20
15. Praise your partner for breastfeeding and let her know that what she is doing is a beautiful, worthwhile thing	16 (11.0)	11 (7.6)	31 (21.4)	28 (19.3)	59 (40.7)	3.71±1.36
16. Let your partner know that breastfeeding is natural and/or give her the message that she is breastfeeding because she wants the best for her baby.	22 (15.2)	6 (4.1)	31 (21.4)	33 (22.8)	53 (36.6)	3.61±1.41
17. Listen to and encourage your partner when she is feeling frustrated or discouraged about breastfeeding.	4 (2.8)	6 (4.1)	28 (19.3)	30 (20.7)	77 (53.1)	4.17±1.19
18. Show appreciation that your partner is breastfeeding.	7 (4.8)	10 (6.9)	32 (22.1)	24 (16.6)	72 (49.7)	3.99±1.19
19. Tell your partner that you value and support her mothering decisions and intuitions around breastfeeding.	16 (11.0)	3 (2.1)	28 (19.3)	28 (19.3)	70 (48.3)	3.92±1.33

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Breastfeeding presence						
20. Try to improve the breastfeeding experience by getting equipment or supplies ready for breastfeeding.	22 (15.2)	6 (4.1)	27 (18.6)	34 (23.4)	56 (38.6)	3.66±1.42
21. Act attentively towards your partner during breastfeeding.	14 (9.7)	7 (4.8)	33 (22.8)	29 (20.0)	62 (42.8)	3.81±1.30
22. Quietly share time and watch or hold your partner during breastfeeding.	10 (6.9)	11 (7.6)	31 (21.4)	21 (14.5)	72 (49.7)	3.92±1.28
23. Physically help with breastfeeding related activities.	9 (6.2)	18 (12.4)	29 (20.0)	16 (11.0)	73 (50.3)	3.87±1.32
24. Help create a quiet, pleasant environment for breastfeeding.	3 (2.1)	7 (4.8)	35 (24.1)	29 (20.0)	71 (49.0)	4.09±1.05
25. Show pleasure and satisfaction while your partner is breastfeeding.	7 (4.8)	11 (7.6)	30 (20.7)	27 (18.6)	70 (48.3)	3.98±1.19
Responsiveness						
26. Make it easy for your partner to breastfeed while entertaining company or visiting others.	7 (4.8)	2 (1.4)	30 (20.7)	37 (25.5)	69 (47.6)	4.10±1.08
27. Be patient and understanding of the time it takes to breastfeed and don't get upset if the other housework is not done.	5 (3.4)	2 (1.4)	29 (20.0)	37 (25.5)	72 (49.7)	4.17±1.02
28. Show your comfort with breastfeeding in public and help her feel comfortable too.	7 (4.8)	5 (3.4)	36 (24.8)	25 (17.2)	72 (49.7)	4.03±1.15
29. Pay attention to how much and how your	12 (8.3)	5 (3.4)	19 (13.1)	36 (24.8)	73 (50.3)	4.06±1.24

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partner wants you to participate in breastfeeding						
30. Notice and show dislike or take offense at formula advertisements or marketing practices.	76 (52.4)	30 (20.7)	29 (20.0)	2 (1.4)	8 (5.5)	1.87±1.23
31. Encourage your partner to breastfeed as a way to calm the baby.	34 (23.4)	10 (6.9)	24 (16.6)	27 (18.6)	50 (34.5)	3.34±1.57
32. Discourage or disagree with your partner's desire to stop breastfeeding.	46 (31.7)	6 (4.1)	24 (16.6)	30 (20.7)	39 (26.9)	3.07±1.61

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4.7. Association between socio-demographic factors (ethnicity, education level, occupation and monthly income) and duration of exclusive breastfeeding among first time mothers in Kuala Lumpur.

Table 4.8 shows the distribution of exclusive breastfeeding duration by socio-demographic factors including ethnicity, education level, occupation and monthly income of the respondents. From the data, there were not significant association (p>0.05) of socio-demographic factors (ethnicity, education level, occupation and monthly income) with exclusive breastfeeding duration. This null hypothesis was accepted

In table 4.8 also stated that the higher percentage of respondent's breastfeeding exclusively were in tertiary education (75.0%) and followed by secondary education (25.0%). However, none of the respondent with no formal education and primary education were exclusively breastfeeding their infants. The most respondents who having exclusively breastfeed was from private sector (48.3%) and also unemployed (26.7%). Besides, respondents with below than RM2999 of monthly income (68.3%) were majority exclusively breastfeed their infants compared to respondents who have above RM3000 of month income (31.7%).

Table 4.8: Association between socio-demographic factors (ethnicity, education level, occupation and monthly income) and duration of exclusive breastfeeding

Variables	Breastfeeding duration		X^2	p-value
	Exclusive breastfeeding n (%)	Non-exclusive breastfeeding n (%)		
Ethnicity			0.010	0.995
Malay	55 (91.7)	78 (91.8)		
Chinese	2 (3.3)	3 (3.5)		
Indian	3 (5.0)	4 (4.7)		
Education level			3.914	0.271
No formal education	0 (0)	2 (2.4)		
Primary education	0 (0)	1 (1.2)		
Secondary education	15 (25.0)	29 (34.1)		
Tertiary education	45 (75.0)	53 (62.4)		
Occupation			1.048	0.902
Public sector	6 (10.0)	12 (14.1)		
Private sector	29 (48.3)	42 (49.4)		
Self-employed	8 (13.3)	8 (9.4)		
Unemployed	16 (26.7)	22 (25.9)		
Student	1 (1.7)	1 (1.2)		
Monthly income			0.363	0.547
<RM2999	41 (68.3)	62 (72.9)		
>RM3000	19 (31.7)	23 (27.1)		

Based on the finding, ethnicity was not significantly associated with the duration of exclusive breastfeeding (X^2=0.010, p>0.05). From the chi-square test, majority of the Malay (91.8%) was not exclusively breastfed their infants out of Malay population. Contradict with previous studies stated that there were significant association between ethnicity and duration of exclusive breastfeeding duration Hafizan Ms, Zainab, & Sutan (2014) was conducted their study in

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Sarawak mention that Pribumi (Malay and other ethnic in Sarawak such as Bidayuh, Iban and Melanau) more likely tend to breastfeed exclusively compared to the Non Pribumi. Meanwhile, in a line with (Siah H Yadav & Yadav, 2002) also stated that ethnicity was significantly associated with duration of breastfeeding which shows that Malay ethnicity was the majority mothers who exclusively breastfeed their baby then followed by Indian and the least was Chinese. This is because women of Malay ethnicity with higher education level had received breastfeeding counselling had a significantly more favorable attitude toward breastfeeding (Ishak et al., 2014).

Education level of the mothers indicated either the mothers received well education or not because mothers with higher education would be less likely to have food insecurity in the family(Gorman et al., 2018). However, according to this study, there were no significant association between education and duration of breastfeeding. Contrast with one of the studies revealed that there were positive association between education and breastfeeding practices which reported that higher education level had a positive effect on attitude towards breastfeeding(Ishak et al., 2014).

Monthly household income could also be a mirror of the socio-economic in the families. The present study has determined that monthly household income was not significant associated with breastfeeding duration. The possible reason because the majority of the respondents were Malays, high monthly income and working in private sector so there were show that no association with the duration of breastfeeding. In a line with one study in California found that income and

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occupation were no longer significant because women with higher income may able to afford feeding supply(Heck, 2006). In addition, (Hafizan Ms et al., 2014) also found there were no significant association between income and duration of exclusive breastfeeding in Kuala Lumpur.

4.8 Association between socio-demographic factors (age) and duration of exclusive breastfeeding among first time mothers in Kuala Lumpur.

Table 4.9 presented the result association of socio-demographic factors (age) with duration of exclusive breastfeeding. Based on Pearson Correlation Coefficient test, there were no significant association between maternal age and duration of exclusive breastfeeding. The null hypothesis was accepted.

Contradict with Kitano et al. (2016) and Fisher et al. (2013) stated that there were no significant between maternal age with breastfeeding duration because increasing maternal age and the perception of low milk supply to infant represent the affect cause cessation of breastfeeding.

Table 4.9: Association between socio-demographic factors (maternal age) and duration of exclusive breastfeeding

Variable	Exclusive breastfeeding duration	
	r	p-value
Maternal age	0.068	0.414

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4.9 Association between maternal psychological stated (depression, anxiety and stress) and exclusive breastfeeding duration among first time mothers in Kuala Lumpur

Table 4.10 shows the association of maternal psychological stated with exclusive breastfeeding duration among respondents. By using Pearson Correlation Coefficient test, depression was not significantly associated with exclusive breastfeeding duration which (r=0.026, p=0.759). The null hypothesis was accepted.

Table 4.10: Correlation between depression state and exclusive breastfeeding duration

Variable	Total score	
	r value	*p* value
Depression	0.026	0.759

Similar with one study from mothers who attending University Malaya Medical Centre stated that there were no significant with mothers who exclusively breastfeed their babies with depression. This is because when mother exclusively breastfeed, it may protect from postpartum depression(Zainal, Kaka, Ng, & Jawan, 2012). However non-exclusive breastfeeding was found having the strong predictor lead to postpartum depression.

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Mckee & Zayas (2004) also found there were no association between depression and breastfeeding duration. The possible reason because when mother breastfeed, mother will perceived closeness to their infant in term of mother-infant interaction. So when the mothers increase in felt closeness, it will transmitted into more positive parenting which can decline the depression level among mothers.

One of previous studies also found there were no significant association in depression in women did not initiate breastfeeding(Figueiredo, Canário, & Field, 2019). As proven in this study, breastfeeding may reduce the depression symptoms because breastfeeding can decrease the depression hormone and psychological state that can correlate with the postpartum period.

Table 4.11 shows the correlation between anxiety with exclusive breastfeeding duration in 6 to 15 months. There were no significant association between anxiety with exclusive breastfeeding duration among first time mothers in Kuala Lumpur (r=0.022, p=0.794). This null hypothesis was accepted.

Table 4.11: Correlation between anxiety and exclusive breastfeeding duration

Variable	Total score	
	r value	*p* value
Anxiety	0.022	0.794

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There was a possible reason why there were no significant association in this study population because majority of the respondents had normal postpartum psychological stated including for anxiety level. Breastfeeding involve physically contact skin to skin between mother and baby which suckling inputs also that can stimulated neuropeptide from infants and other neurochemical hormonal from mother which can enhancing to the reduction of anxiety level for the first time mothers (Lonstein, 2007).

In a line with a study from Farangis Sharifi, Soheila Nouraei (2016) in Middle East, Iran had found that there were no significant association among mothers who exclusively breastfeed compared to mothers with combine feeding. This due to the anxiety level was not a co-founding factor in breastfeeding initiation as this study was conducted in one of small town in Iran which cannot be generalize the result to the larger population.

But, contrast with previous founding that there were an association between stress and exclusive breastfeeding duration (O'Brien, Buikstra, & Hegney, 2008). This showed that higher anxiety has a relationship with earlier weaning of the infants. This factors may influence the mother to introduce early complementary feeding and also supplement food to the premature infants thus it may cease breastfeeding.

Table 4.12 shows the correlation between stress and exclusive breastfeeding duration. Based Based on Pearson Correlation Coefficient test, there were no significant association between stress and exclusive breastfeeding duration (r=-0.021, p=0.798). This null hypothesis was accepted.

Table 4.12: Correlation between stress and exclusive breastfeeding duration

Variable	Total score	
	r value	*p* value
Stress	-0.021	0.798

There were no significant association of stress with exclusive breastfeeding duration in this study population due to the normal psychological stated on stress. This result shows that mainly respondents was not having extremely stress that can contribute to discontinuing breastfeeding and short breastfeeding duration.

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However, previous studies showed that stress was significantly associated with breastfeeding duration that can poses a threat to infants that may lead to under nutrition and stunting as they not well received nutrient (Groer, 2002). Mother who emotionally distress reported to prohibit the let-down reflex that can contribute to the interruption of milk flow and decrease milk volume(Shukri, Wells, Mukhtar, Lee, & Fewtrell, 2017). Similar with one of the studies among low-income mothers in the United stated, they reported that most of the respondents having stress due to the financial problems and causal form the partner (Dozier, Nelson, & Brownell, 2012). All this two types of stress (financial and partner) were positively associated with short breastfeeding duration. This stressful life event such as having financial stress seems could be a reasonable why mother would stop breastfeeding because mothers may not be able to maintain breastfeeding to achieve her target even though a mother planning to breastfeed longer.

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4.10 Association between breastfeeding education and exclusive breastfeeding duration.

Table 4.13 shows the correlation between knowledge and exclusive breastfeeding duration. There was no significant association between breastfeeding education level and exclusive breastfeeding duration (r=0.020, p=0.808) respectively. This null hypothesis was accepted.

Table 4.13: Correlation between breastfeeding knowledge and exclusive breastfeeding duration

Variable	Total score	
	r value	*p* value
Knowledge	0.020	0.808

There was no association of knowledge with exclusive breastfeeding duration because the study population were mostly had high knowledge on breastfeeding. This was also may be due to some obstacle that could not make them breastfeed exclusively. (Figure 4.1). Majority of the respondents received the knowledge from the doctor, nurse and health professional (table 4.4).

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Contrast with one of previous randomized trial study shows that there were significantly associated between breastfeeding education with exclusive breastfeeding duration(Du, 2011). In this study had compared between intervention group (received education) and control group (not received education). They found that intervention group was more likely to started breastfeed within 30 minutes compared to control group. This result indicates that those who received education having longer duration of breastfeeding. Similar finding from Acharya & Khanal (2015) stated that mother who have higher education will early initiated breastfeeding compared to uneducated mother. This was also supported by Afrose, Banu, Ahmed, & Khanom (2012) which stated that mothers who have high education will give direct colostrum as the first food after delivery to the baby as the colostrum can enhance the immunity in the body to protect from any infection disease.

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4.11 Association between breastfeeding support and exclusive breastfeeding duration

Table 4.14 determine the association between breastfeeding support and exclusive breastfeeding duration among first time mothers in Kuala Lumpur. There were no significant association between breastfeeding support and exclusive breastfeeding duration (r=-0.010, p=0.901). This null hypothesis was accepted.

Table 4.14: Correlation between breastfeeding support and exclusive breastfeeding duration

Variable	Total score	
	r value	*p* value
Support from partner	-0.010	0.901

Contradict with previous study which found that there was a positively significant correlation between husband support with duration of exclusive breastfeeding in Klang (Tan, 2011). Exclusive breastfeeding was generally common among mothers with high supportive from partner compared to non-exclusive breastfeeding. This indicate that husband play an important role in decision making in household matter which can help to work together as a partner to overcome the obstacle of breastfeeding and reach breastfeeding goals. Besides, husband role was to endorse the mothers decision to continued breastfeed and provide emotional support when the mothers feel to give up (Datta, Graham, & Wellings, 2012).

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4.12 Additional findings: Correlation of maternal psychological state with breastfeeding knowledge and breastfeeding support.

Table 4.15 showed the correlation of maternal psychological state with breastfeeding knowledge and breastfeeding support. Maternal psychological state score in stress were negatively associated with breastfeeding knowledge (r= -0.21, p=0.012) and support (r= -0.261, p= 0.002). This data showing that mothers who have higher breastfeeding knowledge and and support tend to have less stress.

Similar of one previous studies by (Heinrichs, Baumgartner, Kirschbaum, & Ehlert, 2003) found that strong social support associated with low stress responsiveness. This due to the combination of oxytocin and social support inhibit the cortisol concentration. Thus, it increase the calmness and reduce stress.

Table 4.15: Correlation of maternal psychological state with breastfeeding knowledge and breastfeeding support.

		Depression	Anxiety	Stress
Knowledge	r value	-0.115	-0.190*	-0.209*
	p value	0.169	0.022	0.012
Support from partner	r value	-0.232*	-0.170*	-0.261*
	p value	0.005	0.041	0.002

*Correlation is significant at p<0.05

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CHAPTER 5
CONCLUSION AND RECOMMENDATION

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5.1 Conclusion

A total respondents of 145 first time mothers with mean age of 27.81±3.543 years respectively participated in this study. There were 45.5% male and 54.5 % female infants in this study with mean age 9.59±3.42 years. A prevalence of exclusive was identify in this study which 41.4% exclusively breastfeed at 6 months and the rest was non-exclusively breastfeed. The mean age of child stopped breastfeed was 2.03±2.79 years which was indicated short period of breastfeeding.

In the presence of study, this study found there were no significant association of socio-demographic factors with exclusive breastfeeding duration (p>0.005). In term of maternal psychological stated in this study, there were three

category of psychological stated which depression, anxiety and stress by using DASS-21 questionnaire which validated have good Cronbach alpha (0.74 to 0.87). The total mean scored for depression was 4.79±5.44, anxiety was 5.93±6.42 and stress was 7.31±6.38. This result indicated that majority of this population was having a good maternal psychological stated. Thus, likely to result in maternal psychological stated, there was no significant association with exclusive breastfeeding duration (r=0.068, p=0.414). In addition, this population also had higher knowledge level (80.7%) and most of them had obtained information from doctor, nurse and other health professional during pregnancy about breastfeeding. However, there were no association between knowledge and exclusive breastfeeding duration (r=0.020, p=0.808). Last but not least, PBIS (Partner Breastfeeding Influence Scale) questionnaire was used to determine the breastfeeding support level in partner. There were no significant association between breastfeeding support and exclusive breastfeeding duration (r=-0.010, p=0.901). This likely due to the majority of the respondent were have high support level (62.8%) compared to low support from partner (37.2%).

5.2 Strength

The main strength of this study is that the respondents was only specific for a first time mothers. Based on the finding there were very limited study in Malaysia that focusing on first time mothers as usually many of the previous studies was generalize for the primiparous and multiparous. In addition, this study also had done a finding focusing on the source of the knowledge that the mothers obtained. However, majority of the previous studies were just only asking for the question based on the breastfeeding knowledge without knowing from where the source that the mothers mostly obtained.

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5.3 Limitation

This study was design as a cross-sectional study which was one of the limitation in this study. This was because cross-sectional study cannot be establish a relationship between independents variables and dependents variable as it cannot be used to analyze the behavior over a period to time. Thus, cross-sectional study design also could not give the finding of temporary relationship between exposure and outcome. Besides, this study only involved first time mothers in Kuala Lumpur as the result it cannot be generalize with the population that shared the similar characteristics with the present study. In this study also found that the distribution of ethnicity was not equally since the majority of the respondents were from Malay ethnicity and the minority were Chinese and Indian. Thus, this finding of the study cannot be represent the whole ethnicity of the respondents that stay in Kuala Lumpur.

Furthermore, this study was using self-administered questionnaire for the respondents to answer the questionnaire. This might cause bias either under-reporting or over-reporting. This also can cause the finding cannot be generalize. For example, this might happen when respondents answering on section C which consists of questions regarding maternal psychological stated as mothers may pretend not to be stress even though she have postpartum distress.

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5.4 Recommendation

In this study found that prevalence of exclusive breastfeeding duration was below the target of NPANM 2025 among mothers and infants. This indicated that governments, health professional such as doctor, nurse, nutritionist and dietitian must have a greater effort or do intervention to achieve the target of NPANM 2025. On the other hand, health care provider have to improve and strengthen the breastfeeding programs that can help to promote, educate and support the mothers. Health care provider also need to make sure that the mother attended the antenatal class that provided in the Klinik Kesihatan and joined some of the breastfeeding talk or talk personnel to the nurse. In this ways mothers can gain more knowledge on breastfeeding and also can learn the proper technique to breastfeed which can make mothers more easily to breastfeed their infants.

In order to reduce bais, face to face interview should done during the data collection. When doing face to face interview, it just not will avoid from over or under reporting, it also can allow for more comprehensive understanding. From here, the reasons challenge of why not have an exclusive breastfeeding will also can be determine.

In this aspect it has been establish that paternal support has a positive influence on initiation and duration of breastfeeding. So, intervention program also could also focus on paternal or spouse. Fathers should have adequate knowledge on breastfeeding to make them aware regarding their role in breastfeeding process by reading books or surfing on website that explain more information on

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breastfeeding. Father also need to know on how to encourage mothers to continued breastfeeding. For example, when the mother feel down by supporting them as let them know that breastfeeding is good to the development of infants and also treat them such as take the mothers to eat outside or give some present to show the appreciation. In addition, father also must attended counselling at any government and private clinic sector to improve the parental skills.

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APPENDIX

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APPENDIX A

Approval letter from MREC (Malay version)

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JAWATANKUASA ETIKA & PENYELIDIKAN PERUBATAN
(Medical Research & Ethics Committee)
KEMENTERIAN KESIHATAN MALAYSIA
d/a Institut Pengurusan Kesihatan
Jalan Rumah Sakit, Bangsar
59000 Kuala Lumpur

Tel.: 03-2287 4032/2282 0491/2282 9085
03-2282 9082/2282 1402/2282 1449
Faks: 03-2282 0015

Ruj.Kami: KKM/NIHSEC/ P19-163 (6)
Tarikh : 15-Februari-2019

MISS AMANINA HUSNA BINTI MOHAMAD ARIFF
UNIVERSITY PUTRA MALAYSIA (UPM)

Dato'/ Tuan/ Puan,

SURAT KELULUSAN ETIKA: NMRR-18-3183-44914 (IIR)
FACTORS ASSOCIATED WITH EXCLUSIVE BREASTFEEDING DURATION AMONG FIRST TIME MOTHERS IN KUALA LUMPUR

Dengan hormatnya perkara di atas adalah dirujuk.

2. Bersama dengan surat ini dilampirkan surat kelulusan saintifik dan etika bagi projek ini. Segala rekod dan data subjek adalah SULIT dan hanya digunakan untuk tujuan kajian dan semua isu serta prosedur mengenai *data confidentiality* mesti dipatuhi. Kebenaran daripada Pengarah Hospital / Institusi di mana kajian akan dijalankan mesti diperolehi terlebih dahulu sebelum kajian dijalankan. Dato' / Tuan / Puan perlu akur dan mematuhi keputusan tersebut dan undang-undang lain yang berkaitan, termasuklah Akta Akses Kepada Sumber Biologi dan Perkongsian Faedah 2017.

3. Penyelidik- penyelidik yang terlibat ialah:

Kepong Health District Office
Dr Nurul Husna bt Mohd Shukri
Miss Amanina Husna Binti Mohamad Ariff (Penyelidik Utama)

Klinik Kesihatan Ibu dan Anak Dato' Keramat (Setiawangsa)
Dr Nurul Husna bt Mohd Shukri
Miss Amanina Husna Binti Mohamad Ariff (Penyelidik Utama)

Pejabat Kesihatan Cheras
Dr Nurul Husna bt Mohd Shukri
Miss Amanina Husna Binti Mohamad Ariff (Penyelidik Utama)

PEJABAT KESIHATAN DAERAH TITIWANGSA
Dr Nurul Husna bt Mohd Shukri
Miss Amanina Husna Binti Mohamad Ariff (Penyelidik Utama)

4. Adalah dimaklumkan bahawa kelulusan ini adalah sah sehingga **14-Februari-2020.** Tuan/Puan perlu menghantar dokumen-dokumen seperti berikut selepas mendapat kelulusan etika. Borang-borang berkaitan boleh dimuat turun daripada laman web Jawatakuasa Etika & Penyelidikan Perubatan (JEPP) (http://www.nih.gov.my/mrec).

i. ***Continuing Review Form*** selewat-lewatnya dalam tempoh 2 bulan (60 hari) sebelum tamat tempoh kelulusan ini bagi memperbaharui kelulusan etika.
ii. ***Study Final Report*** pada penghujung kajian.
iii. Mendapat kelulusan etika sekiranya terdapat pindaan ke atas sebarang dokumen kajian / lokasi kajian / penyelidik. Pihak JEPP mempunyai hak untuk menarik balik kelulusan etika sekiranya terdapat perubahan dokumen kajian yang tidak diisytiharkan.

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APPENDIX B

Approval letter from MREC (English version)

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JAWATANKUASA ETIKA & PENYELIDIKAN PERUBATAN
(Medical Research & Ethics Committee)
KEMENTERIAN KESIHATAN MALAYSIA
d/a Institut Pengurusan Kesihatan
Jalan Rumah Sakit, Bangsar
59000 Kuala Lumpur

Tel.: 03-2287 4032/2282 0491/2282 9085
03-2282 9082/2282 1402/2282 1449
Faks: 03-2282 0015

Ref : KKM/NIHSEC/ P19-163 (7)
Date: 15-February-2019

MISS AMANINA HUSNA BINTI MOHAMAD ARIFF
UNIVERSITY PUTRA MALAYSIA (UPM)

Dear Sir / Mdm,

ETHICS INITIAL APPROVAL: NMRR-18-3183-44914 (IIR)
FACTORS ASSOCIATED WITH EXCLUSIVE BREASTFEEDING DURATION AMONG FIRST TIME MOTHERS IN KUALA LUMPUR

This letter is made in reference to the above matter.

2. The Medical Research and Ethics Committee (MREC), Ministry of Health Malaysia (MOH) has provided ethical approval for this study. Please take note that all records and data are to be kept strictly **CONFIDENTIAL** and can only be used for the purpose of this study. All precautions are to be taken to maintain data confidentiality. Permission from the District Health Officer / Hospital Administrator / Hospital Director and all relevant heads of departments / units where the study will be carried out must be obtained prior to the study. You are required to follow and comply with their decision and all other relevant regulations, including the Access to Biological and Benefit Sharing Act 2017.

3. The investigators involved in this study are:

   Kepong Health District Office
   Dr Nurul Husna bt Mohd Shukri
   Miss Amanina Husna Binti Mohamad Ariff (Penyelidik Utama)

   Klinik Kesihatan Ibu dan Anak Dato' Keramat (Setiawangsa)
   Dr Nurul Husna bt Mohd Shukri
   Miss Amanina Husna Binti Mohamad Ariff (Penyelidik Utama)

   Pejabat Kesihatan Cheras
   Dr Nurul Husna bt Mohd Shukri
   Miss Amanina Husna Binti Mohamad Ariff (Penyelidik Utama)

   PEJABAT KESIHATAN DAERAH TITIWANGSA
   Dr Nurul Husna bt Mohd Shukri
   Miss Amanina Husna Binti Mohamad Ariff (Penyelidik Utama)

4. The following study documents have been received and reviewed with reference to the above study:

Documents received and reviewed with reference to the above study:

1. Study Protocol Version 3, dated 31-Jan-2019
2. Patient Information Sheet and Informed Consent Form_English_version 3, dated 31-Jan 2019
3. Patient Information Sheet and Informed Consent Form_BM_version 1, dated 31-Jan 2019
4. Questionnaire Version 2, dated 15-Jan-2019

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APPENDIX C

Approval letter from Jabatan Kesihatan Wilayah Persekutuan Kuala Lumpur dan Putrajaya

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JABATAN KESIHATAN WILAYAH PERSEKUTUAN
KUALA LUMPUR DAN PUTRAJAYA
Jalan Cenderasari
50590 KUALA LUMPUR
MALAYSIA

Tel : 03-2268 7333
Fax : 03-2268 7555
Laman Web : jknkl.moh.gov.my

Ruj. Kami : Bil.(4)dlm.JKWPKL/203/4 Bhg. 4
Tarikh : 28 Mac 2019

Puan Amanina Husna Binti Mohamad Ariff
Jabatan Pemakanan dan Dietatik,
Fakulti Perubatan dan Sains Kesihatan,
Universiti Putra Malaysia,
43400 UPM Serdang,
Selangor Darul Ehsan.

Puan,

MAKLUMBALAS PERMOHONAN KELULUSAN UNTUK MENJALANI PENYELIDIKAN BAGI PROJEK ILMIAH TAHUN AKHIR (PKK 4999) BS PEMAKANAN DAN KESIHATAN KOMUNITI, UNIVERSITI PUTRA MALAYSIA DI KLINIK KESIHATAN IBU DAN ANAK DI WILAYAH PERSEKUTUAN, KUALA LUMPUR

TAJUK KAJIAN : FAKTOR HUBUNGAN ANTARA TEMPOH PENYUSUAN EKSKLUSIF DALAM KALANGAN IBU ANAK PERTAMA DI KUALA LUMPUR

NMRR ID : NMRR-18-3183-44914(IIR)

Dengan hormatnya saya merujuk kepada perkara di atas dan surat puan bertarikh 12 Mac 2019 adalah berkaitan.

2. Sukacita dimaklumkan bahawa pihak kami **tiada halangan** untuk membenarkan puan menjalankan penyelidikan seperti di atas pada 01 April 2019 hingga 30 Jun 2019. Lokasi penyelidikan yang diberi kelulusan adalah seperti berikut:-

a. Klinik Kesihatan Ibu dan Anak Bandar Tun Razak
b. Klinik Kesihatan Ibu dan Anak Cheras Makmur
c. Klinik Kesihatan Ibu dan Anak Salak Selatan
d. Klinik Kesihatan Ibu dan Anak Dato' Keramat (Setiawangsa)
e. Klinik Kesihatan Ibu dan Anak Kampung Pandan
f. Klinik Kesihatan Ibu dan Anak Cheras
g. Klinik Kesihatan Ibu dan Anak Segambut
h. Klinik Kesihatan Ibu dan Anak Taman Pantai Indah
i. Klinik Kesihatan Ibu dan Anak Jalan Bangsar
j. Klinik Kesihatan Ibu dan Anak Taman Tun Dr Ismail
k. Klinik Kesihatan Ibu dan Anak Taman Sri Sentosa

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MAKLUMBALAS PERMOHONAN KELULUSAN UNTUK MENJALANI PENYELIDIKAN BAGI PROJEK ILMIAH TAHUN AKHIR (PKK 4999) BS PEMAKANAN DAN KESIHATAN KOMUNITI, UNIVERSITI PUTRA MALAYSIA DI KLINIK KESIHATAN IBU DAN ANAK DI WILAYAH PERSEKUTUAN, KUALA LUMPUR

TAJUK KAJIAN : FAKTOR HUBUNGAN ANTARA TEMPOH PENYUSUAN EKSKLUSIF DALAM KALANGAN IBU ANAK PERTAMA DI KUALA LUMPUR

NMRR ID NMRR-18-3183-44914(IIR)

3. Untuk makluman, pihak puan dimohon agar mematuhi perkara-perkara berikut semasa menjalankan kajian di fasiliti kesihatan Jabatan Kesihatan Wilayah Persekutuan Kuala Lumpur & Putrajaya:-

3.1 Sebarang bentuk kajian yang dijalankan tidak mengganggu kelancaran perkhidmatan klinik dan tugas hakiki pegawai yang terlibat.

3.2 Bagi sebarang permohonan penyelidikan akan datang, pihak puan diingatkan agar menghantar permohonan penyelidikan kepada JKWPKL&P selewat-lewatnya sebulan sebelum tarikh penyelidikan dijalankan bagi memastikan maklumbalas dapat diberikan dalam tempoh masa yang sepatutnya.

3.3 Perlu mengikuti segala perundangan dan prosedur yang telah ditetapkan oleh Kerajaan Malaysia, Kementerian Kesihatan Malaysia (KKM), Pejabat Kesihatan Daerah (PKD) dan Klinik Kesihatan.

3.4 Membentangkan hasil kajian kepada pihak kami setelah kajian selesai.

3.5 Memberikan sesalinan hasil kajian kepada pihak kami sebagai bahan bacaan dan rujukan pegawai-pegawai di jabatan ini.

3.6 Sebarang penerbitan atau diseminasi hasil penyelidikan tersebut sama ada melalui penulisan, pengiklanan, pembentangan atau untuk ke media perlu mendapat kelulusan Ketua Pengarah Kesihatan Malaysia terlebih dahulu.

Puan boleh merujuk kepada garis panduan Institut Kesihatan Negara mengenai penyelidikan di institusi dan fasiliti Kementerian Kesihatan Malaysia (Pindaan 01/2015).

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APPENDIX D

Information Sheet and Inform Consent Form (Malay Version)

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RISALAH MAKLUMAT PESERTA DAN
BORANG PERSETUJUAN atau KEIZINAN PESERTA
(untuk subjek dewasa dan penyelidikan intervensi)

1. **Tajuk penyelidikan**: Faktor-faktor yang berhubung-kait dengan tempoh penyusuan eksklusif dalam kalangan ibu anak pertama di Kuala Lumpur

2. **Nama Institusi and Nama Penyelidik:**

Amanina Husna Bt Mohamad Ariff	Universiti Putra Malaysia
Dr Nurul Husna Bt Mohd Shukri	Universiti Putra Malaysia

3. **Nama Penaja**: -

4. **Pengenalan:**

Anda telah dijemput untuk menyertai penyelidikan ini. Risalah ini menjelaskan hal-hal berkenaan penyelidikan tersebut dengan lebih mendalam dan terperinci. Amat penting untuk anda memahami mengapa penyelidikan ini dilakukan dan apa yang dilakukan dalam penyelidikan ini. Sila ambil masa yang secukupnya untuk membaca dan mempertimbangkan dengan teliti penerangan yang diberi sebelum anda bersetuju untuk menyertai penyelidikan ini. Jika ada sebarang kemusykilan ataupun maklumat lanjut yang anda ingin tahu, anda boleh bertanya dengan mana-mana kakitangan yang terlibat dalam penyelidikan ini. Setelah anda berpuashati bahawa anda memahami penyelidikan ini, dan anda berminat untuk turut serta, anda dikehendaki untuk menandatangani Borang Persetujuan atau Keizinan Peserta, pada muka surat akhir risalah ini.

Penyertaan anda dalam penyelidikan ini adalah secara sukarela. Anda tidak perlu menyertai penyelidikan ini jika anda tidak mahu. Anda juga mempunyai hak untuk tidak menjawab mana-mana soalan yang anda tidak mahu jawab. Anda juga boleh menarik diri daripada penyelidikan ini pada bila-bila masa sahaja. Jika anda menarik diri, segala maklumat yang telah diperolehi sebelum anda menarik diri tetap akan digunakan dalam penyelidikan ini, sekiranya anda mepersetujuinya.

Penyelidikan ini telah mendapat kelulusan Jawatankuasa Etika dan Penyelidikan Perubatan, Kementerian Kesihatan Malaysia.

5. **Apakah tujuan penyelidikan ini dilakukan?**

Tujuan penyelidikan ini adalah untuk menentukan faktor-faktor yang berkaitan dengan penyusuan eksklusif di kalangan ibu kali pertama. Kajian ini memerlukan seramai 145 di kalangan ibu kali pertama. Maklumat yang berkenaan boleh mengkaji hubungan antara faktor sosio-demografi, status psikologi ibu, pengetahuan penyusuan dan sokongan penyusuan di kalangan ibu dengan tempoh penyusuan ibu antara ibu secara ekslusif.

Penyelidikan ini akan berlangsung selama satu tahun dan tempoh pembabitan anda dianggarkan selama 20 minit bagi menjawab borang soal selidik.

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6. Apakah prosedur penyelidikan yang akan saya terima?

Pada permulanya, kami (penyelidik) akan menerangkan tentang kajian ini kepada anda. Jika anda bersetuju untuk mengambil bahagian dalam kajian ini, kami akan meminta anda melengkapkan borang kebenaran. Anda boleh meminta kakitangan penyelidik jika terdapat apa-apa yang tidak jelas atau jika anda memerlukan maklumat lanjut dan kemudian menjawab satu set soal selidik sendiri yang mengandungi maklumat mengenai faktor sosio-demografi, keadaan psikologi ibu, pengetahuan menyusukan dan sokongan penyusuan di kalangan ibu dengan tempoh penyusuan eksklusif. Selepas mengisi borang soal selidik, sila hantar soal selidik kepada kakitangan penyelidik yang berada di klinik.

7. Apakah yang terjadi sekiranya saya bersetuju untuk menyertai penyelidikan ini?

Anda dikehendaki menjawab set borang soal selidik yang mengandungi maklumat tentang ciri-ciri sosio-demografi, status psikologi ibu, pengetahuan penyusuan dan sokongan penyusuan. Sekiranya terdapat sebarang perubahan pada soal selidik atau prosedur penyelidikan, kami akan memberi anda maklumat atau perubahan baru yang dibuat.

8. Bilakah saya akan menerima produk penyelidikan dan bagaimana cara menyimpannya?

Tiada produk penyelidikan yang akan anda terima

9. Apakah tanggungjawab saya sewaktu menyertai penyelidikan ini?

Amat penting anda menjawab kesemua soalan yang ditanyakan oleh kakitangan penyelidikan dengan jujur dan lengkap . Jika keadaan atau kesihatan anda berubah sepanjang penyelidikan ini, anda mesti memberitahu kakitangan penyelidikan. Adalah amat penting untuk memberitahu dengan segera kepada kakitangan penyelidikan jika berlaku sebarang perubahan pada kesihatan anda sepanjang penyertaan anda dalam penyelidikan ini.

10. Apakah jenis rawatan yang akan saya terima selepas menyertai penyelidikan ini ?

Tiada rawatan yang akan diterima selepas menyertai penyelidikan ini.

11. Apakah risiko dan kesan-kesan sampingan menyertai penyelidikan ini?

Kajian ini mempunyai risiko yang minimum kerana kajian ini hanya melibatkan soal selidik. Subjek boleh menolak mana-mana soalan yang tidak selesa

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12. Apakah manfaatnya saya menyertai kajian ini?

Penyelidikan ini mungkin akan mendatangkan manfaat ataupun tiada memberi manfaat secara terus kepada anda. Segala maklumat yang diperolehi daripada penyelidikan ini akan dapat membantu dalam penambahbaikan kadar penyusuan esklusif di Kuala Lumpur

13. Apakah yang akan terjadi sekiranya saya tercedera semasa menyertai kajian ini?

Adalah berkemungkinan sangat kecil sekiranya anda tercedera dalam penyataan bagi penyelidikan ini. Jika anda tercedera kerana penyertaan anda dalam penyelidikan ini, anda haruslah menghubungi penyelidik dengan segera. Sekiranya kecederaan fizikal/badan atau penyakit terhasil secara langsung akibat daripada prosedur penyelidikan, penyelidik akan melaporkan kepada pegawai perubatan di klinik kesihatan untuk memberi sebarang rawatan yang diperlukan. Tetapi, pihak penyelidik tidak bertanggungjawab terhadap perbelanjaan perubatan bagi penyakit atau rawatan yang sedang anda ikuti, ataupun sebarang masalah yang timbul sama ada daripada kecuaian anda sendiri atau salah laku yang disengajakan, ataupun kecuaian atau salah laku yang disengajakan sama ada oleh pihak penyelidik, pihak klinik kesihatan, mahupun mana-mana pihak ketiga yang terlibat. Walaubagaimanapun, anda tetap tidak kehilangan mana-mana hak anda di sisi undang-undang untuk mendapatkan pampasan sekalipun anda sudah menandatangani borang ini.

14. Apakah rawatan alternatif lain sekiranya saya tidak menyertai penyelidikan ini?

Sekiranya anda menyertai penyelidikan ini, tiada rawatan alternatif lain akan diberikan. Tetapi sekiranya skor DASS-21 mendapati tinggi pada kategori stress, kebimbangan atau kemurungan, anda disarankan untuk mendapatkan nasihat daripada doktor atau pakar psikologi

15. Siapakah yang membiayai penyelidikan ini?

Kajian ini adalah ditaja sendiri oleh penyelidik dan anda tidak akan dikenakan sebarang bayaran untuk menyertai kajian ini.

16. Bolehkah penyelidikan ataupun penyertaan saya ditamatkan lebih awal daripada yang dirancang?

Penyelidik boleh menamatkan penyertaan anda dalam penyelidikan ini pada bila-bila masa.

17. Adakah maklumat perubatan saya akan dirahsiakan ?

Semua maklumat anda yang diperolehi dalam kajian ini akan disimpan dan dikendalikan secara rahsia oleh penyelidik. Nama anda tidak akan didedahkan kepada orang ramai dan anda akan diberi ID kajian. Apabila menerbitkan atau membentangkan hasil kajian, identiti anda tidak akan dimaklumkan tanpa kebenaran anda. ID kajian akan digunakan semasa analisis data dan tafsiran. Data tersebut akan dinamakan dan disimpan dalam komputer yang dilindungi kata laluan dan dikekalkan untuk sekurang-kurangnya satu tahun selepas selesai kajian tersebut sehingga hancur. Pengumpulan data akan menganalisis dan menulis untuk

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tesis Projek Tahun Akhir dan penerbitan yang berpotensi. Semasa penerbitan, tiada maklumat peribadi responden yang terlibat dalam kajian ini akan didedahkan dalam tesis atau kertas untuk menjaga privasi dan rahsia mereka. Hasil kajian ini juga tidak akan diberikan secara individu kepada ibu, tetapi ringkasan kajian dirancang untuk diterbitkan secara umum.

18. Siapakah yang perlu saya hubungi sekiranya saya mempunyai sebarang pertanyaan?

Sebarang pertanyaan anda boleh hubungi Cik Amanina Husna Binti Mohamad Ariff, 019-3370445 (atau email kepada amaninahusna96@gmail.com) atau penyelia kajian atau Medical Research & Ethics Committee (MREC):

Penyelia Kajian,
Dr. Nurul Husna Binti Mohd Shukri
Jabatan Pemakanan dan Dietetik
Universiti Putra Malaysia
43400 UPM Serdang Selangor Darul Ehsan
Tel no: +60386092963
E-mail: n_husna@upm.edu.my

Medical Research & Ethics Committee (MREC),
Phone: +(603) 2282 9082 / 2282 9085 / 2287 4032
Fax : +(603) 2282 0015
Email: mrecsec@nih.gov.my
https://www.nmrr.gov.my

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BORANG PERSETUJUAN/ KEIZINAN PESERTA

Tajuk Penyelidikan : Faktor-faktor yang berhubung-kait dengan tempoh penyusuan eksklusif dalam kalangan ibu anak pertama di Kuala Lumpur

Dengan menandatangani di bawah, saya mengesahkan bahawa (sila tanda dikotak):

- ☐ Saya telah diberi maklumat tentang penyelidikan di atas secara lisan dan bertulis dan saya telah baca dan memahami segala maklumat yang diberikan dalam risalah ini.
- ☐ Saya telah diberi masa yang secukupnya untuk mempertimbangkan penyertaan saya dalam penyelidikan ini dan telah diberi peluang untuk bertanyakan soalan dan semua persoalan saya telah dijawab dengan sempurna dan memuaskan.
- ☐ Saya juga faham bahawa penyertaan saya adalah secara sukarela dan pada bila-bila masa saya bebas menarik diri daripada penyelidikan ini tanpa harus memberi sebarang alasan dan ianya sama sekali tidak akan menjejaskan rawatan perubatan saya pada masa akan datang. Saya juga memahami tentang risiko dan manfaat penyelidikan ini dan saya secara sukarela memberi persetujuan untuk menyertai penyelidikan ini di bawah syarat-syarat yang telah dinyatakan di atas. Saya faham saya harus mengikut arahan yang diberikan oleh penyelidik berkaitan dengan penyertaan saya dalam penyelidikan ini.
- ☐ Saya faham bahawa kakitangan penyelidikan, pemantau dan juruaudit terlatih , pihak penaja atau gabungannya, dan pihak berkuasa kerajaan atau undang-undang, mempunyai akses langsung dan boleh menyemak laporan perubatan saya bagi memastikan penyelidikan ini dijalankan dengan betul dan data direkodkan dengan betul. Segala maklumat dan data peribadi akan dianggap sebagai SULIT.
- ☐ Saya akan menerima satu salinan 'Risalah Maklumat Peserta dan Borang Persetujuan atau Keizinan Peserta' yang telah lengkap dengan tarikh dan tandatangan untuk dibawa pulang.
- ☐ Saya bersetuju/ tidak bersetuju* untuk doktor yang merawat keluarga saya diberitahu tentang penyertaan saya dalam penyelidikan ini. *(*Potong mana yang tidak berkenaan)*

Subjek:

Tandatangan: Nombor K/P:

Nama: Tarikh :

Penyelidik yang mengendalikan proses menandatangani borang keizinan:

Tandatangan: Nombor K/P:

Nama: Tarikh :

Saksi tidak-berpihak/adil: *(Diperlukan; jika subjek adalah buta huruf dan kandungan risalah maklumat peserta disampaikan secara lisan kepada subjek)*

Tandatangan: Nombor K/P:

Nama: Tarikh :

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APPENDIX E
Information Sheet
and Inform Consent Form
(English Version)

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PARTICIPANT INFORMATION SHEET AND INFORMED CONSENT FORM
(for adult subjects and interventional studies)

1. **Title of study**: Factors Associated With Exclusive Breastfeeding Duration Among First Time Mothers In Kuala Lumpur

2. **Name of investigator and institution:**

   Ms Amanina Husna binti Mohamad Ariff — Universiti Putra Malaysia
   Dr Nurul Husna bt Mohd Shukri — Universiti Putra Malaysia

3. **Name of sponsor**: -

4. **Introduction:**

   You are invited to participate in a research study. The details of the research are described in this document. It is important that you understand why the research is being done and what it will involve. Please take your time to read through and consider this information carefully before you decide if you are willing to participate. Ask the study staff if anything is unclear or if you like more information. After you are properly satisfied that you understand this study, and wish to participate, please sign the informed consent form.

   Your participation in this study is voluntary. You do not have to be in this study if you do not want to. You may also refuse to answer any questions you do not want to answer.
   You may also withdraw from it at any time. If you withdraw, any data collected from you up to your withdrawal will be used for the study with your permission.

   This study has been approved by the Medical Research and Ethics Committee, Ministry of Health Malaysia.

5. **What is the purpose of the study?**

   This study will assess the factor associated with exclusive breastfeeding duration among the first time mothers. This study will involves 145 mothers. All the related information gathered will be able to determine the significant factors that associated with the exclusive breastfeeding duration among first time mothers in Kuala Lumpur. Your participation in completing the questionnaires will be about 30 minutes. The whole study period is estimated to be completed in one year.

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6. What kind of study procedures will I receive?

First, we (the study stuff) will explain about the study to you. If you agree to participate in the study, we will ask you to complete a consent form. You may ask the study staff if there is anything unclear or if you need further information and then answer a set of self-administrated questionnaire which includes information regarding socio-demographic factors, maternal psychological state, breastfeeding knowledge and breastfeeding support among mother with duration of exclusive breastfeeding among mothers. After completing questionnaire, please submit the questionnaire to the study staff who will be presented at the clinic.

7. What will happen if I decide to take part?

You will be required to complete a set of questionnaire that consist information on socio-demographic factors, maternal psychological state, breastfeeding knowledge and breastfeeding support. If there is any changes in the questionnaires or procedure of the research, we will provide you the new information or changes made.

8. When will I receive the trial product and how should it be kept?

There will be no trial product given in this study.

9. What are my responsibilities when taking part in this study?

It is important that you answer all of the questions asked by the study staff honestly and completely. If your condition or circumstances change during the study, you must tell the study staff. It is very important that the study staff be informed very rapidly of any eventual changes to your health during your participation in the study.

10. What kind of treatment will I receive after my participation in the trial?

There will be no treatment in this study but if you are found to have scores suggestive severe and extremely severe of depression, anxiety or stress on DASS 21, we will be advised to seek medical doctor or psychologist for consultation.

11. What are the potential risks and side effects of being in this study?

That it is minimal risk since this study only involves questionnaire. Subjects may decline to answer any of the questions that they are uncomfortable with.

12. What are the benefits of being in this study?

There may or may not be any direct benefits to you. Information obtained from this study will help to improve the prevalence of exclusive breastfeeding rates in Kuala Lumpur

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13. What if I am injured during this study?

There is very least likely that you will be injured by the participating in the study. But in case, if you are injured as a result of being in this study, you should contact the researcher. The researcher however is not responsible for medical expenses due to pre-existing medical conditions (prior to the study), any underlying diseases, any ongoing treatment process, your negligence or willful misconduct, the negligence or willful misconduct of your study doctor or the study site or any third parties. You do not lose any of your legal rights to seek compensation by signing this form.

14. What are my alternatives if I do not participate in this study?

There will be no alternatives if you do not participate in this study.

15. Who is funding the research?

This study is self-sponsored by the researchers as you will not be paid for your participation in this study.

16. Can the research or my participation be terminated early?

The researcher may stop your participation at any time, when necessary.

17. Will my medical information be kept private?

All your information obtained in this study will be kept and handled in a confidential manner by the researcher. Your name will never be exposed to the public and you will be given a study ID. When publishing or presenting the study results, your identity will not be revealed without your expressed consent. The study ID will be used during data analysis and interpretation. The data will be anonymized and stored into a computer that is password protected and maintained for a minimum a years after the completion of the study until destroyed. The data collection will be analyze and writing up for a Final Year Project thesis and potential publications. During publication, no personal information of respondents involved in this study will be disclosed in the thesis or paper to keep their privacy and confidential. The study findings also will not be provided individually to the mother, but the summary of the study finding is planned to be published, hence the published data will be available for the public after study completed.

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18. Who should I call if I have questions?

If you have any enquiry about this study, you can direct contact Ms Amanina Husna Binti Mohamad Ariff at 019-3370445 (or email to amaninahusna96@gmail.com) or the research's supervisor or Medical Research & Ethics Committee (MREC):

Research Supervisor,
Dr. Nurul Husna Binti Mohd Shukri
Department of Nutrition and Dietetics Faculty of Medicine and Health Sciences
Universiti Putra Malaysia
43400 UPM Serdang Selangor Darul Ehsan
Tel no : +603-86092963
E-mail : n_husna@upm.edu.my

Medical Research & Ethics Committee (MREC),
Phone: +(603) 2282 9082 / 2282 9085 / 2287 4032
Fax : +(603) 2282 0015
Email: mrecsec@nih.gov.my
https://www.nmrr.gov.my

Thank you very much for your interest in the research!

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INFORMED CONSENT FORM

Title: Factors Associated With Exclusive Breastfeeding Duration Among First Time Mothers In Kuala Lumpur.

By signing below I confirm the following (please tick):

- ☐ I have been given oral and written information for the above study and have read and understood the information given.
- ☐ I have had sufficient time to consider participation in the study and have had the opportunity to ask questions and all my questions have been answered satisfactorily.
- ☐ I understand that my participation is voluntary and I can at anytime free withdraw from the study without giving a reason and this will in no way affect my future treatment. I understand the risks and benefits, and I freely give my informed consent to participate under the conditions stated. I understand that I must follow the (investigator's) instructions related to my participation in the study.
- ☐ I understand that study staff, qualified monitors and auditors, the sponsor or its affiliates, and governmental or regulatory authorities, have direct access to my medical record in order to make sure that the study is conducted correctly and the data are recorded correctly. All personal details will be treated as STRICTLY CONFIDENTIAL
- ☐ I will receive a copy of this subject information/informed consent form signed and dated to bring home.
- ☐ I agree/disagree* for my family doctor to be informed of my participation in this study. *(*delete which is not applicable)*

Subject:

Signature: I/C number:

Name: Date:

Investigator conducting informed consent:

Signature: I/C number:

Name: Date:

Impartial witness: *(Required if subject is illiterate and contents of participant information sheet is orally communicated to subject)*

Signature: I/C number:

Name: Date:

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APPENDIX F

Questionnaire
(Bilingual)

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Reference no.

FAKULTI PERUBATAN DAN SAINS KESIHATAN
FACULTY OF MEDICINE AND HEALTH SCIENCES
JABATAN PEMAKANAN DAN DIETETIK
DEPARTMENT OF NUTRITION AND DIETETICS

PKK4999
PROJEK ILMIAH TAHUN AKHIR
FINAL YEAR PROJECT

SULIT
CONFIDENTIAL

Soal selidik
Questionnaire
Faktor hubungan antara tempoh penyusuan eksklusif dalam kalangan ibu anak pertama di Kuala Lumpur
Factors associated with exclusive breastfeeding duration among first time mothers in Kuala Lumpur

Researcher's name : AMANINA HUSNA BINTI MOHAMAD ARIFF 182176
Program / Programme : B. Sc (Nutrition and Community Health)
Supervisor's name : DR. NURUL HUSNA BINTI MOHD SHUKRI

Semua maklumat yang diberikan di sini adalah dirahsiakan dan hanya digunakan untuk tujuan akademik sahaja. Kejayaan kajian ini amat bergantung kepada kerjasama pihak tuan/ puan dalam menjawab kesemua soalan yang dikemukan. Segala kerjasama tuan/puan berikan saya dahului dengan ucapan ribuan terima kasih.
Your personal information given in in the questionnaire is for research purpose only. It will kept strictly confidential. I would be very grateful if you could help me by completing the questionnaire

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Part A: Infant Feeding

Sila isi tempat kosong atau tandakan / pada kotak yang disediakan

Please fill in the blank or tick / the boxes for the question below.

	Perkara/*Items*	Pilihan/*Options*
A1	Adakah anak anda masih disusukan dengan susu ibu (susu badan)? *Is our child still bein breas eeding*	⊔ Ya/*Yes* ⊔ Tidak/*No*
A2	Bilakah anda mula memperkenalkan cecair lain selain susu ibu? *When you have started introducing other fluid beside breast milk to your child?*	________ bulan/*months*

A3 Bilakah dan berapa kali anda menyuap bayi anda bagi setiap makanan yang disenaraikan dibawah? Sila tulis purata penyuapan setiap hari pada lajur yang tertera dengan masa anda menyuap anak anda. Sila tulis 0 sekiranya tidak meyuap anak anda dengan cecair atau makanan tersebut. Contohnya, sekiranya bayi anda diberi susu ibu sebanyak 4-6 kali sehari semasa dia berumur 3 bulan, tuliskan nombor 6 pada lajur <4 bulan.

When and how often did your baby was fed each food that is listed below? Please write the average number of feedings per day in the columns that showing the time of feedings take place. Please write down 0 if you do not feed your baby with any of fluid of food. For example, if you fed your baby at aged 3 months old with breast milk for about 4-6 times a day, number 6 will be written down in the column of <4 months.

Makanan/*Food Items*	Purata penyuapan setiap hari/ *Average feedings per day*		
mur Kategori/ Age Category	< 4 bulan	4 – 6 bulan	> 6 bulan
a) Susu ibu / *breast milk*			
b) Susu formula / *Infant formula*			
c) Susu lembu / Cow's milk			
d) Cecair lain: Susu soya, susu beras, susu kambing *Other fluid: Soy milk, rice milk, goat milk*			
e) Air kosong/ *Plain water*			
f) Makanan solid: bijirin, beras, puree *Solid food: porridge, cereal, puree*			

A4	Berapa umur anak anda sekiranya anda telah berhenti menyusu susu ibu? *At what age did....(child name) stopped the breastfeed?* *1-104 min *weeks*	minggu/*weeks*

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A5	Siapakah yang menjaga anda selepas anda bersalin/dalam tempoh berpantang? (Tandakan /) *Who is/are taking care of you during postpartum? (Tick / that applies)*	⊔ Suami/*Husband* ⊔ Ibu bapa/*Parent* ⊔ Mertua/*In-Law's* ⊔ Adik-beradik/*Siblings* ⊔ Pembantu khas/*Confinement lady* ⊔ Saudara-mara atau rakan/*Close relatives or friends* ⊔ Sendiri/*Self*
A6	Siapakah yang menjaga dan memberi sokongan utama kepada anda selepas anda bersalin / dalam tempoh berpantang? (tandakan "/", hanya pada SATU jawapan) *Who is providing the primary care support to you during postpartum? (tick "/" to the only ONE answer that apply*	⊔ Suami/*Husband* ⊔ Ibu bapa/*Parents* ⊔ Mertua/*In-law's* ⊔ Adik-beradik/*Siblings* ⊔ Pembantu khas/*Confinement lady* ⊔ Saudara mara atau rakan/*Close relatives or friends* ⊔ Sendiri/ *Self*

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Part B: Depression, Anxiety and Stress Scale

Untuk setiap pernyataan dibawah, sila bulatkan pada nombor 0, 1, 2 atau 3 bagi menggambarkan keadaan anda sepanjang minggu yang lalu. Tiada jawapan yang betul atau salah. Jangan mengambil masa yang terlalu lama untuk menjawab mana-mana kenyataan. *Circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right and wrong answers. Do not spend too much time on any statement*

Skala pemarkahan adalah seperti berikut:
The rating scale is as follows:

0 Tidak langsung menggambarkan keadaan saya
Did not apply to me at all

1 Sedikit atau jarang-jarang menggambarkan keadaan saya.
Applied to me to some degree, or some of the time

2 Banyak atau kerapkali menggambarkan keadaan saya.
Applied to me to a considerable degree or a good part of time

3 Sangat banyak atau sangat kerap menggambarkan keadaan saya
Applied to me very much or most of the time

	Statements	Rating scale			
B1	Saya dapati diri saya sukar ditenteramkan *I found it hard to wind down*	0	1	2	3
B2	Saya sedar mulut saya terasa kering *I was aware of dryness of my mouth*	0	1	2	3
B3	Saya tidak dapat mengalami perasaan positif sama sekali *I couldn't seem to experience any positive feeling at all*	0	1	2	3
B4	Saya mengalami kesukaran bernafas (contohnya pernafasan yang laju, tercungap-cungap walaupun tidak melakukan senaman fizikal) *I experienced breathing difficulty (e.g. excessively rapid breathing,breathlessness in the absence of physical exertion)*	0	1	2	3
B5	Saya sukar untuk mendapatkan semangat bagi melakukan sesuatu perkara *I found it difficult to work up the initiative to do things*	0	1	2	3
B6	Saya cenderung untuk bertindak keterlaluan dalam sesuatu keadaan *I tended to over-react to situations*	0	1	2	3
B7	Saya rasa menggeletar (contohnya pada tangan) *I experienced trembling (e.g. in the hands)*	0	1	2	3
B8	Saya rasa saya menggunakan banyak tenaga dalam keadaan cemas *I felt that I was using a lot of nervous energy*	0	1	2	3

B9	Saya bimbang keadaan di mana saya mungkin menjadi panik dan melakukan perkara yang membodohkan diri sendiri *I was worried about situations in which I might panic and make a fool of myself*	0	1	2	3
B10	Saya rasa saya tidak mempunyai apa-apa untuk diharapkan *I felt that I had nothing to look forward to*	0	1	2	3
B11	Saya dapati diri saya semakin gelisah *I found myself getting agitated*	0	1	2	3
B12	Saya rasa sukar untuk relaks *I found it difficult to relax*	0	1	2	3
B13	Saya rasa sedih dan murung *I felt down-hearted and blue*	0	1	2	3
B14	Saya tidak dapat menahan sabar dengan perkara yang menghalang saya meneruskan apa yang saya lakukan *I was intolerant of anything that kept me from getting on with what I was doing*	0	1	2	3
B15	Saya rasa hampir-hampir menjadi panik/cemas *I felt I was close to panic*	0	1	2	3
B16	Saya tidak bersemangat dengan apa jua yang saya lakukan. *I was unable to become enthusiastic about anything*	0	1	2	3
B17	Saya tidak begitu berharga sebagai seorang individu *I felt I wasn't worth much as a person*	0	1	2	3
B18	Saya rasa yang saya mudah tersentuh *I felt that I was rather touchy*	0	1	2	3
B19	Saya sedar tindakbalas jantung saya walaupun tidak melakukan aktiviti fizikal (contohnya kadar denyutan jantung bertambah, atau denyutan jantung berkurangan) *I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)*	0	1	2	3
B20	Saya berasa takut tanpa sebab yang munasabah *I felt scared without any good reason*	0	1	2	3
B21	Saya rasa hidup ini tidak bermakna *I felt that life was meaningless*	0	1	2	3

Skala pemarkahan adalah seperti berikut:
The rating scale is as follows:

0 Tidak langsung menggambarkan keadaan saya
Did not apply to me at all

1 Sedikit atau jarang-jarang menggambarkan keadaan saya.
Applied to me to some degree, or some of the time

2 Banyak atau kerapkali menggambarkan keadaan saya.
Applied to me to a considerable degree or a good part of time

3 Sangat banyak atau sangat kerap menggambarkan keadaan saya
Applied to me very much or most of the time

Part C: Breastfeeding Knowledge

Soalan berikut bertanya tentang sumber maklumat dan pengetahuan anda mengenai penyusuan sepanjang tempoh kehamilan. Tandakan / pada jawapan yang berkenaan. *The following questions ask about the source of information and your knowledge on breastfeeding throughout the pregnancy. Tick / on the right answer.*

C1	Pernahkah anda mendapat maklumat mengenai pemakanan bayi daripada mana-mana sumber berikut sewaktu hamil? Sila fikirkan penyusuan susu ibu, susu formula, makanan pepejal, atau apa-apa maklumat makanan bayi yang lain. *Have you have obtained information about feeding babies from any of the following sources during pregnancy? Please think of breastfeeding, formula feeding, feeding solid foods, or any other infant feeding information.*	YA/YES	TIDAK /NO
	a) Doktor, jururawat atau pegawai kesihatan lain. *Doctor, nurse or other health professional.*		
	b) Program penyusuan bayi di Klinik Kesihatan. *Infant feeding programme at Health Clinic.*		
	c) Sedara mara atau rakan. *Relative or friend.*		
	d) Buku atau tayangan video. *Books or videos.*		
	e) Surat khabar atau majalah. *Newspaper or magazines.*		
	f) Televisyen atau radio. *Television or radio.*		
	g) Laman sesawang, *The web site,* www.nutrition.moh.gov		
	h) Laman sesawang, *The web site,* www.babycenter.com		
	i) Laman sesawang, *The web site,* malaysianbfpc.org		
	j) Laman sesawang, *The web site,* waba.org.my		
	k) Laman sesawang kerajaan lain, sila nyatakan *Other government web site, please indicate*		

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	l) Laman sesawang bukan kerajaan lain, sila nyatakan *Other non-government web site, please indicate* ………………………………………………………… ……………….		

C2	Pernahkah anda melihat, mendengar, atau membaca apa-apa mengenai penyusuan susu ibu atau susu formula bayi dari sumber berikut? *Have you seen, heard, or read anything about breastfeeding or about infant formula from the following sources?*	PENYUSUAN SUSU IBU / BREASTFEEDING		SUSU FORMULA / INFANT FORMULA	
		YA/YES	TIDAK/NO	YA/YES	TIDAK/NO
	a) Televisyen / *Television*				
	b) Majalah / *Magazine*				
	c) Surat khabar / *Newspaper*				
	d) Radio / *Radio*				
	e) Di dalam internet atau laman sesawang / *On the internet or web*				
	f) Papan iklan atau poster luar / *Billboards or outdoor posters*				

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Sila bulatkan pada 'betul, salah atau tidak pasti' bagi setiap pernyataan berikut. *Please circle in the 'correct, incorrect or uncertain' column for each of the following statements.*				
C3	Penyusuan susu ibu boleh mengurangkan kadar risiko bagi bayi untuk mendapat jangkitan paru-paru *Breastfeeding reduces the risk of lung infection among babies*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C4	Penyusuan susu ibu menyebabkan bayi mudah mengalami cirit-birit Baby who received breastfeeding is less prone to get diarrhoea	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C5	Penyusuan susu ibu mengurangkan kejadian penderaan dan pengabaian *Breastfeeding helps to reduce the incidence of child abuse and neglect*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C6	Penyusuan susu ibu dapat meningkatkan kecerdasan otak bayi *Breastfeeding increases the baby's intelligence*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C7	Penyusuan susu ibu menyebabkan pembentukan gusi dan gigi bayi tidak sempurna *Breastfeeding causes good development of baby's teeth and gum*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C8	Susu ibu lebih melindungi bayi dari alahan jika dibandingkan dengan susu tepung *Breast milk provides baby with more protection from allergy compared to formula milk*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C9	Ibu yang menyusu berisiko rendah untuk mendapat kanser payudara *Mother who practised breastfeeding has a low risk of getting breast cancer*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C10	Penyusuan susu ibu secara eksklusif (sepenuhnya) boleh menjarakkan kehamilan	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE

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	Exclusive breastfeeding is beneficial in spacing birth			
C11	Penyusuan susu ibu boleh membantu pengecutan rahim ibu *Breastfeeding helps to stimulate uterine contraction*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C12	Ibu yang menyusu lebih cepat kembali kepada berat badan asal *Mothers who practised breastfeeding may achieve pre-pregnancy weight faster*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C13	Penyusuan susu ibu menggelakkan proses pereputan tulang *Breastfeeding may protect against osteoporosis*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C14	Memberi susu ibu dengan kerap dapat mengelakkan bengkak payudara *Frequent breastfeeding may prevent breast engorgement*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C15	Kolostrum ialah susu awal ibu yang bersifat pekat, melekit dan berwarna jernih kekuningan *Colostrum is the mother's early milk, which is thick, sticky, and yellowish in colour*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C16	Kolostrum sukar dihadam dan patut dibuang *Colostrum is difficult to digest and needs to be discarded*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C17	Kolostrum boleh menyebabkan bayi susah membuang air besar *Colostrum causes constipation among babies*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C18	Kolostrum tidak boleh melindungi bayi dari jaundis *Colostrum is not able to protect babies from jaundice*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C19	Berat badan bayi akan meningkat sekiranya mendapat penyusuan yang sempurna *Babies will gain weight if they receive effective feeding*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C20	Posisi yang betul membantu	BETUL/	SALAH/	TIDAK

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	keberkesanan penyusuan bayi *Correct positioning helps to achieve effective breastfeeding*	RIGHT	WRONG	PASTI/ NOT SURE
C21	Bayi tidur dengan lena jika mendapat susu ibu yang mencukupi *Babies sleep well after they receive adequate breastfeeding*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C22	Pemerahan susu ibu boleh dilakukan setiap 3 jam *Breast milk expression may be done every 3 hours*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C23	Perahan susu hanya perlu pada sebelah payudara sahaja *It is necessary to express breast milk from one side of the breast only*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C24	Susu perahan boleh disimpan sehingga 3 bulan di bahagian sejuk beku dalam peti sejuk 2 pintu *Expressed breast milk may be stored for 3 months in a freezer of a 2-door refrigerator*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C25	Susu perahan boleh disimpan sehingga 24-48 jam dalam peti sejuk bahagian bawah *Expressed breast milk may be stored for 24–48 hours in a lower part of a refrigerator*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C26	Susu perahan boleh dicampur dengan susu perahan sebelumnya *Expressed breast milk may be mixed with the previous expressed milk*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C27	Susu perahan boleh dipanaskan di atas api *Expressed breast milk may be warmed on a fire*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C28	Susu perahan boleh dipanaskan dalam microwave *Expressed breast milk may be warmed in a microwave*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C29	Perahan susu ibu yang telah digunakan boleh disimpan semula *The leftover expressed breast milk that has been used may be*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE

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	stored again			
C30	Penyusuan susu ibu patut dimulakan dalam tempoh 30 minit selepas bayi dilahirkan *Breastfeeding should be initiated within 30 minutes after delivery*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C31	Penyusuan susu ibu perlu diberi mengikut keperluan *Breastfeeding should be given on demand*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C32	Bayi hendaklah dibenarkan menyusu sekurang-kurangnya 10-20 minit pada setiap kali penyusuan *Baby should be allowed to breastfeed for at least 10–20 minutes for each feeding*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C33	Penyusuan susu ibu perlu diteruskan sehingga 2 tahun walaupun bayi telah mendapat makanan tambahan *Breastfeeding should be continued up to 2 years even though the baby has received complementary food*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C34	Makanan tambahan hendaklah dimulakan apabila bayi berumur 6 bulan *Complementary feeding should be introduced at 6 months of age*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C35	Ibu boleh mencampurkan penyusuan susu ibu dan susu formula apabila bayi mula mengambil makanan tambahan *Mothers may mix breastfeeding and formula feeding once baby starts taking complementary food*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C36	Penghasilan susu ibu dipengaruhi oleh saiz payudara *Breast milk production is influenced by breast size*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE

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C37	Ibu yang mempunyai puting susu tenggelam tidak boleh menyusukan bayi mereka *Mothers with inverted nipples cannot breastfeed their babies*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C38	Penyusuan susu ibu perlu dihentikan jika ibu mempunyai puting susu merekah *Breastfeeding must be discontinued if mother has cracked nipple*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C39	Penyusuan susu ibu perlu dihentikan jika bayi mengalami jaundis *Breastfeeding must be discontinued if baby has jaundice*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C40	Penyusuan susu ibu perlu dihentikan jika ibu mengalami bengkak susu *Breastfeeding must be discontinued if mother has breast engorgement*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C41	Bengkak payudara boleh diatasi dengan demahan sejuk *Breast engorgement may be reduced with cold packs*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C42	Daun kubis boleh membantu mengurangkan bengkak payudara *The use of cabbage may help to reduce breast engorgement*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C43	Penyusuan secara ekslusif perlu dilakukan sehingga bayi berumur 6 bulan *Exclusive breastfeeding must be practiced until the infant is 6 months old*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C44	Pemberian air masak adalah digalakkan setiap kali selepas penyusuan susu ibu *Giving water to baby is encouraged after every breastfeeding*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C45	Bayi sendawa selepas menyusu menunjukkan bayi kenyang *Belching after feeding shows that the baby is full*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE

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C46	Bayi yang menyusu dengan cukup akan kencing dengan lebih kerap *Babies who get enough feeding will pass urine more frequently*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C47	Bayi juga boleh diberi susu tepung sepanjang penyusuan semasa 6 bulan pertama *Babies may also be given formula milk in the first 6 months of life*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C48	Oral trush (keputihan pada lidah) kerap berlaku pada bayi yang menyusu susu ibu *Oral thrush frequently happens to babies who breastfeed*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE
C49	Pemberian air masak adalah digalakkan setiap kali selepas penyusuan susu ibu *Giving water to baby is encouraged after every*	BETUL/ RIGHT	SALAH/ WRONG	TIDAK PASTI/ NOT SURE

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Part D: Breastfeeding Support

Sila gunakan skala berikut untuk menunjukkan sejauh manakah kekerapan suami anda melakukan setiap aktivti semasa anda menyusu dengan menandakan (/) pada SATU skala di dalam kotak yang disediakan disebelah setiap pernyataan.

Please use the following scale to indicate how often your husband did each of the following activities by mark up (/) only ONE scale in the box during the time you was breastfeeding.

1	2	3	4	5
Tiada	Jarang sekali	Kadang-kadang	Kerap	Sangat kerap
Not at all	*Rarely*	*Sometimes*	*Often*	*Very often*

	Penyataan / *Statements*	1 Tiada *Not at all*	2 Jarang sekali *Rarely*	3 Kadang-kadang *Sometimes*	4 Kerap *Often*	5 Sangat kerap *Very often*
D1	Berbincang dengan suami anda tentang berapa lama tempoh untuk teruskan penyusuan *Discuss or negotiate with your partner about how long to continue breastfeeding*					
D2	Berbincang dengan anda untuk cuba menyelesaikan masalah penyusuan atau mencadangkan cara yang kreatif dalam memastikan proses penyusuan berjalan dengan lebih efektif. *Discuss with you an ideas for trying to solve breastfeeding problems or make suggestions for creative or different ways to make breastfeeding work better*					
D3	Pasangan anda belajar mengenai penyusuan dengan membaca buku atau artikel mengenai penyusuan. *Your partner learn more about breastfeeding by reading books or articles on breastfeeding.*					

D4	Memberi pendapat kepada anda tentang berapa lama sepatutnya amalan penyusuan *Tell you his opinion about how long he think that you should breastfeed.*					
D5	Menunjukkan sokongan atau membela anda apabila seseorang memberi komen negatif berkaitan penyusuan terhadap anda *Speak up in support of you or defend breastfeeding when someone makes a negative breastfeeding comment*					
D6	Membantu anda mendapatkan bantuan daripada orang lain untuk menyelesaikan masalah penyusuan atau menggalakkan penyusuan susu ibu (contoh, dengan meminta nasihat orang lain, mendapatkan bantuan profesional, atau pergi bersama untuk mendapatkan bantuan) *Help you get assistance from others for solving breastfeeding problems or improving breastfeeding (for example, by asking others for advice, getting professional help, or going along to get help)*					
D7	Memberi peringatan kepada anda berkaitan manfaat penyusuan yang akan diperolehi oleh ibu dan anak/bayi (sebagai contoh, ia menjimatkan wang, lebih mudah daripada memberi susu botol) *Remind you of the benefits that breastfeeding has for you or for your baby (for example, it saves money, it is easier than bottle feeding)*					

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D8	Tunjukkan kesabaran dan kerelaan pasangan anda dengan menunggu peluang untuk pasangan anda memberi makanan /susu kepada bayi anda *Show patience and a willingness to wait for his opportunity*					
D9	Menyokong anda untuk menhadiri persatuan pembimbing ibu menyusu *Support you attendance at a breastfeeding support group*					
D10	Bersedia memudahkan proses penyusuan anda (contohnya, bersedia untuk mengetepikan hobi atau aktiviti pilihan, mengambil cuti, berhenti dalam perjalanan kereta) *Give something up in order to make your breastfeeding easier (for example, be willing to set aside hobbies or preferred activities, take time off work, stop on a car trip)*					
D11	Menjaga bayi anda semasa dan selepas proses penyusuan selesai (contoh, 'burp' kan bayi anda, tukarkan lampin bayi anda) *Care for your baby during and after breastfeeding is done (for example, burp the baby, change the diaper)*					
D12	Cuba menjaga kesihatan dan pemakanan anda (contohnya, masak makanan yang berkhasiat, membantu mengelakkan daripada makanan yang tidak berkhasiat) *Try to improve your health and nutrition (for example, cook nutritious meals, help avoid foods as agreed)*					
D13	Memberi peluang untuk anda berehat dan mempunyai masa sendiri (contohnya,					

	menggalakkan anda mempunyai masa peribadi, menjaga bayi supaya anda boleh mempunyai masa untuk diri sendiri) *Give you a break from the baby (for example, encourage personal time away, take care of the baby so that you can have time to yourself)*					
D14	Menyokong anda dalam melakukan yang terbaik dalam proses penyusuan, dan memaklumkan bahawa anda adalah yang terbaik walaupun mempunyai perasaan untuk berputus asa dalam penyusuan *Encourage you to do best when it comes to breastfeeding and let you know that you is not less of a mother if you feels like quitting*					
D15	Memuji anda kerana menyusu bayi dengan susu ibu dan memaklumkan bahawa apa yang anda akukan ini adalah indah dan bermanfaat. *Praise you for breastfeeding and let you know that what you doing is a beautiful, worthwhile thing*					
D16	Memberitahu anda bahawa menyusu adalah semulajadi dan /atau memberitahu anda mesej bahawa anda sedang menyusu kerana mahu yang terbaik untuk bayi anda? *Let you know that breastfeeding is natural and/or give you the message that you is breastfeeding because (that is who you are)? You wants the best for your baby?*					
D17	Mendengar dan mendorong anda apabila anda berasa kecewa dan hampa terhadap penyusuan *Listen to and encourage you when you are feel frustrated or*					

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	discouraged about breastfeeding					
D18	Tunjukkan penghargaan kepada anda yang menyusukan anak anda (contohnya, belikan anda bunga, bawakkan anda keluar makan) *Show appreciation that you are breastfeeding (for example, bring you a flowers, take you out for dinner)*					
D19	Memberitahu anda bahawa pasangan anda menghargai dan menyokong keputusan serta perasaannya terhadap isu berkaitan penyusuan. *Tell you that his value and support your decisions and intuitions around breastfeeding*					
D20	Cuba meningkatkan pengalaman menyusu dengan menyediakan peralatan yang diperlukan untuk proses penyusuan. (e.g sediakan bantal semasa menyusu atau alat untuk mengepam susu ibu) *Try to improve the breastfeeding experience by getting equipment or supplies ready for breastfeeding (for example, preparing a breastfeeding pump, get things such as a pillow that will make you comfortable)*					
D21	Tumpu perhatian terhadap anda semasa dia sedang menyusu bayi (contoh: bawa makanan atau minuman atau buku untuk anda, atau urut bahu atau belakang anda *Act attentively towards you during breastfeeding (for example, bring your food or drink, a book, or massage your shoulders or back)*					
D22	*Meluangkan masa menemani di sisi anda dan memerhatinya dengan kasih sayang semasa proses penyusuan* *Quietly share time and watch or*					

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	hold you during breastfeeding					
D23	Membantu dari segi fizikal dalam aktiviti atau amalan melibatkan penyusuan (contohnya, mengawasi kedudukan bayi anda ketika penyusuan, urut payudara, pegang payudara ketika penyusuan, membantu dengan alat penyusuan) *Physically help with breastfeeding related activities (for example, check the baby's latch or position, breast massage, hold a breast pump, help with breastfeeding aids)*					
D24	Membantu mewujudkan persekitaran yang nyaman dan sesuai untuk penyusuan bayi *Help create a quiet, pleasant environment for breastfeeding*					
D25	Menunjukkan kegembiraan dan keselesaan semasa anda menyusu (contohnya,melihat anda dan senyum) *Show pleasure and satisfaction while you are breastfeeding (for example, watch, smile)*					
D26	Memudahkan anda untuk menyusu dengan melayan tetamu yang datang. *Make it easy for you to breastfeed while entertaining company or visiting others*					
D27	Bersabar dan bertimbang rasa terhadap anda bahawa penyusuan memakan masa. Tiada perasaan kecewa sekiranya kerja rumah tidak dapat diselesaikan. *Be patient and understanding of the time it takes to breastfeed and don't get upset if the other housework is not done*					
D28	Pasangan anda menunjukkan keselesaan terhadap penyusuan di tempat awam (contohnya, pasar raya, kedai makan) dan membantu anda untuk berasa selesa semasa menyusu di tempat awam.					

	Show his comfort with breastfeeding in public (for example, malls, restaurants) and help you feel comfortable too					
D29	Memberi perhatian terhadap berapa banyak anda mahukan kerjasama daripada pasangan anda dalam proses penyusuan anak. *Pay attention to how much and how you wants him to participate in breastfeeding*					
D30	Pasangan anda tidak suka pada notis dan iklan formula atau pemasaran susu formula *Your partner notice and show dislike or take offense at formula advertisements or marketing practices*					
D31	Pasangan anda menggalakkan anda menyusukan sebagai cara untuk menenangkan bayi *Your partner encourage you to breastfeed as a way to calm the baby*					
D32	Pasangan anda tidak bersetuju dengan keinginan anda untuk menghentikan penyusuan susu ibu *Discourage or disagree with your desire to stop breastfeeding*					

Part E: Socio-demographic

Sila isi tempat kosong atau tandakan / pada kotak yang disediakan untuk soalan berikut.

Fill in the blank or tick / the boxes for the questions below.

Maklumat anda (Ibu)/*Mother's information*	**Pilihan jawapan/*Options***

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E1	Taraf perkahwinan / *Marital status*	☐ Tidak pernah berkahwin / N*ever married* ☐ Berkahwin / *Married* ☐ Berpisah / *Separated* ☐ Janda / Duda / *Divorcee* ☐ Balu / *Widower* ☐ Tinggal bersama pasangan / *Cohabiting*
E2	Tarikh lahir / *date of birth*	☐☐ ☐☐ / ☐☐☐☐ *Dd* *mm* *yyyy*
E3	Umur / *Age*	☐☐ tahun / *years old*
E4	Warganegara / *Nationality*	☐ Warganegara / *Malaysian* ☐ Permastautin Tetap / *Permanent resident* ☐ Bukan warganegara Malaysia / *Non-malaysian*
E5	Etnik / *Ethnicity*	☐ Melayu / *Malay* ☐ Cina / *Chinese* ☐ India / *Indian* ☐ Lain-lain / *Others* Sila tuliskan / *Please Specify* : …………………..
E6	Agama / *Religion*	☐ Islam / *Islam* ☐ Buddha / *Buddha* ☐ Hindu / *Hindu* ☐ Kristian / *Christian* ☐ Lain- lain / *Others* Sila tuliskan / *Please specify*:
E7	Tahap pendidikan / *Education level* (sila pilih SATU sahaja / *please select ONE only*)	☐ Tiada pendidikan formal / *No formal education* ☐ Pra-sekolah / *Primary education* ☐ Sekolah Menengah / Pra-Uni (STPM/ Matriculation)/ *Secondary education / Pre-Uni (STPM/ Matriculation)* ☐ *Certificates / Diploma* ☐ *Bachelor's Degree / Advanced Diploma* ☐ *Master's degree/ PhD/ Doctorates*
E8	Pekerjaan / *Occupation*	☐ Sektor awam / *Public sector* ☐ Sektor swasta / *Private sector* ☐ Kerja sendiri / *Self-employed* ☐ Tidak bekerja / *Uemployed* ☐ Pelajar / *Student*
E9	Pendapatan isi rumah bulanan / *Monthly household income*	☐ ≤ RM 1000 ☐ RM 1000 – RM 1999 ☐ RM 2000 – RM 2999 ☐ RM 3000 – RM 3999

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		⊔ RM 4000 - RM 4999 ⊔ RM 5000 dan ke atas / *and above*
Informasi Bayi / *Baby's information*		**Pilihan jawapan/*Option***
E10	Tarikh lahir kanak-kanak/ *Date of birth of child*	[ ][ ] [ ][ ] / [ ][ ][ ][ ] *Dd* *mm* *yyyy*
E11	Umur kanak-kanak/*Child's age*	[ ][ ] ulan / *months*
E12	Jantina bayi/*Sex for baby*	⊔ Lelaki/*Male* ⊔ Perempuan/*Female*

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