



UNIVERSITI PUTRA MALAYSIA

***KNOWLEDGE, ATTITUDE AND PRACTICE OF EXCLUSIVE
BREASTFEEDING (EBF) AMONG POSTNATAL MOTHERS ATTENDING
BALAKONG HEALTH CLINIC, SELANGOR***

SITI NORINA BINTI AMAT RAKIM

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**THESIS SUBMITTED TO THE FACULTY OF MEDICINE AND HEALTH
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ABSTRACT

KNOWLEDGE, ATTITUDE, AND PRACTICE OF EXCLUSIVE BREASTFEEDING (EBF) AMONG POSTNATAL MOTHERS ATTENDING BALAKONG HEALTH CLINIC, SELANGOR

SITI NORINA BINTI AMAT RAKIM

Background: Mothers should exclusively breastfeed (EBF) their babies for the first six months without any fluids or food except medications as recommended by the World Health Organization and the Malaysian Ministry of Health. EBF gives advantages to the baby such as providing ideal nutrition and reducing the risk of allergies. The mother also can get benefits such as a reduced risk of breast and ovarian cancer, close pregnancies, and anemia. Mothers' knowledge of EBF and their attitudes toward EBF were more likely to influence EBF practice. **Objective:** To determine the level of knowledge, attitude, and practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor. **Method:** A cross-sectional study was carried out among postnatal mothers attending Balakong Health Clinic, Selangor. The estimation of 135 postnatal mothers will be selected using convenience sampling. Participants completed the self-administered questionnaire that comprises four parts. **Data analysis:** This study was analyzed by using The Statistical Analysis Package for Social Sciences (SPSS) version 28. This analysis used frequency and percentage for the measurement of sociodemographics, knowledge, attitude, and practice of EBF. Pearson chi-square test was used to evaluate the resulting data. **Result:** The total number of respondents in this study is 111. The majority of the respondents were 48.6% which is 20-29 years old, 61.3% were Malay, 44.1% had foundation/matriculation/diploma, 43.2% worked in the private sector, 52.3% worked full time, 47.7% had a non-maternity leave period, 55.0% have RM4,000-RM6,000 as total household income, 62.2% have 2-3 children and 39.6% have youngest child age below than 6 months old. About 81.1% of respondents had good knowledge of EBF. Meanwhile, 95.5% and 59.5% had a positive attitude and good EBF practice respectively. The analysis had done showed that there is no significant association between sociodemographics and the level of knowledge, attitude, and practice of EBF and no significant association between the level of knowledge, attitude, and practice of EBF. **Conclusion:** The result obtained in this study showed that the majority of the respondents had a high level of knowledge and attitude toward EBF resulting in positive practice patterns among most of them.

Keywords: Knowledge, Attitude, Practice, Exclusive breastfeeding, Postnatal mother

ABSTRAK

PENGETAHUAN, SIKAP DAN AMALAN PENYUSUAN EKSKLUSIF (EBF) DALAM KALANGAN IBU LEPAS BERSALIN YANG MENGHADIRI KLINIK KESIHATAN BALAKONG, SELANGOR

SITI NORINA BINTI AMAT RAKIM

Latar Belakang: Ibu perlu menyusukan bayi secara eksklusif (EBF) selama enam bulan pertama tanpa sebarang minuman atau makanan kecuali ubat-ubatan seperti yang disyorkan oleh Pertubuhan Kesihatan Sedunia dan Kementerian Kesihatan Malaysia. EBF memberi kelebihan kepada bayi seperti membekalkan nutrisi yang ideal dan mengurangkan risiko alahan. Ibu juga boleh mendapat manfaat seperti pengurangan risiko kanser payudara dan ovari, kehamilan rapat, dan anemia. Pengetahuan ibu tentang EBF dan sikap mereka terhadap EBF lebih berkemungkinan mempengaruhi amalan EBF. **Objektif:** Untuk mengetahui tahap pengetahuan, sikap, dan amalan EBF di kalangan ibu selepas bersalin yang menghadiri Klinik Kesihatan Balakong, Selangor. **Kaedah:** Kajian keratan rentas telah dijalankan di kalangan ibu selepas bersalin yang menghadiri Klinik Kesihatan Balakong, Selangor. Anggaran 135 ibu selepas bersalin akan dipilih menggunakan pensampelan mudah. Peserta melengkapkan soal selidik yang ditadbir sendiri yang terdiri daripada empat bahagian. **Analisis data:** Kajian ini dianalisis dengan menggunakan The Statistical Analysis Package for Social Sciences (SPSS) versi 28. Analisis ini menggunakan kekerapan dan peratusan untuk pengukuran sosiodemografi, pengetahuan, sikap, dan amalan EBF. Ujian Pearson Chi-square digunakan untuk menilai data yang terhasil. **Keputusan:** Jumlah keseluruhan responden dalam kajian ini ialah 111. Majoriti responden ialah 48.6% iaitu berumur 20-29 tahun, 61.3% Melayu, 44.1% mempunyai asas/matrikulasi/diploma, 43.2% bekerja di sektor swasta, 52.3% bekerja sepenuh masa, 47.7% tidak mempunyai tempoh cuti bersalin, 55.0% mempunyai RM4,000-RM6,000 sebagai jumlah pendapatan isi rumah, 62.2% mempunyai 2-3 anak dan 39.6% mempunyai anak bongsu berumur di bawah 6 bulan. Kira-kira 81.1% responden mempunyai pengetahuan yang baik tentang EBF. Manakala, 95.5% dan 59.5% masing-masing mempunyai sikap positif dan amalan EBF yang baik. Analisis yang telah dilakukan menunjukkan bahawa tidak terdapat perkaitan yang signifikan antara sosiodemografi dengan tahap pengetahuan, sikap, dan amalan EBF dan tiada perkaitan yang signifikan antara tahap pengetahuan, sikap dan amalan EBF. **Kesimpulan:** Keputusan yang diperolehi dalam kajian ini menunjukkan majoriti responden mempunyai tahap pengetahuan dan sikap yang tinggi terhadap EBF menyebabkan corak amalan positif di kalangan kebanyakan mereka.

Kata kunci: Pengetahuan, Sikap, Amalan, Penyusuan badan secara eksklusif, Ibu lepas bersalin

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DECLARATION BY STUDENT

I hereby confirm that:

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- the research conducted and the writing of this thesis were under our supervision;
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LIST OF ABBREVIATION

| | |
|--------|---|
| EBF | Exclusive breastfeeding |
| WHO | World Health Organization |
| IQ | Intelligent quotient |
| MOH | Malaysian Ministry of Health |
| IIFAS | Iowa Infant Feeding Attitude Scale |
| MREC | Medical Research Ethics Committee |
| NMRR | National Medical Research Register |
| JKEUPM | Research Ethics Committee Universiti Putra Malaysia |
| JKNS | <i>Jabatan Kesihatan Negeri Selangor</i> |

CHAPTER 1

INTRODUCTION

1.0 Background of the study

Breastfeeding is the most natural and healthy approach to feeding a baby from the moment he or she is born. Breastfeeding provides various health advantages for both mother and newborn. It is also the most natural way to feed a baby, therefore most mothers should find it simple and uncomplicated. Except for oral rehydration solution or drops/syrups of vitamins, minerals, or medicines, it is suggested that mothers breastfeed their newborns exclusively for the first six months, without giving the baby any other food or drink to achieve optimal growth, development, and health (“WHO | Exclusive Breastfeeding for Optimal Growth, Development and Health of Infants,” 2019).

According to Victora et al. (2016), if breastfeeding were scaled up to near-universal levels, about 820 000 child lives would be saved every year. If all infants aged 0–23 months were breastfed ideally, almost 820 000 deaths may be spared every year among children under the age of five. Breastfeeding boosts the Intelligent quotient (IQ) increases school attendance and is linked to greater earnings in adulthood. Breastfeeding improves infant development and lowers healthcare expenses, resulting in economic benefits for both individual families and the country.

Reducing the risk of cancer in mothers who breastfeed their baby is one of the main benefits of breastfeeding. According to Chowdhury et al. (2015), breastfeeding for longer than six months is not only good for the child's health but also protects the mother against breast and ovarian cancers. Furthermore, based on a study by Su et al.

(2013), discovered that women who breastfed for more than 13 months were 63% less likely than women who breastfed for less than seven months to acquire ovarian cancer. When compared to women who were nursed for less than 10 months, women who breastfed several children for more than 31 months have a 91% lower risk of ovarian cancer.

Breast milk is the best source of nutrients for newborns. It has an almost ideal balance of vitamins, protein, and fat that a growing infant needs and it is all in a form that is easier to digest than formula milk (Martin et al., 2016). Colostrum is found in breast milk. According to Ekubay et al. (2018), they stated that protein, fat-soluble vitamins, minerals, and immunoglobulins are all abundant in colostrum. Immunoglobulins are antibodies that are passed down from mother to child and offer passive immunity by fighting a variety of bacterial and viral infections. Breastfeeding lowers the chances of a baby developing asthma or allergies. Furthermore, babies who are exclusively breastfed for the first six months, without the use of any formula, have fewer ear infections, respiratory ailments, and diarrhea episodes.

1.1 Problem statement

Knowledge, attitude, and practice about EBF are particularly important in this study. EBF is recommended for the first six months of age by both the Malaysian Ministry of Health (MOH) and the World Health Organization (WHO). Good maternal knowledge and a positive attitude play an important role in the process of EBF practice. Therefore, we need to focus more on breastfeeding exclusively to newborns. In addition, the practice of EBF is still low among postnatal mothers in Malaysia. Based on a study by Mohamad Pilus et al. (2019) stated that in 2006, the prevalence of EBF in Malaysia was 19.3%, however by 2016 it had risen to 47.1%.

Gender, education level, and the number of children were the factors affecting knowledge score whereas education level and the number of children were the factors affecting attitude (Ramzaa et al., 2019). According to Samuel and Oluwaseun (2020), it has been found that women with higher incomes and education levels were less likely to breastfeed; nevertheless, awareness of exclusive breastfeeding among nursing mothers was much greater when compared to younger age groups who were less knowledgeable and adherent to the practice. Adolescent exclusive breastfeeding education and sensitization are important in preparing them for parenthood.

In another study conducted by DeMaria et al. (2020), of female participants in Florence Italy, 27.3% of female participants had never seen other women breastfeed their babies and considered it strange to do so in public. Malaysian working women although having a positive attitude, stop EBF after back to the workplace due to the lack of feasibility to breastfeed the baby (Marzo et al., 2019). Short maternity leave causes a negative impact on breastfeeding Tan, (2009) and is clearly a barrier for working mothers Wan Musa et al. (2017). In addition, a study conducted by Le et al. (2018) reported that in Southern Vietnam, only 33% breastfeed their infants exclusively before hospital discharge and mothers of higher socioeconomic status were more likely to not initiate EBF during a hospital stay in comparison to those in the lowest socioeconomic quintile.

Based on a study conducted by Kana et al. (2018), the proportion of native Portuguese mothers who exclusively breastfed their infants for up to six months was only 16.6%. In addition, according to Shukri (2018), only 28% of the mother from Ampang, Selangor performed EBF for up to six months, 39% for less than six months, and 33% for more than six months. Furthermore, according to Ra (2019), he reported that

among mothers in Daejeon South Korea who breastfed their babies, 15.0% did not exclusively breastfeed. In addition, he also reported that mothers who did not exclusively breastfeed from the age of one to six months were 47.5%.

The rationale of this study was to create awareness and practice of EBF among postnatal mothers about the importance of breastfeeding to newborns because it gives many advantages to mother and baby in Balakong Health Clinic, Selangor. Breastfeeding has been the subject of various studies in Malaysia and abroad. However, the investigator found that most previous investigations paid less attention to these three important things, which are knowledge, attitude, and practice. Moreover, previous investigations selected only one type of ethnicity and most of the research involved undergraduate students, women, and parents but was limited to postnatal mothers in Malaysia. As a result, the purpose of this study was to determine the level of knowledge and attitude among postnatal mothers, as well as their association with EBF practice. Apart from that, Balakong Health Clinic, Selangor is one of the places that have not been studied about EBF and the investigator would like to compare the level of knowledge, attitude, and practice in this public health clinic.

1.2 Research question

- I. What is the association between sociodemographic characteristics with the level of knowledge, level of attitude, and level of practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor?
- II. What is the association between the level of knowledge, attitude, and practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor?

1.3 Research objectives

1.3.1 General objective

To determine the level of knowledge, attitude, and practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor.

1.3.2 Specific objective

- i. To determine the sociodemographic characteristic of postnatal mothers attending Balakong Health Clinic, Selangor.
- ii. To assess the level of knowledge of EBF among postnatal mothers attending Balakong Health Clinic, Selangor.
- iii. To assess the level of attitude of EBF among postnatal mothers attending Balakong Health Clinic, Selangor.
- iv. To assess the level of practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor.
- v. To determine the association between sociodemographic characteristics and the level of knowledge, attitude, and practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor.
- vi. To determine the association between the level of knowledge, attitude, and practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor.

1.4 Hypothesis

1.4.1 Null hypothesis

H01: There is no significant association between sociodemographic characteristics and the level of knowledge, attitude, and practice of EBF among postnatal mothers attending Baalakong Health Clinic, Selangor.

H02: There is no significant association between the level of knowledge, attitude, and practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor.

1.4.2 Alternative hypothesis

H01: There is a significant association between sociodemographic characteristics and the level of knowledge, attitude, and practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor.

H02: There is a significant association between the level of knowledge, attitude, and practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor.

1.5 Significance of the study

This study is important in determining the level of knowledge, attitude, and practice toward EBF among postnatal mothers. This is because it was found that the percentage of EBF in Malaysia is not more than half in 2016, which is only 47.1%. Health education on EBF can increase knowledge, change attitudes, and improve practice among postnatal mothers. Expectant mothers will change their eating habits for the better after realizing that EBF provides many benefits not only to the child but also to them.

In this era of globalization, most mothers are working and do not have time to exclusively breastfeed their children until the age of 6 months. With health education and milk pumping strategies or schedules, the working postnatal mother can exclusively provide milk to their children. Therefore, the knowledge and attitude of postnatal mothers need to be determined as it is important to increase the level of EBF practice to supply adequate nutrients to the infant and increase benefits to the mother. In addition, the findings of this study will also benefit healthcare professionals so that strategies to increase awareness in practicing EBF can be adapted to society.

1.6 Conceptual framework

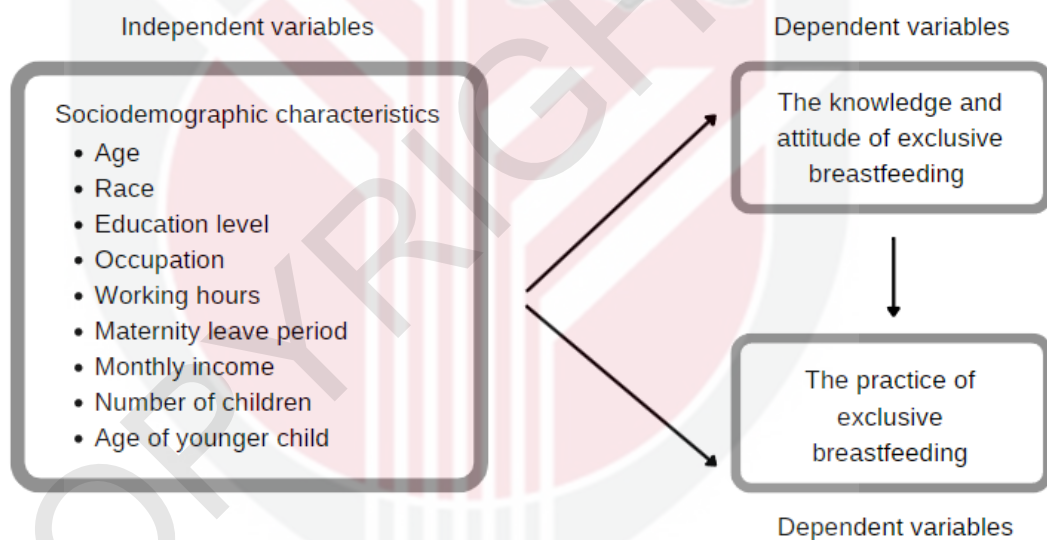


Figure 1.1 Conceptual framework

Figure 1.1 shows the conceptual framework of the knowledge and attitude toward EBF and its practice among postnatal mothers. For independent variables, it consisted of sociodemographic data of the postnatal mothers. Meanwhile, for independent variables, it is divided into two which are primary dependent variable and secondary dependent variable. For primary dependent variable, it is the knowledge and attitude toward EBF while for the second dependent variable is the EBF practice among postnatal mothers. Socio-demographic data is not significant with the knowledge,

attitude, and practice of EBF. This study evaluated the relationship between the independent variable (sociodemographic data) and the dependent variable (knowledge, attitudes, and practices regarding EBF).

1.7 Operational definition

1.7.1 Exclusive breastfeeding

Exclusive breastfeeding means that the baby is only breastfed completely with breast milk only without any other food and drink including plain water until the age of six months.

1.8.2 Postnatal mothers

Postnatal mothers in this study were referred to mothers who had given birth and were undergoing examination at the Balakong Health Clinic, Selangor. Postnatal mothers who were confined and examined at home were also included in this study.

1.7.3 EBF knowledge

EBF knowledge refers to mothers who know that newborns only need to be given full breast milk without any additional food and drink until the age of six months. Mothers also know the benefits of breast milk for themselves and their child.

1.7.4 EBF attitude

EBF attitude refers to mothers who believe that breast milk alone can provide convenience and benefits to them and the baby without any additional food and drink.

1.7.5 EBF practice

The practice of EBF refers to mothers who only give breast milk to the infant without any additional food or drink until the infant is 6 months old according to their knowledge and attitude about the benefits of EBF.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

According to Hasan et al. (2021), they stated that EBF provides a balanced diet for the newborn's growth and development, reduces stunting, protects against infectious and chronic illnesses, and has the potential to lower infant mortality. Next, The National Breastfeeding Policy was formed in 1993 and amended in 2005 in compliance with the 2001 World Health Assembly Resolution 54.2. It recommended EBF for infants until they were at least 6 months old, and then continued with prudent, adequate, and safe supplemental meals until they were 2 years old and beyond (Hashim et al., 2020). In areas of poverty, low nutrition, and poor cleanliness, where illness rates are higher, the advantages of EBF are greater. This is because offering other foods to newborns before they are six months old is typically linked to contamination during the preparation and administration procedure. These mistakes can lead to diarrheal illnesses such as cholera and dysentery, which can result in childhood death (Nukpezah et al., 2018).

2.1 Exclusive breastfeeding

According to Bhandari and Chowdhury (2016), they stated that the WHO is committed to assisting nations with the implementation and monitoring of the "Comprehensive implementation plan on maternal, infant, and young child nutrition" which was adopted by Member States in May 2012. The plan has six objectives, one of which is to raise the rate of EBF for the first six months to at least 50% by 2025. Activities listed in the "Global strategy for infant and young child feeding," which aims to safeguard, promote, and support adequate newborn and young child feeding, will

contribute to this goal. Furthermore, they also stated that WHO and United Nations Children's Fund (UNICEF) have established courses for educating health workers to give expert support to nursing women, assist them in overcoming obstacles, and monitor the growth of infants so that undernutrition or overweight or obesity may be identified early.

2.2 Knowledge of EBF

According to a study conducted by Shukri (2018), most mothers have accurate understanding about breastfeeding, EBF duration, and breastfeeding beginning time. However, slightly more than half of the moms were unaware that nursing had long-term advantages. Furthermore, several moms felt that breastfed babies are more likely to be overfed than newborns who are fed formula. This might be one of the evidence that Malay mothers still lack understanding about the benefits of breastfeeding (Marías & Glasauer, 2014).

2.3 Attitude of EBF

An attitude score of 70% is classified urgent for nutrition intervention, according to FAO guidelines for thresholds suggestive of nutrition intervention. All moms who scored more than 70% on the attitude test were regarded to have a good attitude, whereas those who scored less than 70% were judged to have a negative attitude. According to the findings of a study by Victora et al. (2016), few mothers have a good attitude toward EBF, such as commencing supplemental foods after six months and believing that EBF is healthy to the child and preferable to formula milk. Most mothers, on the other hand, disagreed that giving breast milk for newborn colostrum is important, that EBF only is enough for a child up to six months, that breastfeeding increases mother-infant bonding, that breastfed babies are healthier than fed babies,

and that formula feeding is more inconvenient than breastfeeding (J. Singh et al., 2018).

2.4 Practice of EBF

Mohamad Pilus et al. (2019) stated that the prevalence of EBF in their study was greater (52.4%) than the national level (45.1%) in rural Selangor, Malaysia. In addition, according to the Malaysia National Health and Morbidity Survey (2006), just 19.3% of mothers who have ever nursed their babies used EBF for at least 4 months, and only 14.5% continued to do so at 6 months. However, study conducted by Hashim et al. (2020), the study's participants had a high rate of failed EBF (58.3%).

2.5 The socio-demographic characteristic of postnatal mothers.

2.5.1 Age

In a previous study, younger breastfeeding mothers breastfed their infants longer as compared to older mothers (Chen, 2010). Contrary, in the current study, older age (>30 years) is associated with longer duration of EBF. The possible reasons may include better knowledge, more experience, and higher confidence level in terms of breastfeeding such as the techniques to hold and feed the baby, increase breastmilk production, or avoid breast problems (Shukri, 2018).

2.5.2 Education level

The current study discovered that mothers who had higher education level and monthly household income was positively related to increased duration of EBF. Generally, those who have higher level of education may have higher level of thinking and know the benefits of EBF in depth (Persad & Mensinger, 2008). However, a study claimed that those with higher education level and higher

household income were more likely to stop EBF early (Tan, 2009). One possible explanation is that lower income family may not be able to afford the costs of infant formulas, thus they are more likely to practice EBF longer (Shukri, 2018).

2.5.3 Occupation

Early breastfeeding discontinuation is a worldwide problem. Based on a study by Shukri (2018), around 56% of mothers who did not EBF their children for six months reported employment as the main reason for stopping EBF. Working mothers are less likely to exclusively breastfeed their children for six months. Working status may mean that more effort is needed to make breastfeeding successful (Saka et al., 2005). This could be due to the unavailability of time and facilities (i.e., private rooms to express breast milk, or refrigerators to store breast milk) for breastfeeding (Amin et al., 2011; Cohen & Mrtek, 1994). Without these three components, mothers would have difficulty to provide breast milk to their children. Workplaces that are supportive of breastfeeding would usually allow their employees to express breast milk for about an hour daily (Slusser et al., 2004). Hence, steps should be taken such as provision of private rooms, refrigerators, and flexible time, for working mothers to breastfeed (Shukri, 2018).

2.5.4 Breastfeeding support

A high percentage of mothers received support to breastfeed their children from their doctors, nurses, family, husband, and friends. However, among these, only spouse support shows significant positive relation with the duration of EBF. Infant feeding method favored by the father may influence the EBF duration (Jordan & Wall., 1990). However, another study indicated that husbands' attitudes were not considered to be a strong influence (Zhou, Katherine, & John, 2010). Another

factor such as childbirth place is related to EBF duration. In this study, babies delivered at private hospitals were more likely to be exclusively breastfed for six months compared to those who were not. However, further investigation is warranted (Shukri, 2018).

2.6 The association between level of knowledge, attitude, and practice of EBF among postnatal mothers.

To promote breastfeeding practice among rural moms, program designers should give specific attention to Chinese and Indian ethnicities, mothers with lower levels of education, and unfavorable attitudes (Mohamad Pilus et al., 2019). According to a research conducted at the National University of Malaysia Hospital, moms who received ante- or post-partum breastfeeding counselling scored considerably higher on the Iowa Infant Feeding Attitude Scale (IIFAS), indicating greater positivity about breastfeeding. Based on a study conducted by Hasan et al. (2021), they found that good knowledge scores about breastfeeding were statistically significant with EBF practice among mothers, similar to the study by Tamaro Tambunan et al. (2021). Meanwhile, a recent study conducted by Mohamed et al. (2018) reported that knowledge score was unassociated with EBF practice, in contrast with their findings.

Mothers with a tertiary education were more likely than their non-tertiary educated counterparts to breastfeed exclusively. Similar findings have been observed in Nigerian, Ethiopian, and Belgian research (Mohamad Pilus et al., 2019). According to the study by Hasan et al. (2021), they found that a good knowledge score on breastfeeding was statistically significant with EBF practice among mothers, in accordance with previous studies. In contrast with their findings, a recent study conducted by Mohamed et al. (2018) reported that knowledge score was not associated

with EBF practice.

According to the study by Mohamad Pilus et al. (2019), women who have a positive attitude toward breastfeeding are eight times more likely to breastfeed exclusively than mothers who have a negative attitude. This is like a research in Japan that found that moms with a good attitude were more likely to breastfeed exclusively than mothers with a neutral or negative attitude. A study conducted among Kenyan mothers by Mohamed et al. (2018) found an equally significant relationship between EBF practices and mother's positive attitudes towards breastfeeding, a study by Hasan et al. (2021).

CHAPTER 3

METHOD

3.0 Introduction

This chapter described the methods used in this study of the relationship between knowledge, attitude, and practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor. This study included study design, study location, sampling frame, sample size, sampling method and subject requirement, criteria of the respondents, instruments used, pre-test, validity, reliability, data collection process, analysis of data, and ethical consideration. Ethical consideration measured was taken to protect the confidentiality and privacy of the respondent who participated in the study.

3.1 Study Design

This study used quantitative research but adopted using a cross-sectional study design to determine the level of knowledge, attitude, and practice of EBF among postnatal mothers. Cross-sectional studies were useful for a variety of objectives, and the cross-sectional design was the most appropriate when examining illness prevalence, attitudes, and knowledge among patients and health care providers in validation studies (Kesmodel & Kesmodel, 2018). Hence, it was appropriate to be implemented this study to explore the knowledge, attitude, and practice of EBF among postnatal mothers in a Balakong Health Clinic, Selangor.

3.2 Study Location

This study was conducted in Balakong Health Clinic which is provided in the district of Hulu Langat. The distance between the investigator's location with Balakong

Health Clinic was 11 km and it takes about 12 minutes. The investigator used public transport to get access to the study site for asked permission from the Matron and collect the data. Balakong Health Clinic was located at Kampung Baru Balakong, 43300, Balakong, Selangor, Malaysia. The services available at the Balakong Health Clinic are mild case or outpatient (diabetes mellitus and hypertension), women's health screening (pap smear), any procedure such as dressing, injection, and open stitches, pre-marital HIV screening clinic, health checkup (admission to educational institutions or work or vehicle license).

Due to the Covid 19 outbreak, Balakong Health Clinic was adopting New Norms to implement social distancing in the clinic. The Clinic adopt an appointment system for all patients who attend the Balakong Health Clinic. Only emergency cases will receive treatment without an appointment. Chronic Repeated Cases (diabetes, high blood pressure, asthma, and the like) and Mother & Child cases please follow the clinic appointments that have been set. Services that are not provided at the Balakong Health Clinic are urine tests for drugs, blood tests for Hepatitis B or C, and X-Ray tests.

3.3 Study population

3.3.1 Target population

The study population for this was the postnatal mothers attending Balakong Health Clinic from 7 October – 14 October 2022.

3.3.2 Subject criteria

| Inclusion criteria | Exclusion criteria |
|---|---|
| <ul style="list-style-type: none">I. Malaysian women.II. Participants must be a mother with newborns and children up to 2 years old who are attending Balakong Health Clinic. These participants were selected because they were highly fit and had been given exposure to EBF from their personal care.III. Participants must be able to read, understand and converse in Malay and/or English language.IV. Participants must be 18 - 55 years old. | <ul style="list-style-type: none">I. Foreigners.II. Antenatal mothers. |

Table 3.1 Subject criteria

3.4 Study Duration

The data for this study were collected from 7 Oct – 14 Oct 2022.

3.5 Sample size estimation

The estimation of sample size was obtained from the calculation on the Cochran Sample Size Calculator. The formula used was shown below:

$$x = Z(c/100)2r(100-r)$$

$$n = N x / ((N-1) E^2 + x)$$

$$E = \text{Sqrt} [(N - n)x/n(N-1)]$$

r: the fraction of responses that the investigator was interested in

Z(c/100): the critical value for the confidence level $c = 1.960 \alpha/2$

p: the estimated proportion of the attribute

MOE: margin of error = 0.08 (according to Nnamdi and Chukwudi (2018), the prevalent view and expectation of Estate Surveyors and Valuers in the South-East Geopolitical Zone is that the margin of error between valuation estimations and sale prices should not exceed 10%)

N: the population size = 99 000 residents (according to *Jumlah Penduduk Bandar, Luar Bandar Dan Kepadatan Penduduk Megikut Pecahan Daerah Di Negeri Selangor* (2018) stated that there 99 000 residents in Hulu Langat, Selangor)

Recommended sample size = 150 respondents

Based on the calculation, the estimated sample size was $n = 150$ respondents who are required to take part in this study. The estimation of the non-response rate was 10% which needs to be minus to recommended sample size. Hence, the final sample size needed for this study was 135 respondents.

3.6 Sampling Method

A convenience sampling method was applied to recruit the sample respondents to achieve generalizability for this study. According to Edgar and Manz (2017), convenience sampling is the most popular type of non-probabilistic sampling, and it uses a method of collecting samples by taking samples located around locations or

Internet services. The Standard Operating Procedure (SOP) due to covid-19 in Malaysia has been changed and less stricken, therefore, the investigator can find the respondents and collect the data at the selected study location.

3.7 Study Instrument

To determine postnatal mothers' knowledge, attitude, and practice regarding EBF, the investigator utilized a hardcopy self-administered questionnaire. Questionnaires was modified and adapted from previous studies by researchers (Shukri, 2018) and (Krishnendu & Devaki, 2017). The questionnaire was divided into four parts, which take 10 to 15 minutes to complete.

Part A was a sociodemographic characteristic of the respondents. Data to be collected include age, race, level of education, occupation, working hours, maternity leave period, monthly income, number of children and age of the younger child. Participants were required to tick in the box and fill in the space provided on the information that represents themselves.

Next, Part B consists of 6 questions about breastfeeding knowledge. Respondents need to choose an answer that represented their knowledge of breastfeeding. If the respondent chooses the correct answer, it becomes 1 mark while if the answer was wrong, it becomes 0 mark. The median score was 3. If the score is more than 3, the respondent represents good knowledge and if the score is less than 3, the respondent has poor knowledge.

Part C consists of 10 questions about an attitude toward breastfeeding. This part used the Five Likert Scale. The respondents need to circle the numbers that suit their views.

The options provided for this section are strongly agree (5), agree (4), unsure (3), disagree (2), and strongly disagree (1). The median score for these questions was 25. If below than 25, respondents represent a negative attitude while if more than 25 the respondents have a positive attitude toward breastfeeding.

Lastly, Part D consists of 6 questions regarding breastfeeding practice. Respondents were required to choose answers that represented themselves about the practice behaviour. If the respondent chooses a good practice answer, the score becomes 1. Next, if the respondents choose a poor practice answer, the score becomes 0. Thus, If the score is more than 3, the respondent represents good practice and if the score is less than 3, the respondent has poor practice.

3.8 Pre-test

The questionnaire was modified to suit the context of the study among postnatal mothers. Since the self-administered questionnaire is modified from previous research by (Shukri, 2018) and (Krishnendu & Devaki, 2017), a pre-test was required to ensure the survey instruments are applicable, valid, and reliable to use in the future (Taherdoost, 2018). In addition, conducting a pre-test helps in determining problems that need to be improved, minimizing measurement errors, minimizing respondents' burden, analysing respondent interpretation of the questions, and preventing bias.

The pre-test takes place in Selangor's Balakong Health Clinic. A total of 16 people included in the pre-test, which is 10% of the total sample size. For the pre-test, a cross-sectional study was conducted. After obtain approval from NMRR and authorization from Balakong Health Clinic, the investigator conducts the pre-test.

Statistical Packages for Social Sciences (SPSS) version 28.0 was used in analysed the findings of the pre-test and requiring the values of Cronbach's Alpha, α which required to be within ≥ 0.70 for the instrument which means the questions asked are reliable to be used for the data collection.

3.9 Validity and reliability

Before utilized the questionnaire to collect data, my supervisor and co supervisor evaluated and reviewed the modified questionnaire. It was critical in ensured that the questionnaire included all aspects of the study's variables. The modified questionnaire was reviewed by Dr. Amilia Afzan binti Mohd Jamil from the Department of Obstetrics & Gynaecology, UPM. The Malay version was also reviewed by the Malay language teacher at secondary school, Puan Hasikin Binti Dzulfakar. The questionnaire was provided in two languages: English and Malay version. It is easier for responders to complete the survey. The Cronbach's alpha value in this study were 0.771. The questionnaires were considered reliable and consistent since the Cronbach's alpha value is between 0.70 and 0.90 (Tavakol & Dennick, 2011).

3.10 Data collection flowchart

The investigator collects the data after the Medical Research Ethics Committee (MREC) has given ethical permission. The investigator carried out the pre-test after Selangor State Health Department (JKNS) grant authorization to perform the study. The investigator approached the subject who was attending Balakong Health Clinic and introduce herself to build a rapport. The investigator asked some questions regarding the inclusion criteria and exclude subject that does not meet the criteria. If the subject meets the characteristics of the inclusion criteria, the investigator explained the purpose of the study and provides a PIS form to the subject. If the subject agrees

to participate, she must sign the informed consent. After that, the investigator gave a questionnaire to the participant. After the participant has finished answering the questions, the investigator checked the answers to make sure all the questions are answered. Finally, the investigator collects the questionnaire. Starting on the first day of data collection, the data be analysed using Statistical Packages for Social Sciences (SPSS) version 28.0. To guarantee confidentiality, all collected data handled with care.

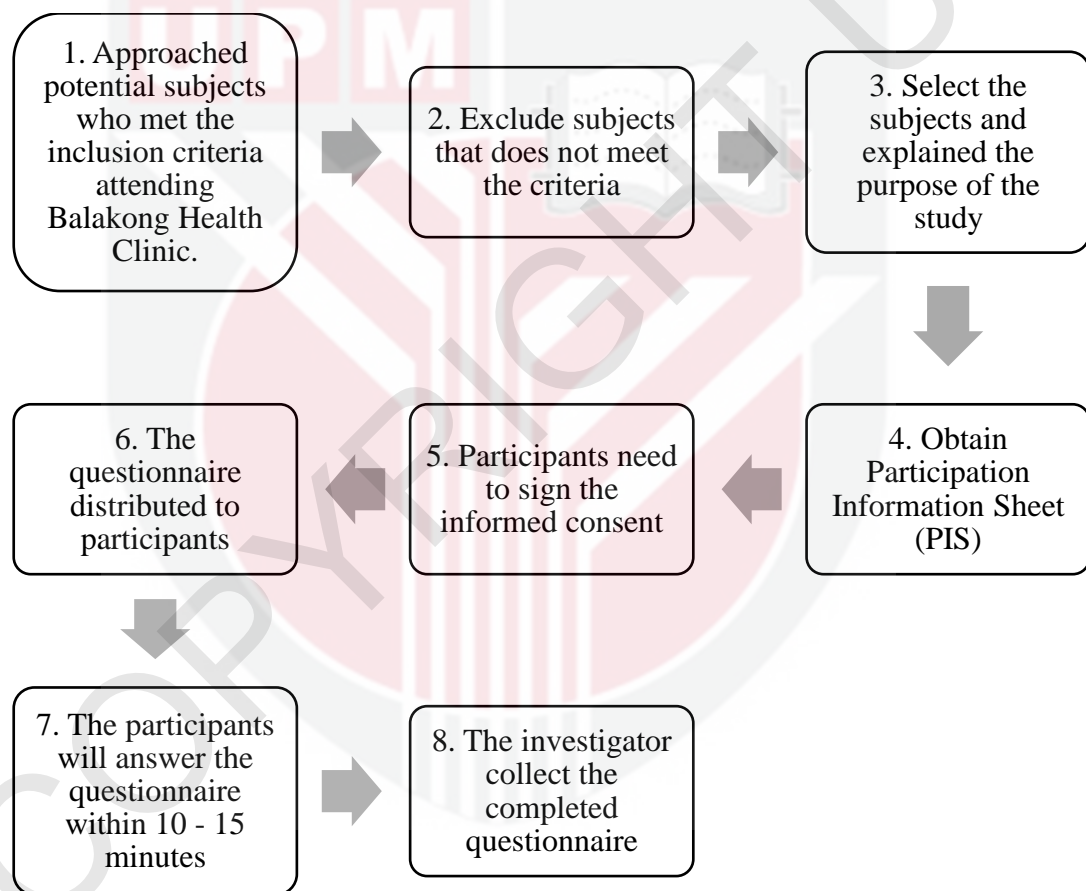


Figure 3.1: Data Collection Flowchart

3.11 Statistical analysis plan

Statistical Packages for Social Sciences (SPSS) version 28.0 will be used in analysed the data collection. For this study, the independent variables were sociodemographic characteristics while the dependent variable was the level of knowledge of EBF, the attitude and EBF practice. Normality tests was performed to determine the distribution of the data. The type of statistical analysis method used was determined by the distribution of the data.

For descriptive analysis, numerical data including current age, monthly income, number of pregnancies, level of knowledge, and attitudes towards EBF described in mean for normal distribution data. If data was distorted, mean and median are used. Meanwhile, category data was described using percentages and frequency. Categorical data included race, education level, and employment status.

In inferential statistics, the main analysis was assessed the relationship between the level of knowledge of EBF, and attitude and practice toward EBF. Pearson's Chi-squared test was used to assess these three types of comparison. Next, logistic regression was used to determine the association between EBF and respondents' socio-demographic characteristics, their level of knowledge of EBF, attitude practice toward EBF.

| Descriptive analysis | | | |
|-----------------------------|-------------------|--------------------|----------------------------|
| Objectives | Variables | Types of variables | Statistical measurements |
| To determine the socio- | Socio-demographic | Continuous | Mean Standard deviation |

| | | | |
|--|---|------------------------------------|----------------------------|
| demographic characteristics of postnatal mothers. | characteristics | Categorical | Percentage Frequency |
| To assess the level of knowledge of EBF among postnatal mothers. | Level of knowledge of EBF | Continuous | Mean Standard deviation |
| | | Categorical | Percentage Frequency |
| To assess the level attitude towards EBF among postnatal mothers. | Level of attitude towards EBF | Continuous | Mean Standard deviation |
| | | Categorical | Percentage Frequency |
| To assess the level practice of EBF among postnatal mothers | Level of practice of EBF | Continuous | Mean Standard deviation |
| | | Categorical | Percentage Frequency |
| Inferential analysis | | | |
| Objectives | Dependent variables | Independent variables | Statistical Measurements |
| To determine the association between sociodemographic characteristics and level of knowledge, attitude, and practice of EBF among postnatal mothers. | Level of knowledge, attitude, and practice of EBF | Age (categorical) | Chi Square test |
| | | Race (categorical) | |
| | | Education status (categorical) | |
| | | Occupation (categorical) | |
| | | Working hour (categorical) | |
| | | Total monthly income (categorical) | |

| | | | |
|--|--------------------------|--------------------------------------|-----------------|
| | | Maternity leave period (categorical) | |
| | | Number of children (categorical) | |
| | | Age of younger child (categorical) | |
| To determine the association between knowledge, attitude, and practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor | Level of practice of EBF | Level of knowledge of EBF | Chi-Square test |
| | | Level of attitudes towards EBF | |

Table 3.2: Descriptive and inferential analysis

3.12 Study flowchart

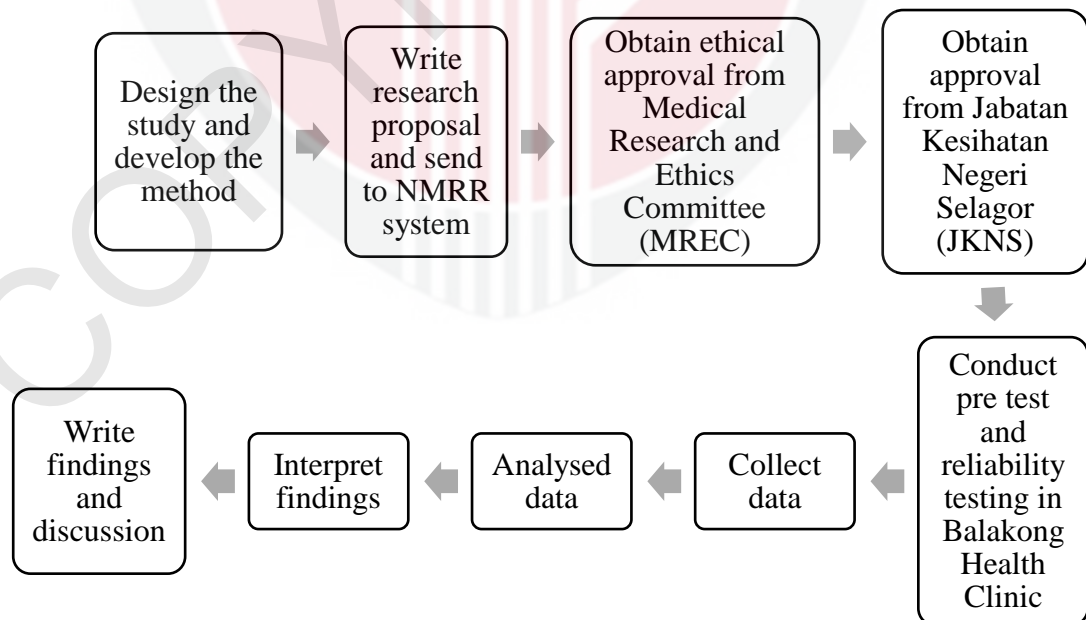


Figure 3.2: Study Flowchart

3.13 Expected outcome

It will be expected that there was an association between socio-demographic characteristics, level of knowledge, attitudes, and practices of EBF among postnatal mothers. This study also allows researchers to know the level of knowledge and practice of EBF among mothers after childbirth in the Balakong health clinic. Postnatal mothers who have a high level of knowledge and positive attitudes are expected to have better EBF practices.

3.14 Ethical consideration

3.14.1 Participant's approval

The participants that fit with the inclusion criteria were approached by the investigator to explain the purpose of the study and to get participation consent. Participant Information Sheet (PIS) was given to the participants that confirm to take part in the study. Five minutes were given to the participants to read on the information sheet and fill in the required information. Then, the questionnaire was distributed to the participants for data collection.

3.14.2 Institution approval

To get ethical approval for this study, an online submission was submitted to Medical Research and Ethics Committee (MREC) through National Medical Research Register (NMRR) system. After receiving ethical approval, a copy of the approval form was sent to Research Ethics Committee Universiti Putra Malaysia (JKEUPM) and Jabatan Kesihatan Negeri Selangor (JKNS).

3.14.3 Access to study site

Since this study was conducted in the Ministry of Health facilities, a written permission form had to be submitted to the healthcare facilities involved. The study sites include Balakong Health Clinic. The permission form was received by the Matron of the study sites. The study only proceeded once the approval was obtained from the list mentioned above in a written form. All the information collected from the participants was only used for research purposes. The confidentiality of the participant's data was maintained. All the answered questionnaires were secured by the researcher and kept for three years before being permanently disposed of. Total access to the findings was only available for the principal investigator and supervisory committee.

CHAPTER 4

RESULT

4.0 Introduction

The questionnaire used in this research consisted of four parts (Part A, Part B, Part C, and Part D). Part A was related to participants' socio-demographic information. Part B was the questions about knowledge of breastfeeding, attitude toward breastfeeding from Part C and Part D was the questions about practice of child. This chapter consisted of the descriptive data for these four parts, and it was presented in table form. Moreover, the association between these four parts was also determined in this chapter.

4.1 Response rate

A total of 111 individuals responded to the self-administered questionnaire and all responses are valid to be used and analyzed in this study. 134 respondents were the required sample size, hence the response rate for this study is 82%.

4.2 Sociodemographic characteristics of participants

A total of 111 postnatal mothers were included in this study. The percentage of respondents aged below 20 years old was 7.2%, whereas for the age range between 20 – 29 years old was 48.6%, 38.7% for respondents aged between 30 – 39, and 5.4% for respondents aged above 39 years old. This showed that most of the age of respondents that participated in this study were 20 – 29 years old (n=54). The mean \pm standard deviation and median for age were 2.42 ± 0.78 and 2.00 respectively. Out of 111 respondents, most of the respondents were Malay (61.3%) followed by Indian (21.6%)

and Chinese (17.1%). The majority of the respondents had a foundation / matriculation / diploma as an education level (44.1%) while the minority of the respondents had a Master as an education level (2.7%). In addition, most of the participants work in the private sector (43.2%) whereas a minority of the participants work in the government sector (16.2%). The majority of the respondents work full-time (53.3%) while the minority of the respondents work part-time (7.2%). The majority of the respondent had 90 days maternity leave period (36.0%). Furthermore, the highest number of respondents was having a total household income between RM4,000 – RM6,000 (55.0%), while the lowest number of respondents was having less than RM2,000 (5.4%). The majority of the respondent have 2-3 children (62.2%) and majority of the respondent has child below than 6 months old (39.6%).

Table 4.1 Descriptive analysis of participant’s socio-demographic characteristics (n=111)

| Socio-demographic characteristics | Frequency (n) | Percentage (%) | Mean ± standard deviation | Median |
|-----------------------------------|---------------|----------------|---------------------------|--------|
| Age | | | 2.42 ± 0.708 | 2.0 |
| <20 | 8 | 7.2 | | |
| 20-29 | 54 | 48.6 | | |
| 30-39 | 43 | 38.7 | | |
| >39 | 6 | 5.4 | | |
| Race | | | 0.60 ± 0.823 | 0.0 |
| Malay | 68 | 61.3 | | |
| Chinese | 19 | 17.1 | | |
| Indian | 24 | 21.6 | | |
| Education status | | | 2.26 ± 0.759 | 2.0 |
| Secondary school | 18 | 16.2 | | |
| Foundation/matriculation/diploma | 49 | 44.1 | | |
| Bachelor’s degree | 41 | 36.9 | | |
| Master | 3 | 2.7 | | |
| Occupation | | | 1.54 ± 1.007 | 2.0 |
| Unemployed | 24 | 21.6 | | |

| | | | | |
|---------------------------------------|----|------|-----------------|-----|
| Self-employed | 21 | 18.9 | | |
| Private sector | 48 | 43.2 | | |
| Government sector | 18 | 16.2 | | |
| Working hours | | | 0.67 ± 0.608 | 1.0 |
| None | 45 | 40.5 | | |
| Full time | 58 | 52.3 | | |
| Part-time | 8 | 7.2 | | |
| Maternity leave period (days) | | | 1.88 ± 0.912 | 2.0 |
| None | 53 | 47.7 | | |
| 60 days | 18 | 16.2 | | |
| 90 days | 40 | 36.0 | | |
| Total household income | | | 1.77 ± 0.750 | 2.0 |
| Less than RM2,000 | 6 | 5.4 | | |
| RM2,000 – RM4,000 | 29 | 26.1 | | |
| RM4,000 – RM6,000 | 61 | 55.0 | | |
| More than RM6,000 | 15 | 13.5 | | |
| Number of children | | | 2.00 ± 0.618 | 2.0 |
| 1 child | 21 | 18.9 | | |
| 2-3 children | 69 | 62.2 | | |
| >4 children | 21 | 18.9 | | |
| Age of youngest child (months) | | | 1.99 ± 1.014 | 2.0 |
| < 6 months | 44 | 39.6 | | |
| 7-12 months | 37 | 33.3 | | |
| 13-18 months | 17 | 15.3 | | |
| 19-24 months | 13 | 11.7 | | |

4.3 Knowledge about EBF

The mean score for knowledge about breastfeeding in this study is $4.59 \pm \text{SD } 1.26$.

Based on the result, more than half of the respondents scored higher than 3 (81.1%) and the rest of the respondents scored lower than 3 (18.9%). 31 (27.9%) out of 111 respondents answered all the questions correctly meanwhile two (1.8%) out of 60 respondents scored 1 which is the lowest score. The statement that has the highest number of respondents who answered correctly is “Breastfeeding is beneficial because it protects the baby against allergies and is easily digested” (83.8%). There were two statements that has the lowest number of respondents who answered correctly “If a

breastfed infant has not regained his body weight by two weeks of age, the mother should be encouraged to give formula milk” and “Exclusive breastfeeding should be given until the baby is 6 months old” (67.6%).

Table 4.2 Response of knowledge on EBF among postnatal mothers (n=111)

| Questions | Yes n (%) | No n (%) |
|---|--------------|-------------|
| 1. Breastfeeding is beneficial because it protects the baby against allergies and is easily digested. | 93 (83.8) | 18 (16.2) |
| 2. The first milk, "colostrum" is high in antibodies and antioxidants, which help to establish a newborn's immune system. | 86 (77.5) | 25 (22.5) |
| 3. Frequent breastfeeding in the early newborn period can help reduce jaundice | 89 (80.2) | 22 (19.8) |
| 4. Growth patterns of breastfed infants differ from those of formula-feeding infants | 92 (82.9) | 19 (17.1) |
| 5. If a breastfed infant has not regained his body weight by two weeks of age, the mother should be encouraged to give formula milk | 75 (67.6) | 36 (32.4) |
| 6. Exclusive breastfeeding should be given until the baby is 6 months old. | 75 (67.6) | 36 (32.4) |

Table 4.3 Frequency (n) and percentage (%) of respondents who had good and poor knowledge of breastfeeding.

| Questions | Frequency (n) | Percentage (%) | Mean | Standard deviation |
|--|------------------|-------------------|------|-----------------------|
| Breastfeeding knowledge | | | 4.59 | 1.26 |
| Level of knowledge of breastfeeding | | | | |
| Good knowledge | 90 | 81.1 | | |
| Poor knowledge | 21 | 18.9 | | |

4.4 Attitude toward EBF

The mean score for attitude towards breastfeeding in this study is 40.34 ± 5.29 . Based on the analysis done, 81 (73.0%) of the respondent strongly agree with the statement “After breastfeeding, I will burp my baby” followed by 63 (56.8%) of the respondents

who strongly agree that “I feel the bonding between me, and my baby increases during breastfeeding”. More than half of the respondents also strongly agree with the first statement “I breastfeed my baby up until the age of 6 months old” (52.3%), “I breastfeed my baby every 2-4 hours” (44.1%) and “Mother’s health and hygiene are essential for safe breastfeeding” (44.1%).

Meanwhile, 45 (40.5%) of the respondents answered strongly disagree with the statement “I started feeding my baby with formula milk first before giving breastfeeding” followed by 41 (36.9%) of the respondent who answered strongly disagree that “Formula milk is more convenient than breastfeeding”. Most of the respondents (36.0%) disagree that “I stop giving breastfeeding after noticing changes in my body shape”, (34.2%) disagree with the statement “I will change to formula milk if breastfeeding causes diarrhea to my baby”, and “Baby will get the benefit of breastfeeding after weaning” (26.1%).

Table 4.4 Response of attitude toward breastfeeding among postnatal mothers (n=111)

| Questions | n (%) | | | | |
|--|---------------------------|---------------|--------------|--------------|------------------------|
| | 1 Strongly disagree | 2 Disagree | 3 Unsure | 4 Agree | 5 Strongly agree |
| 1) I breastfeed my baby up until the age of 6 months old | 0 (0) | 1 (0.9) | 13 (11.7) | 39 (35.1) | 58 (52.3) |
| 2) I breastfeed my baby every 2-4 hours | 0 (0) | 11 (9.9) | 8 (7.2) | 43 (38.7) | 49 (44.1) |
| 3) Baby will get the benefit of breastfeeding after weaning * | 23 (20.7) | 29 (26.1) | 32 (28.8) | 25 (22.5) | 2 (1.8) |
| 4) I started feeding my baby with formula milk first before giving breastfeeding * | 45 (40.5) | 32 (28.8) | 13 (11.7) | 17 (15.3) | 4 (3.6) |

| | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|
| 5) I will change to formula milk if breastfeeding causes diarrhea to my baby * | 38 (34.2) | 38 (34.2) | 14 (12.6) | 17 (15.3) | 4 (3.6) |
| 6) After breastfeeding, I will burp my baby | 0 (0) | 2 (1.8) | 7 (6.3) | 21 (18.9) | 81 (73.0) |
| 7) Formula milk is more convenient than breastfeeding * | 41 (36.9) | 38 (34.2) | 7 (6.3) | 16 (14.4) | 9 (8.1) |
| 8) Mother's health and hygiene are essential for safe breastfeeding | 1 (0.9) | 2 (1.8) | 14 (12.6) | 45 (40.5) | 49 (44.1) |
| 9) I stop giving breastfeed after noticed changes in my body shape * | 32 (28.8) | 40 (36.0) | 5 (4.5) | 22 (19.8) | 12 (10.8) |
| 10) I feel the bonding between me and my baby increases during breastfeeding | 0 (0) | 0 (0) | 6 (5.4) | 42 (37.8) | 63 (56.8) |

*Reverse statement

Table 4.5 Frequency (n) and percentage (%) of respondents who had positive and negative attitude toward breastfeeding.

| Questions | Frequency (n) | Percentage (%) | Mean | Standard deviation |
|---|---------------|----------------|-------|--------------------|
| Breastfeeding attitude | | | 40.34 | 5.29 |
| Level of attitude toward breastfeeding | | | | |
| Positive attitude | 106 | 95.5 | | |
| Negative attitude | 5 | 4.5 | | |

4.5 Practice of EBF

The mean \pm standard deviation for practices of EBF was 4.05 ± 2.015 . The total number of respondents with good practice scores was 66 respondents with 59.5% while respondents with poor practices score was 45 respondents with 40.5%. Most of the respondents gave only breastmilk to their child (59.5%). Most of the respondents also gave breastmilk until 6 months or more (71.2%).

Table 4.6 Frequency (n) and percentage (%) of respondents who had good and poor practice of breastfeeding.

| Questions | Frequency (n) | Percentage (%) | Mean | Standard deviation |
|--|---------------|----------------|------|--------------------|
| Breastfeeding practice | | | 4.05 | 2.015 |
| Level of breastfeeding practice | | | | |
| Good practice | 66 | 59.5 | | |
| Poor practice | 45 | 40.5 | | |

4.6 The association between sociodemographic characteristics and knowledge, attitude, and practice of EBF among postnatal mothers in Balakong Health Clinic, Selangor

The normality test had been conducted for knowledge about breastfeeding and it had found that the total score is normally distributed with Skewness of -0.872 and Kurtosis of 0.252. Values greater or less than 1.96 are adequate in small samples to prove the data's normality (Ghasemi & Zahediasl, 2012). Thus, the Pearson chi-square had been conducted to rule out the association between the socio-demographic characteristics of respondents and their level of knowledge of breastfeeding, level of attitude toward breastfeeding and level of breastfeeding practice. Pearson chi-square was conducted, and the results had shown that there is no significant relationship between sociodemographic characteristics with knowledge of breastfeeding. Details of the data as described in table below.

Table 4.7 Association between sociodemographic characteristics and knowledge of EBF among postnatal mothers in Balakong Health Clinic, Selangor

| Socio-demographic characteristics | Knowledge of breastfeeding | | | | x ² (df) | p-value |
|-----------------------------------|----------------------------|----------------------|-------|--|---------------------|---------|
| | Good knowledge n (%) | Poor knowledge n (%) | Total | | | |
| Age | | | | | 3 | 0.816 |
| <20 | 7 (87.5) | 1 (12.5) | 8 | | | |
| 20-29 | 45 (83.3) | 9 (16.7) | 54 | | | |
| 30-39 | 33 (76.7) | 10 (23.3) | 43 | | | |
| >39 | 5 (83.3) | 1 (16.7) | 6 | | | |

| | | | | | |
|--|------------|-----------|----|---|-------|
| Race | | | | 2 | 0.125 |
| Malay | 58 (85.3) | 10 (14.7) | 68 | | |
| Chinese | 16 (84.2) | 3 (15.8) | 19 | | |
| Indian | 16 (66.7) | 8 (33.3) | 24 | | |
| Education status | | | | 3 | 0.535 |
| Secondary school | 13 (72.2) | 5 (27.8) | 18 | | |
| Foundation/ matriculation/ diploma | 39 (79.6) | 10 (20.4) | 49 | | |
| Bachelor's degree | 35 (85.4) | 6 (14.6) | 41 | | |
| Master | 3 (100.0) | 0 (0) | 3 | | |
| Occupation | | | | 3 | 0.130 |
| Unemployed | 19 (79.2) | 5 (20.8) | 24 | | |
| Self-employed | 15 (71.4) | 6 (28.6) | 21 | | |
| Private sector | 38 (79.2) | 10 (20.8) | 48 | | |
| Government sector | 18 (100.0) | 0 (0) | 18 | | |
| Working hours | | | | 2 | 0.353 |
| None | 34 (75.6) | 11 (24.4) | 45 | | |
| Full time | 50 (86.2) | 8 (13.8) | 58 | | |
| Part-time | 6 (75.0) | 2 (25.0) | 8 | | |
| Maternity leave period (days) | | | | 2 | 0.070 |
| None | 40 (75.5) | 13 (24.5) | 53 | | |
| 60 days | 18 (100.0) | 0 (0) | 18 | | |
| 90 days | 32 (80.0) | 8 (20.0) | 40 | | |
| Total household income | | | | 3 | 0.556 |
| Less than RM2,000 | 6 (100.0) | 0 (0) | 6 | | |
| RM2,000– RM4,000 | 23 (79.3) | 6 (20.7) | 29 | | |
| RM4,000– RM6,000 | 50 (82.0) | 11 (18.0) | 61 | | |
| More than RM6,000 | 11 (73.3) | 4 (26.7) | 15 | | |
| Number of children | | | | 2 | 0.733 |
| 1 child | 18 (85.7) | 3 (14.3) | 21 | | |
| 2 – 3 children | 56 (81.2) | 13 (18.8) | 69 | | |
| > 4 children | 16 (76.2) | 5 (23.8) | 21 | | |
| Age of youngest child (months) | | | | 3 | 0.949 |

| | | | |
|---------|-----------|----------|----|
| < 6 | 36 (81.8) | 8 (18.2) | 44 |
| 7 – 12 | 30 (81.1) | 7 (18.9) | 37 |
| 13 – 18 | 13 (76.5) | 4 (23.5) | 17 |
| 19 – 24 | 11 (84.6) | 2 (15.4) | 13 |

Table 4.8 Association between sociodemographic characteristics and attitude toward EBF among postnatal mothers in Balakong Health Clinic, Selangor

| Socio-demographic characteristics | Attitude toward breastfeeding | | | | |
|--|-------------------------------|----------------------------|-------|---------------|---------|
| | Positive attitude n (%) | Negative attitude n (%) | Total | χ^2 (df) | p-value |
| Age | | | | 3 | 0.001 |
| <20 | 6 (75.0) | 2 (25.0) | 8 | | |
| 20-29 | 54 (100.0) | 0 (0) | 54 | | |
| 30-39 | 42 (97.7) | 1 (2.3) | 43 | | |
| >39 | 4 (66.7) | 2 (33.3) | 6 | | |
| Race | | | | 2 | 0.424 |
| Malay | 65 (95.6) | 3 (4.4) | 68 | | |
| Chinese | 19 (100.0) | 0 (0.0) | 19 | | |
| Indian | 22 (91.7) | 2 (8.3) | 24 | | |
| Education status | | | | 3 | 0.404 |
| Secondary school | 18 (100.0) | 0 (0) | 18 | | |
| Foundation/ matriculation/ diploma | 45 (91.8) | 4 (8.2) | 49 | | |
| Bachelor's degree | 40 (97.6) | 1 (2.4) | 41 | | |
| Master | 3 (100.0) | 0 (0) | 3 | | |
| Occupation | | | | 3 | 0.418 |
| Unemployed | 23 (95.8) | 1 (4.2) | 24 | | |
| Self-employed | 21 (100.0) | 0 (0) | 21 | | |
| Private sector | 46 (95.8) | 2 (4.2) | 48 | | |
| Government sector | 16 (88.9) | 2 (11.1) | 18 | | |
| Working hours | | | | 2 | 0.429 |
| None | 44 (97.8) | 1 (2.2) | 45 | | |
| Full time | 54 (93.1) | 4 (6.9) | 58 | | |
| Part-time | 8 (100.0) | 0 (0) | 8 | | |
| Maternity leave period (days) | | | | 2 | 0.260 |
| None | 52 (98.1) | 1 (1.9) | 53 | | |
| 60 days | 16 (88.9) | 2 (11.1) | 18 | | |
| 90 days | 38 (95.0) | 2 (5.0) | 40 | | |

| | | | | | |
|---------------------------------------|------------|----------|----|---|-------|
| Total household income | | | | 3 | 0.338 |
| Less than RM2,000 | 5 (83.3) | 1 (16.7) | 6 | | |
| RM2,000–RM4,000 | 27 (93.1) | 2 (6.9) | 29 | | |
| RM4,000–RM6,000 | 59 (96.7) | 2 (3.3) | 61 | | |
| More than RM6,000 | 15 (100.0) | 0 (0) | 15 | | |
| Number of children | | | | 2 | 0.532 |
| 1 child | 20 (95.2) | 1 (4.8) | 21 | | |
| 2 – 3 children | 65 (94.2) | 4 (5.8) | 69 | | |
| > 4 children | 21 (100.0) | 0 (0) | 21 | | |
| Age of youngest child (months) | | | | 3 | 0.566 |
| < 6 | 41 (93.2) | 3 (6.8) | 44 | | |
| 7 – 12 | 35 (94.6) | 2 (5.4) | 37 | | |
| 13 – 18 | 17 (100.0) | 0 (0) | 17 | | |
| 19 – 24 | 13 (100.0) | 0 (0) | 13 | | |

Table 4.9 Association between sociodemographic characteristics and practice of EBF among postnatal mothers in Balakong Health Clinic, Selangor

| Socio-demographic characteristics | Practice of breastfeeding | | | x ² (df) | p-value |
|-----------------------------------|---------------------------|---------------------|-------|---------------------|---------|
| | Good practice n (%) | Poor practice n (%) | Total | | |
| Age | | | | 3 | 0.586 |
| <20 | 6 (75.0) | 2 (25.0) | 8 | | |
| 20-29 | 34 (63.0) | 20 (37.0) | 54 | | |
| 30-39 | 23 (53.5) | 20 (46.5) | 43 | | |
| >39 | 3 (50.0) | 3 (50.0) | 6 | | |
| Race | | | | 2 | 0.238 |
| Malay | 43 (63.2) | 25 (36.8) | 68 | | |
| Chinese | 8 (42.1) | 11 (57.9) | 19 | | |
| Indian | 15 (62.5) | 9 (37.5) | 24 | | |
| Education status | | | | 3 | 0.544 |
| Secondary school | 11 (61.1) | 7 (38.9) | 18 | | |
| Foundation/matriculation/diploma | 32 (65.3) | 17 (34.7) | 49 | | |
| Bachelor's degree | 22 (53.7) | 19 (46.3) | 41 | | |
| Master | 1 (33.3) | 2 (66.7) | 3 | | |
| Occupation | | | | 3 | 0.895 |

| | | | | | |
|---------------------------------------|-----------|-----------|----|---|-------|
| Unemployed | 14 (58.3) | 10 (41.7) | 24 | | |
| Self-employed | 14 (66.7) | 7 (33.3) | 21 | | |
| Private sector | 28 (58.3) | 20 (41.7) | 48 | | |
| Government sector | 10 (55.6) | 8 (44.4) | 18 | | |
| Working hours | | | | 2 | 0.847 |
| None | 28 (62.2) | 17 (37.8) | 45 | | |
| Full time | 33 (56.9) | 25 (43.1) | 58 | | |
| Part-time | 5 (62.5) | 3 (37.5) | 8 | | |
| Maternity leave period (days) | | | | 2 | 0.839 |
| None | 33 (62.3) | 20 (37.7) | 53 | | |
| 60 days | 10 (55.6) | 8 (44.4) | 18 | | |
| 90 days | 23 (57.5) | 17 (42.5) | 40 | | |
| Total household income | | | | 3 | 0.077 |
| Less than RM2,000 | 5 (83.3) | 1 (16.7) | 6 | | |
| RM2,000–RM4,000 | 16 (55.2) | 13 (44.8) | 29 | | |
| RM4,000–RM6,000 | 40 (65.6) | 21 (34.4) | 61 | | |
| More than RM6,000 | 5 (33.3) | 10 (66.7) | 15 | | |
| Number of children | | | | 2 | 0.064 |
| 1 child | 17 (81.0) | 4 (19.0) | 21 | | |
| 2 – 3 children | 39 (56.5) | 30 (43.5) | 69 | | |
| > 4 children | 10 (15.2) | 11 (52.4) | 21 | | |
| Age of youngest child (months) | | | | 3 | 0.710 |
| < 6 | 29 (65.9) | 15 (34.1) | 44 | | |
| 7 – 12 | 20 (54.1) | 17 (45.9) | 37 | | |
| 13 – 18 | 10 (58.8) | 7 (41.2) | 17 | | |
| 19 – 24 | 7 (53.8) | 6 (46.2) | 13 | | |

4.7 The association between knowledge, attitude, and practice of EBF among postnatal mothers in Balakong Health Clinic

The Pearson chi-square also had been conducted to rule out the association between the level of knowledge of breastfeeding, level of attitude toward breastfeeding and level of breastfeeding practice. The p-value in this study show that both associations are more than 0.05. Therefore, the results of this study had shown that there is no significant relationship between level of knowledge with practice of EBF. In addition, there is no significant association between level of attitude with breastfeeding practice level. Details of the data as described in table below.

Table 4.10 Association between level knowledge of EBF and EBF practice among postnatal mothers in Balakong Health Clinic, Selangor

| Level knowledge of EBF | Practice of breastfeeding | | | x ² (df) | p - value |
|------------------------|---------------------------|---------------------|-------|---------------------|-----------|
| | Good practice n (%) | Poor practice n (%) | Total | | |
| Good knowledge | 52 (57.8) | 38 (42.2) | 90 | 1 | 0.455 |
| Poor knowledge | 14 (66.7) | 7 (33.3) | 21 | | |

Table 4.11 Association between level of attitude toward EBF and EBF practice among postnatal mothers in Balakong Health Clinic, Selangor

| Level attitude toward EBF | Practice of breastfeeding | | | x ² (df) | p - value |
|---------------------------|---------------------------|---------------------|-------|---------------------|-----------|
| | Good practice n (%) | Poor practice n (%) | Total | | |
| Positive attitude | 62 (58.5) | 44 (41.5) | 106 | 1 | 0.338 |
| Negative attitude | 4 (80.0) | 1 (20.0) | 5 | | |

CHAPTER 5

DISCUSSION

5.0 Introduction

The findings of this study are discussed further in this chapter based on the objective set. The discussion includes all the results of the descriptive findings of the respondents' socio-demographic characteristics. The descriptive results of knowledge, attitude and practice of EBF will also be discussed. The association between socio-demographic characteristics with the level of knowledge, attitude and practice of EBF will also be explored in this study.

5.1 Sociodemographic characteristics

The results showed that most participants aged 20 – 29 years old (48.6%) were involved in this study. This result was almost the same as previous studies conducted in Malaysia by Johari and Abdul Hamid (2021), the majority of participants were less than 30 years old (56%). On the other hand, most of the respondents are Malay (61.3%) followed by India (21.6%) and Chinese (19%). It is similar to the study conducted by Mohamad Pilus et al. (2019), Malay ethnicity was the majority among the study respondents (79.8%). The highest education status for most of the respondents in this study is Foundation/Matriculation/Diploma (44.1%) followed by a Bachelor degree (36.9%), while only three respondent has Master. This result was similar to the previous study by Kl (2009) in Malaysia which most participants have less than diploma-level education (87.3%). In addition, the private sector is the highest occupation of participants (43.2%) but differs from the study by Kl (2009) where most participants are not employed (62.7%).

Furthermore, about 52.3% of participants work full-time. Different from the study by

(Ryan & Martinez, 1989) only 10% of full-time employed mothers breastfed their infants at 6 months of age compared with 24% of those not employed and they stated that working full-time seemed to have a substantial impact on breastfeeding duration. Next, 55.0% of the participants have a monthly income of RM4,000 - RM6,000 and 62.2% of the participants have 2-3 children in this study. Meanwhile, a study conducted by Marzo et al. (2019) showed that only 9% of participants had a monthly income of more than RM4,000 and 41% of participants had one child.

5.2 Level of knowledge of EBF

The mean score for the knowledge of exclusive breastfeeding among postnatal mother in this study is 4.59 ± 1.26 . The general knowledge regarding breastfeeding among postnatal mother in this study shows that majority of the postnatal mother has good knowledge regarding breastmilk. In this study, the total number of respondents with good knowledge was 90 (81.1%), whereas the number of respondents with poor knowledge are 21 (18.9%).

These results are same with a study done by Samuel and Oluwaseun (2020), in Saki West Local Government, where majority of the mothers 104 (52%) have good knowledge toward exclusive breastfeeding. Same goes with a study done among Nigerian mothers from a Semi-Urban community, found that 71.3% of the respondents had good knowledge (Mbada et al., 2013). The study in Malaysia by Ibrahim et al. (2019) showed a compatible result where 81.9% majority of mothers (285) had adequate knowledge. Other than that, this study results regarding good level of knowledge samewith the previous studies done in Thrissur district of Kerala, India (Krishnendu & Devaki, 2017). Women who had gotten BF information during ANC follow-up during their pregnancy period were four times higher to practice EBF compared to those who did not have the information (Jebena & Tenagashaw, 2022).

However, this result is contraindicated with a study done by Mogre et al. (2016) in Ghana. About 26% of them were unable to define EBF; 66% defined EBF as giving the child breastmilk and water and the others did not have an idea. 22% of the mothers said breastmilk only is not sufficient to meet the nutritional needs of the child. The reasons they offered for holding this view were that the child may not be satisfied and could die if fed with only breastmilk for 6 months. Others also had the opinion that the child also feels thirsty and should be given water to drink. The majority (88.9%) of the mothers did not know that breastmilk could be expressed, stored safely and given to the child in times of the mother's absence. Regarding how to overcome breastfeeding difficulties, 8.9 % of the mothers said herbs/drugs could be taken to overcome the difficulty; 6.8 % said breastfeeding should be stopped; 11.1 % said breastfeeding should be continued and 4.2 % did not know what to do.

5.3 Level of Attitude toward EBF

The mean score for attitude towards pressure ulcer prevention in this study is $40.34 \pm SD5.291$. the Postnatal mother who scores above 25 were considered as having good attitude while those who score below 25 were labeled as having poor attitude. In this present study, 106 (95.5%) postnatal mother have good attitude while the rest 5 (4.5%) are having poor attitude toward exclusive breastfeeding.

The previous study conducted in Malaysia by Mohamad Pilus et al. (2019) showed that 68.5% (n=89) of mother had positive attitude toward exclusive breastfeeding. The study also found that mothers with positive attitude towards breastfeeding have odds around eight times higher to perform exclusive breastfeeding compared to negative attitude. This is comparable with a study in Japan where exclusive breastfeeding was likelier to be performed by positive attitude mothers relative to neutral or negative attitude (Inoue et al., 2013).

In comparison to the current research with a study done by Samuel and Oluwaseun (2020) where they found that 54% of the participants had poor attitude towards EBF. The researcher and her colleague used a scoring system for attitude questionnaire with a 5-point Likert scale while in the current study used a positive and negative choices of answers (yes, no, and not sure). Thus, this may affect to the difference result for each study since the total score will be different too.

5.4 Level of practice of EBF

The mean score for practice on EBF is $4.05 \pm SD2.015$. 59.5% respondents in this research had good practice towards EBF while the rest 40.5% of the respondents had a poor practice toward EBF. This result was consistent with the previous studies done in Italy by Cascone et al. (2019) where the researchers showed that 71% of them knew that exclusive breastfeeding should be practiced for at least six months. Nearly all mothers had breastfed their child (93.2%), but only 33.3% of them had practiced exclusive breastfeeding for at least six months. The reason of the postnatal mothers had poor practice may be due to employment status of the mothers, being head of household, getting husband support, feeding colostrum and traditional beliefs towards breastfeeding were predictors of EBF practice. This statement were supported in a study by Yimer et al. (2021) where they found that postnatal mother had poor practice due to sociodemographic characteristic.

In addition, the previous study showed that 42% of the mothers did not EBF their babies. These mothers did not practice EBF because they misunderstood certain signs of the child to mean wanting to eat food or drink water, regarded breastmilk to be inadequate to meet the nutritional needs of the child and misunderstood healthcare professionals' EBF advice (Mogre et al., 2016).

5.5 The association between sociodemographic with level of knowledge, attitude, and practice of EBF among postnatal mothers in Balakong Health Clinic.

The result obtained in this study shows that there was no significant association between the sociodemographic characteristic with level of knowledge of EBF as the p-value was more than 0.05. This result was consistent with a study done by Samuel and Oluwaseun (2020) where there no significant difference between employed and unemployed nursing mother. The researcher recommended that every nursing mother should be actively involved in the practice of exclusive breastfeeding and Government should established a nursery in each of our working place for easy access of mother to their child. In addition, out of the 79 mothers, only 31% practiced exclusive breastfeeding. The ages, education and occupation of the respondents were found not to have influenced the practice of EBF (Mo et al., 2011).

Next, the result obtained in this study shows that there was significant association between the age of the participants with level of attitude toward EBF as the p-value was less than 0.05 ($p < 0.001$). The a study done by Johari and Abdul Hamid (2021) found that breastfeeding experience and maternal age were significantly associated with breastfeeding self-efficacy and infant feeding attitudes. Meanwhile, maternal age had shown significant association with infant feeding attitudes among overweight and obese mothers. From the finding, they found that maternal age was significantly associated with the method of infant feeding. However, the study by Mgongo et al. (2019) found that not only maternal age was significantly associated with infant feeding attitudes, but tiredness, income, parity, educational level, breastfeeding support, occupation, breastfeeding experience, and the availability of private space for breastfeeding also influence the attitudes to breastfeeding.

On the other hand, factors such as low maternal education, higher socioeconomic status, nonvaginal birth and use of prelacteal feeds were significant predictors of lower

EBF practice. To optimally reap the potential benefits of proper infant feeding, effort needs to be shifted to strategies that not only sustains and promotes knowledge to those that confer behavioural change. Exclusive breastfeeding support groups may be able to serve this need (Onah et al., 2014). Finally, the researcher concluded that there is no significant different between occupation of nursing mother and practice of exclusive breastfeeding (Samuel & Oluwaseun, 2020).

5.6 The association between knowledge, attitude, and practice of EBF among postnatal mothers in Balakong Health Clinic

The result obtained in this study shows that there was no significant association between the level of knowledge with level of practice of EBF as the p-value was more than 0.05. Meanwhile, the previous study done by Dan and Dan (2022), they found that there is a significant link between knowledge and exclusive breastfeeding practice. They also found a link between exclusive breastfeeding attitude and exclusive breastfeeding behaviour among participants. Knowledge and attitude alone are not sufficient to ensure successful breastfeeding practice among mothers. Measures to improve breastfeeding should address issues surrounding culture and traditions as well as improving deliverance of readily available support and its continuity (Ishak et al., 2014).

Next, this study shows that there was no significant association between the level of attitude with level of practice of EBF as the p-value was more than 0.05. A study found that there is no significant difference between infants either on breast feed or formula feed in their length and weight. The growth was slightly better in formula feeding during first 6 months of life. But another study also found that there are infants on breast feed have better weight gain as compared to infants on formula feeding, moreover, the length was also greater with breast feeding rather than formula feed

infants (A. K. Singh et al., 2017). In addition, a study done by Nakada (2021) the researcher found that comparing the pamphlet and comparison groups revealed no significant differences in breastfeeding continuation rates at 3 months after returning to work. Program intervention was associated with a significant increase in breastfeeding continuation rates at 3 months after returning to work; however, pamphlet intervention alone resulted in no significant difference. The program was effective but time consuming, and costly due to the personnel needed to run the intervention. It is difficult for women with children to participate in a 90-min program.

5.7 Conclusion

All objectives of this study have been achieved. The result obtained in this study showed that majority of the respondents had good level of knowledge, positive level of attitude and good breastfeeding practice. However, there is no association between level of knowledge, level of attitude and level of practice which conclude that the alternative hypothesis being rejected.

CHAPTER 6

LIMITATION AND RECOMMENDATION

6.0 Introduction

This study was a cross-sectional study with a convenience sampling method that had been conducted in a short time to collect data. During the study period, there were several limitations identified and will be discussed in this chapter.

6.1 Limitation

Firstly, the data collection period for this study was short due to the long waiting time in getting ethical approval from NMRR and JKNS and the permission to collect data from the selected study location. Hence, the researcher only can get 82% of the participants from the total sample size.

Since the coronavirus (COVID-19) hit Malaysia in 2019, Malaysia has implemented a new SOP and UPM students must stay in their respective residences and are not allowed to go out, including nursing students. The investigator must replace the delayed clinical training starting from May 2021 until September 2022. This study was conducted when the investigator was undergoing clinical training on weekdays and classes on weekends causing the time required to do the study to be less than it should have been.

In addition, the selection of a clinic in an urban area was very difficult to do because the investigator must undergo clinical training in a hospital and a clinic. The researcher had to undergo clinical training at the Salak health clinic, and it was hard for researcher to collect the data during weekdays at the Balakong health clinic. Researchers need to

take initiatives such as taking 2-3 days off from clinical training to collect data in the study area.

Next, this study uses the convenient method, and the researcher must come to the study location and personally meet with the appropriate participants. The estimations produced from convenience samples are frequently skewed since researchers are typically unable to generalize survey results to the population at large. Due to the sample's inadequate representation of the target population, there is a chance of either an over or under representation. The researcher frequently doesn't recruit a diverse group of volunteers for data collection because they choose their subjects based on accessibility, and they may also leave out important demographic subgroups from the results.

6.2 Recommendation

A suggestion for future studies is to further study the contraindications of breastfeeding or giving breast milk to babies. As is well known, breast milk is the best food and provides the most complete form of nutrition for newborns up to the age of 2 years, but society also needs to know the things that allow breastfeeding that should not be given for the good of the child's health.

Although there are rare exceptions when breastfeeding is not recommended, this can be used to assess possible risk factors for infants and to provide public exposure to these unusual risk factors. There are several types of contraindications, therefore focusing on these types of breastfeeding contraindications may be recommended to increase and improve awareness, knowledge, and practice. This is useful for managing and preventing the risk of newborns getting the diseases from the mother and improving early detection and timely intervention with less invasive treatment

methods if they drink the breast milk.

In addition, breastfeeding education programs need to be improved especially in clinics or through media platforms. This is to ensure effective and positive results where the latest information about breast milk can be reached by the target group in society. As in nursing practice, health education is important to create awareness, provide knowledge and guide appropriate practices to the people. Therefore, the content of health education should be improved and follow the latest news and information to serve the community.

6.3 Conclusion

Based on the results obtained through this study, the majority of respondents have good knowledge about exclusive breastfeeding, have a positive attitude towards breastfeeding as well as good practices about breastfeeding for children under 2 years of age. Although the results showed positive results for mothers who attended the health clinic in Balakong, Selangor, health education about the importance of maintaining breastfeeding and the importance of breast milk for mothers and children needs to be improved to increase the awareness among them.

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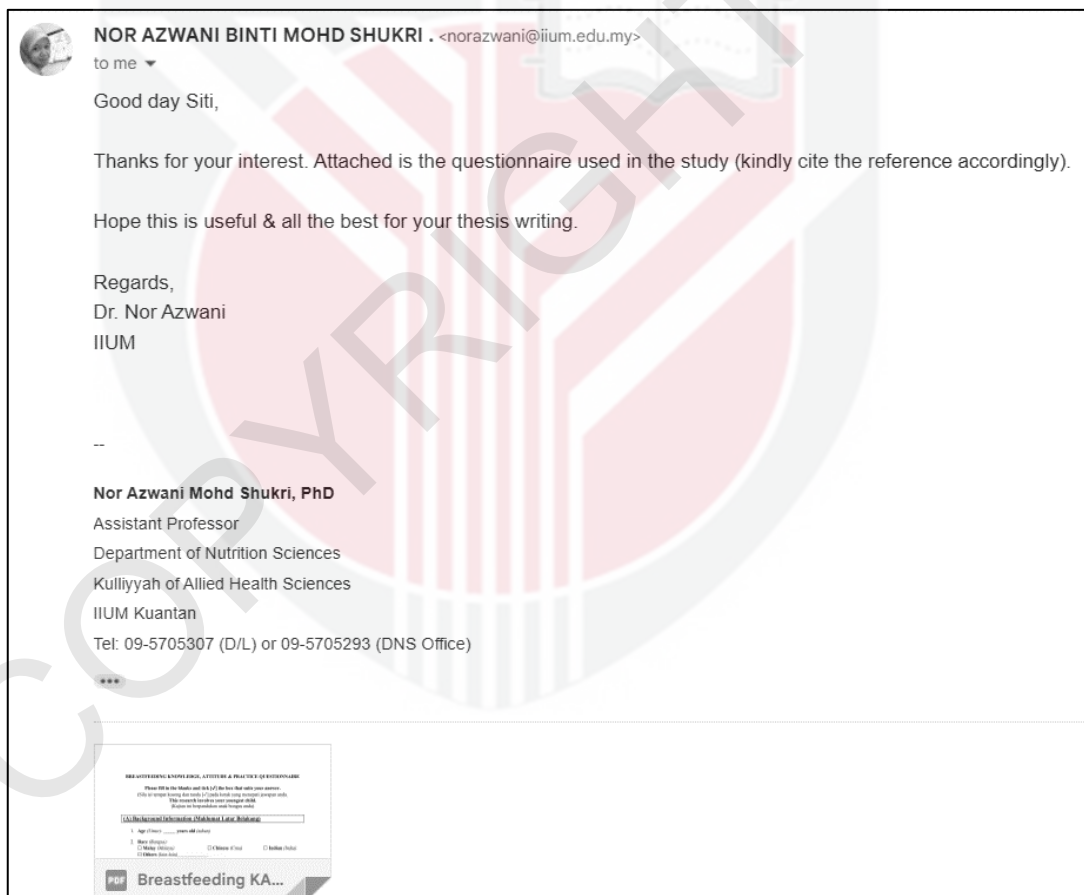
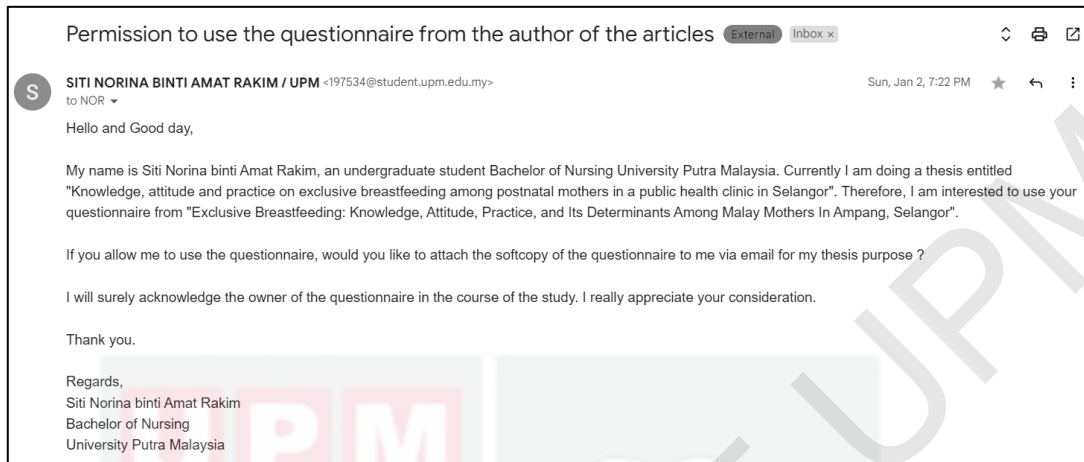
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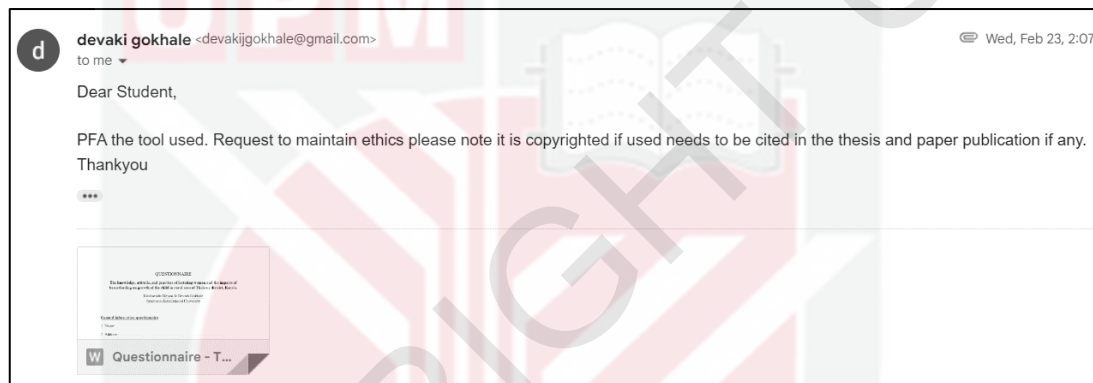
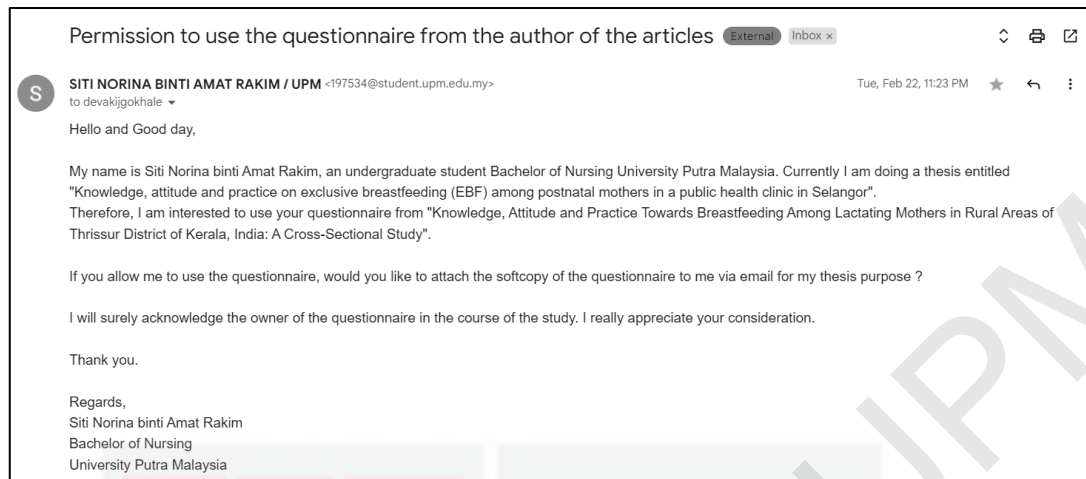
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APPENDICES

APPENDIX 1: PERMISSION FOR A STUDY INSTRUMENT 1



APPENDIX 2: PERMISSION FOR A STUDY INSTRUMENT 2



APPENDIX 3: QUESTIONNAIRE VALIDATION

PART A: KNOWLEDGE OF BREASTFEEDING

(Bahagian A: Pengetahuan mengenai penyusuan badan)

Instruction (Arahan):

This part is to assess the postnatal mother's level of knowledge about breastfeeding. Please rate the most appropriate score for each question according to the scale provided below. You may answer by ticking (✓) in the column provided)

(Bahagian ini adalah untuk mengakses tahap pengetahuan ibu selepas bersalin tentang penyusuan badan. Sila nilaikan skor yang paling sesuai untuk setiap soalan mengikut skala yang disediakan di bawah. Anda boleh menjawab dengan menanda (✓) pada ruangan yang disediakan)

| Score (Skor) | 1 | 2 | 3 | 4 |
|-----------------------|-------------------------------|-------------------------------|--------------------|----------------------------------|
| Relevance (Relevansi) | Not relevance (Tidak relevan) | Quite relevant (Agak relevan) | Relevant (Relevan) | Highly relevant (Sangat relevan) |

| Question (Soalan) | Response (Respon) | Relevance (Relevansi) | | | | Remark (Catatan) |
|---|-------------------|-----------------------|---|---|---|------------------|
| | | 1 | 2 | 3 | 4 | |
| 1. Breastfeeding is beneficial because it protects the baby against allergies and is easily digested. (Penyusuan susu ibu berfaedah kerana ia melindungi bayi daripada alahan dan mudah dihadam.) | Yes (Benar) | | | | | |
| | No (Tidak benar) | | | | ✓ | |
| 2. The first milk, "colostrum" is high in antibodies and antioxidants, which help to establish a newborn's immune system. (Susu pertama, "kolostrum" mengandungi antibodi dan antioksidan yang tinggi, yang membantu membentuk sistem imun bayi baru lahir.) | Yes (Benar) | | | | | |
| | No (Tidak benar) | | | | ✓ | |
| 3. Frequent breastfeeding in the early newborn period can help reduce jaundice. (Kekerapan penyusuan badan pada awal kelahiran boleh mengurangkan penyakit kuning.) | Yes (Benar) | | | | | |
| | No (Tidak benar) | | | | ✓ | |
| 4. Growth patterns of breastfed infants differ from those of formula feeding infants. (Corak tumbesaran bayi yang menyusu badan berbeza dengan bayi yang diberikan susu formula.) | Yes (Benar) | | | | | |
| | No (Tidak benar) | | | | ✓ | |
| 5. If a breastfed infant has not regained his birth weight by two weeks of age, the mother should be encouraged to give formula milk. (Jika bayi yang menyusu badan tidak bertambah berat badan pada usia 2 minggu, ibu digalakkan memberi susu formula.) | Yes (Benar) | | | | | |
| | No (Tidak benar) | | | | ✓ | |
| 6. Exclusive breastfeeding should be given until the baby is 6 months old. (Penyusuan susu badan secara eksklusif perlu diberikan sehingga bayi berumur 6 bulan.) | Yes (Benar) | | | | | |
| | No (Tidak benar) | | | | ✓ | |

PART B: ATTITUDE OF BREASTFEEDING

(Bahagian B: Sikap terhadap penyusuan badan)

Instruction (Arahan):

This part is to assess the postnatal mother's level of attitude about breastfeeding. Please rate the most appropriate score for each question according to the scale provided below. You may answer by ticking (✓) in the column provided.

(Bahagian ini adalah untuk mengakses tahap sikap ibu selepas bersalin tentang penyusuan badan. Sila nilaikan skor yang paling sesuai untuk setiap soalan mengikut skala yang disediakan di bawah. Anda boleh menjawab dengan menanda (✓) pada ruangan yang disediakan.)

| | | | | |
|-----------------------|-------------------------------|-------------------------------|--------------------|----------------------------------|
| Score (Skor) | 1 | 2 | 3 | 4 |
| Relevance (Relevansi) | Not relevance (Tidak relevan) | Quite relevant (Agak relevan) | Relevant (Relevan) | Highly relevant (Sangat relevan) |

| Question (Soalan) | Response (Respon) | | | | | Relevance (Relevansi) | | | | Remark (Catatan) |
|---|-------------------|---|----|---|----|-----------------------|---|---|---|--|
| | SA | A | US | D | SD | 1 | 2 | 3 | 4 | |
| 1. I breastfeed my baby up until the age of 6 months old <i>(Saya memberikan susu badan kepada bayi saya sehingga berumur 6 bulan)</i> | | | | | | | | | ✓ | |
| 2. I breastfeed my baby every 2-4 hours <i>(Saya memberikan susu badan kepada bayi saya setiap 2-4 jam)</i> | | | | | | | | | ✓ | |
| 3. Baby will get the benefit of breastfeeding after stop breastfeed <i>(Bayi tidak akan mendapat faedah penyusuan badan setelah putus susu)</i> | | | | | | | | | ✓ | <i>change to: baby will get the benefit of breastfeeding after weaning</i> |
| 4. I started feeding my baby with formula milk first before giving breastfeed <i>(Saya mula menyusukan bayi saya dengan susu formula terlebih dahulu sebelum memberi susu badan)</i> | | | | | | | | | ✓ | |
| 5. I will change to formula milk if breastfeeding causes diarrhea to my baby | | | | | | | | | ✓ | |

| | | | | | | | | | | | | | | | | | | | |
|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|
| | <i>(Saya akan bertukar ke susu formula jika penyusuan badan menyebabkan bayi saya cirit-birit)</i> | | | | | | | | | | | | | | | | | | |
| 6. | After breastfeeding, I will burp my baby <i>(Selepas penyusuan badan, saya akan sendawakan bayi saya)</i> | | | | | | | | | | | | | | | | | ✓ | |
| 7. | Formula milk is more convenient than breastfeeding <i>(Susu formula lebih mudah diberikan berbanding susu badan)</i> | | | | | | | | | | | | | | | | | ✓ | |
| 8. | Mother's health and hygiene are essential for safe breastfeeding <i>(Kesihatan dan kebersihan ibu adalah penting untuk penyusuan badan yang selamat)</i> | | | | | | | | | | | | | | | | | ✓ | |
| 9. | I stop giving breastfeed after notice changes in my body shape <i>(Saya berhenti memberikan penyusuan badan setelah menyedari terdapat perubahan pada bentuk badan saya)</i> | | | | | | | | | | | | | | | | | ✓ | <i>change to- I stop breastfeeding after I notice changes in my body shape saya berhenti menyusu apabila menyedari terdapat perubahan pada bentuk badan saya</i> |
| 10. | I feel the bonding between me and my baby increases during breastfeed <i>(Saya merasakan ikatan antara ibu dan anak semakin kuat ketika penyusuan badan)</i> | | | | | | | | | | | | | | | | | ✓ | <i>change to I feel the bonding between me and my baby strengthened during breastfeeding</i> |

PART C: CHILD FEEDING PRACTICE

(Bahagian C: Amalan penyusuan anak)

Instruction (Arahan):

This part is to assess the postnatal mother's level of child feeding practice. Please rate the most appropriate score for each question according to the scale provided below. You may answer by ticking (✓) in the column provided.

(Bahagian ini adalah untuk mengakses tahap amalan ibu selepas bersalin tentang amalan penyusuan anak. Sila nilaikan skor yang paling sesuai untuk setiap soalan mengikut skala yang disediakan di bawah. Anda boleh menjawab dengan menanda (✓) pada ruangan yang disediakan.)

| | | | | |
|--------------------------|----------------------------------|----------------------------------|-----------------------|-------------------------------------|
| Score (Skor) | 1 | 2 | 3 | 4 |
| Relevance (Relevansi) | Not relevance (Tidak relevan) | Quite relevant (Agak relevan) | Relevant (Relevan) | Highly relevant (Sangat relevan) |

| Question (Soalan) | Response (Respon) | Relevance (Relevansi) | | | | Remark (Catatan) |
|--|--|-----------------------|---|---|---|------------------|
| | | 1 | 2 | 3 | 4 | |
| For question 1-4, you can tick only 1 answer (Untuk soalan 1-4, anda hanya boleh tanda 1 jawapan sahaja) | | | | | | |
| 1. Type of milk that is given to your child (Jenis penyusuan yang anda beri kepada anak anda) | Only Breastmilk (Hanya susu badan) | | | | | |
| | Breastmilk and infant formula milk (Susu badan bersama susu formula bayi) | | | | | ✓ |
| | Only infant formula milk (Hanya susu formula bayi) | | | | | |
| 2. Duration of giving breastmilk (Tempoh anda memberi susu badan) | No breastmilk was given (Tidak memberi susu badan) | | | | | |
| | Less than 3 months (Kurang dari 3 bulan) | | | | | |
| | 3 months – 6 months (3 bulan – 6 bulan) | | | | | ✓ |
| | More than 6 months (Lebih dari 6 bulan) | | | | | |

APPENDIX 4: PARTICIPANT'S INFORMATION SHEET AND CONSENT (ENGLISH)

PARTICIPATION INFORMATION SHEET

1. Title of study

Knowledge, attitude, and practice of exclusive breastfeeding (EBF) among postnatal mothers attending Balakong Health Clinic, Selangor

2. Name of Investigator and Institution

- a. Siti Norina binti Amat Rakim, Universiti Putra Malaysia (UPM)
- b. Associate Professor Dr. Lee Khuan, Universiti Putra Malaysia (UPM)
- c. Dr. Ruthpackiavathy A/P Rajen Durai, Universiti Putra Malaysia (UPM)

3. Name of sponsor: No external funding

4. Introduction

The percentage of exclusive breastfeeding (EBF) of newborns up to the age of 6 months is still weak and does not reach the target required by Malaysia. Therefore, exclusive breastfeeding among postnatal mothers is a hot topic to discuss. Mothers' knowledge and attitude about EBF play an important role in knowing their level of practice. Therefore, this study aims to evaluate the level of knowledge, attitude, and practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor.

You are invited to participate in a research study because you have criteria for this study that requires your understanding of EBF. 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 researcher if anything is unclear or if you like more information. After you are properly satisfied that you understand this study and that you wish to participate, you must sign this 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. If you volunteer to be in this study, you may withdraw from it at any time. If you withdraw, any data collected from you up to your withdrawal will still be used for the study. Your refusal to participate or withdraw will not affect any medical or health benefits to which you are otherwise entitled. The result of your questionnaire answer will not be informed. However, if you want to know your result; you need to email at siti.norina.1104@gmail.com.

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 is conducted to determine the level of knowledge, attitude, and practice of EBF among postnatal mothers attending Balakong Health Clinic, Selangor. A total of 165 respondents like you, will be participating in this study. The whole study will last about 12 months from April 2022 - March 2023 and data collection will last for 1 week from 7th October 2022 – 14th October 2022. Your participation will be about 15-20 minutes only.

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

You will be given a survey form to be answered. You must answer all the questions honestly and completely. This questionnaire contains four sections that will enquire about sociodemographic (PART A), knowledge of EBF (PART B), attitude towards EBF (PART C), and practice on EBF (PART D). You need to read the instruction first before answering the questions. If your condition or circumstances change during the study, you must tell the investigator. As for your safety, you need to follow the instruction given to make sure the process is going well.

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

There is no potential risk or harm to the participants in this study. No clinical procedures were included in this study. The participants only need to complete the questionnaire distributed.

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

It has no direct benefits to the respondent, but it will create awareness about the importance of EBF among respondents.

9. Who is funding this research?

This study does not receive any external funding. There will be no payment given to the respondent as this participation is voluntary.

10. Will my information be kept private?

Yes. All information obtained from this study will be kept and handled confidentially per applicable laws and/or regulations. Your identity will not be revealed without your permission throughout the activities in this study including presentation and publication. However, individuals involved in this study and the subjects' medical care, qualified

monitors, auditors, and governmental or regulatory authorities may inspect the study data, where appropriate and necessary.

12. Who should I call if I have questions?

If you have any problems, please do not hesitate to contact one of the people listed below.

i. Researcher

Siti Norina binti Amat Rakim

Contact no.: +60106697046

Email: siti.norina.1104@gmail.com

ii. Supervisor

Professor Madya Dr. Lee Khuan

Contact no.: +60162040157

Email: leekhuan@upm.edu.my

iii. Co-supervisor

Dr. Ruthpackiavathy A/P Rajen Durai

Contact no.: +60122688275

Email: ruthpackiavaty@upm.edu.my

If you have any questions about your rights as a participant in this study, please contact the Secretary of Medical Research & Ethics Committee, Ministry of Health Malaysia at 03-3362 8407/8205/8888

INFORMED CONSENT FORM

Title of Study:

Knowledge, Attitude, and Practice of Exclusive Breastfeeding (EBF) Among Postnatal Mothers attending Balakong Health Clinic, Selangor

By signing below, I confirm the following:

- 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 any time free withdraw from the study without giving a reason and this will in no way affect my future treatment. I am not taking part in any other research study currently. I understand the minimal risks and benefits, and I am free to give my informed consent to participate in the conditions stated. I understand that I must follow the study doctor's (investigator's) instructions related to my participation in the study.
- I understand that research staff, qualified monitors and auditors, the sponsor, or its affiliates, and governmental or regulatory authorities, have direct access to my medical record 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 agree with my participation in this study.

Respondent:

Signature:

I/C number:

Name:

Date:

An investigator conducting informed consent:

Signature:

I/C number:

Name:

Date:

Impartial witness: *(Required if contents of the participant information sheet are orally communicated to the respondent)*

Signature:

I/C number:

Name:

Date:

APPENDIX 5: PARTICIPANT'S INFORMATION SHEET AND CONSENT (MALAY)

RISALAH MAKLUMAT RESPONDEN

1. Tajuk Penyelidikan

Pengetahuan, sikap dan amalan penyusuan susu ibu secara eksklusif (EBF) dalam kalangan ibu selepas bersalin di Klinik Kesihatan Balakong, Selangor.

2. Nama penyelidik dan Nama Institusi:

- a. Siti Norina binti Amat Rakim, Universiti Putra Malaysia (UPM)
- b. Profesor Madya Dr. Lee Khuan, Universiti Putra Malaysia (UPM)
- c. Dr. Ruthpackiavathy A/P Rajen Durai, Universiti Putra Malaysia (UPM)

3. Nama Penaja: Tidak menerima penajaan

4. Pengenalan:

Peratusan penyusuan susu ibu secara eksklusif (EBF) kepada bayi baru lahir sehingga umur 6 bulan masih lemah dan tidak mencapai sasaran yang dikehendaki Malaysia. Justeru, penyusuan susu ibu secara eksklusif dalam kalangan ibu selepas bersalin menjadi topik hangat untuk dibincangkan. Pengetahuan dan sikap ibu tentang EBF memainkan peranan penting dalam mengetahui tahap amalan mereka. Oleh itu, kajian ini bertujuan untuk menilai tahap pengetahuan, sikap, dan amalan EBF dalam kalangan ibu selepas bersalin di sebuah Klinik Kesihatan Balakong, Selangor.

Anda telah dijemput untuk menyertai penyelidikan ini kerana anda telah memenuhi kriteria dalam kajian ini yang memerlukan pemahaman anda tentang EBF. Adalah 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 tentang penerangan yang diberi sebelum anda bersetuju untuk menyertai penyelidikan ini. Jika ada sebarang kemusykilan ataupun maklumat lanjut yang anda ingin tahu, anda boleh bertanya kepada penyelidik. Setelah anda berpuas hati bahawa anda memahami penyelidikan ini dan anda berminat untuk turut serta, anda dikehendaki untuk menandatangani Borang Persetujuan atau Keizinan Responden ini.

Penyertaan anda dalam penyelidikan ini adalah secara sukarela. Anda tidak perlu menyertai penyelidikan ini jika anda tidak mahu. 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. Jika anda tidak mahu menyertai ataupun menarik diri daripada penyelidikan ini, tindakan anda tidak akan menjejaskan

segala hak dan keistimewaan perubatan kesihatan yang anda layak terima. Keputusan untuk jawapan anda dalam soal selidik ini tidak akan diberitahu. Walau bagaimanapun, jika anda ingin mengetahui keputusannya: anda perlu email kepada siti.norina.1104@gmail.com. Penyelidikan ini telah mendapat kelulusan Jawatankuasa Etika dan Penyelidikan Perubatan, Kementerian Kesihatan Malaysia.

5. Apakah tujuan penyelidikan ini dilakukan?

Tujuan penyelidikan ini dilakukan adalah untuk mengetahui tahap pengetahuan, sikap dan amalan penyusuan susu ibu secara eksklusif (EBF) dalam kalangan ibu selepas bersalin yang menghadiri Klinik Kesihatan Balakong, Selangor. Seramai 165 orang responden akan menyertai penyelidikan ini. Keseluruhan kajian akan berlangsung kira-kira 12 bulan dari April 2022 - Mac 2023 dan pengumpulan data akan berlangsung selama 1 minggu dari 7 Oktober 2022 – 14 Oktober 2022. Penyertaan anda akan mengambil masa kira-kira 15-20 minit sahaja.

6. Apakah tanggungjawab saya sewaktu menyertai penyelidikan ini?

Anda akan diberikan borang kaji selidik untuk dijawab. Anda hendaklah menjawab semua soalan yang dikemukakan dengan jujur dan lengkap. Soal selidik ini mengandungi empat bahagian yang akan menyoal tentang sosiodemografi (BAHAGIAN A), pengetahuan tentang EBF (BAHAGIAN B), sikap terhadap EBF (BAHAGIAN C), dan amalan mengenai EBF (BAHAGIAN D). Jika situasi atau keadaan anda berubah semasa kajian, anda mesti memberitahu penyelidik. Bagi keselamatan anda, anda perlu mengikut arahan yang diberikan untuk memastikan proses berjalan dengan baik.

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

Tiada potensi risiko atau bahaya kepada peserta dalam kajian ini. Tiada prosedur klinikal dimasukkan dalam kajian ini. Peserta hanya perlu melengkapkan borang soal selidik yang diedarkan.

8. Apakah manfaatnya saya menyertai kajian ini?

Tiada manfaat yang akan anda terima secara langsung, tetapi kajian ini akan meningkatkan tahap kesedaran terhadap kepentingan EBF dalam kalangan responden.

9. Siapakah yang membiayai penyelidikan ini?

Kajian ini tidak menerima penajaan dari pihak luar. Kajian ini tidak menerima sebarang pembiayaan luar. Tiada bayaran akan diberikan kepada responden kerana penyertaan ini adalah secara sukarela.

10. Adakah maklumat perubatan saya akan dirahsiakan?

Ya. Segala maklumat anda yang diperolehi dalam kajian ini akan disimpan dan dikendalikan secara sulit, bersesuaian dengan peraturan-peraturan dan/atau undang-undang yang berkenaan.

Sekiranya hasil penyelidikan ini diterbitkan atau dibentangkan kepada orang ramai, identiti anda tidak akan didedahkan tanpa kebenaran anda. Namun, individu yang terlibat dalam kajian ini dan rawatan perubatan anda, pemantau yang berkeelayakan, juruaudit, dan pihak berkuasa kerajaan atau kawal selia boleh memeriksa data kajian, jika perlu.

11. Siakah yang perlu saya hubungi sekiranya saya mempunyai sebarang pertanyaan?

a. Penyelidik

Siti Norina binti Amat Rakim

Contact no.: +60106697046

Email: siti.norina.1104@gmail.com

b. Supervisor

Professor Madya Dr. Lee Khuan

Contact no.: +60162040157

Email: leekhuan@upm.edu.my

c. Co-supervisor

Dr. Ruthpackiavathy A/P Rajen Durai

Contact no.: +60122688275

Email: ruthpackiavaty@upm.edu.my

Jika anda mempunyai persoalan berkaitan tentang hak anda sebagai responden dalam kajian ini, anda boleh menghubungi Setiausaha Jawatankuasa Etika dan Penyelidikan Perubatan (MREC), Kementerian Kesihatan Malaysia melalui talian telefon 03-3362 8407/8205/8888.

BORANG PERSETUJUAN/KEIZINAN RESPONDEN

Tajuk Penyelidikan:

Pengetahuan, sikap dan amalan penyusuan susu ibu secara eksklusif (EBF) dalam kalangan ibu selepas bersalin di Klinik Kesihatan Balakong, Selangor.

Dengan menandatangani borang ini, saya mengesahkan bahawa:

- Saya telah dimaklumkan tentang penyelidikan ini secara lisan dan bertulis dan saya telah membaca dan memahami segala maklumat yang diberikan.
- Saya diberikan masa yang cukup untuk mempertimbangkan penyertaan saya dalam kajian ini dan diberikan peluang untuk bertanyakan soalan dan semua persoalan 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 tidak mengambil bahagian dalam mana-mana penyelidikan lain pada masa ini. 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 mematuhi nasihat dan arahan yang berkaitan dengan penyertaan saya dalam penyelidikan ini daripada doktor penyelidikan (penyelidik) .
- Saya setuju/tidak setuju* untuk menyertai kajian ini.

Responden:

Tandatangan:

Nama:

Nombor K/P:

Tarikh:

Penyelidik yang mengendalikan proses menandatangani borang keizinan:

Tandatangan:

Nama:

Nombor K/P:

Tarikh:

Saksi tidak-berpihak/adil:

Tandatangan:

Nama:

Nombor K/P:

Tarikh:

APPENDIX 6: QUESTIONNAIRE

BREASTFEEDING KNOWLEDGE, ATTITUDE & PRACTICE QUESTIONNAIRE

(Soal selidik berkaitan pengetahuan, sikap dan amalan penyusuan badan)

Please fill in the blanks and tick [✓] the box that suits your answer.

(Sila isi tempat kosong dan tanda [✓] pada kotak yang menepati jawapan anda)

This research involves your youngest child.
(Kajian ini adalah berpandukan anak bongsu anda)

(A) Background Information *(Maklumat Latar Belakang)*

1. **Age** *(Umur)*: _____ **years old** *(tahun)*

2. **Race** *(Bangsa)*:
 - Malay** *(Melayu)*
 - Chinese** *(Cina)*
 - Indian** *(India)*
 - Others** *(lain-lain)*

3. **Education status** *(Tahap pendidikan)*:
 - Primary school** *(Sekolah rendah)*
 - Secondary school** *(Sekolah menengah)*
 - Foundation / Matriculation / Diploma** *(Asasi / Matrikulasi / Diploma)*
 - Bachelor Degree** *(Ijazah Sarjana Muda)*
 - Masters** *(Master)*
 - PhD**

4. **Occupation** *(Pekerjaan)*
 - Unemployed** *(Tidak bekerja)*
 - Self employed** *(Bekerja sendiri)*
 - Private sector** *(Sektor swasta)*
 - Government sector** *(Sektor kerajaan)*

5. **Working hours** *(waktu bekerja)*:
 - None** *(Tiada)*
 - Full time** *(Sepenuh masa)*
 - Part time** *(Sambilan)*

6. **Maternity leave period** *(Tempoh anda cuti bersalin)*: _____ **days** *(hari)*

7. **Total monthly household income** (*Jumlah pendapatan bulanan isi rumah*):
- Less than RM2,000** (*Kurang daripada RM 2,000*)
 - RM 2,000 – 4,000**
 - RM 4,000 – 6,000**
 - More than RM 6,000** (*Lebih daripada RM 6,000*)
8. **Number of children** (*Bilangan anak*): _____
9. **Age of youngest child** (*umur anak bongsu*): _____ **months** (*bulan*)

(B) Knowledge of breastfeeding (*Pengetahuan mengenai*

7. **Breastfeeding is beneficial because it protects the baby against allergies and is easily digested.** (*Penyusuan susu ibu berfaedah kerana ia melindungi bayi daripada alahan dan mudah dihadam.*)
- Yes** (*Benar*)
 - No** (*Tidak benar*)
8. **The first milk, "colostrum" is high in antibodies and antioxidants, which help to establish a newborn's immune system.** (*Susu pertama, "kolostrum" mengandungi antibodi dan antioksidan yang tinggi, yang membantu membentuk sistem imun bayi baru lahir.*)
- Yes** (*Benar*)
 - No** (*Tidak benar*)
9. **Frequent breastfeeding in the early newborn period can help reduce jaundice.** (*Kekerapan penyusuan badan pada awal kelahiran boleh mengurangkan penyakit kuning.*)
- Yes** (*Benar*)
 - No** (*Tidak benar*)
10. **Growth patterns of breastfed infants differ from those of formula feeding infants.** (*Corak tumbesaran bayi yang menyusu badan berbeza dengan bayi yang diberikan susu formula.*)
- Yes** (*Benar*)
 - No** (*Tidak benar*)
11. **If a breastfed infant has not regained his body weight by two weeks of age, the mother should be encouraged to give formula milk.** (*Jika bayi yang menyusu badan tidak bertambah berat badan pada usia 2 minggu, ibu digalakkan memberi susu formula.*)
- Yes** (*Benar*)

No (*Tidak benar*)

12. Exclusive breastfeeding should be given until the baby is 6 months old.

(*Penyusuan susu ibu secara eksklusif perlu diberikan sehingga bayi berumur 6 bulan.*)

Yes (*Benar*)

No (*Tidak benar*)

(C) Attitude toward breastfeeding (*Sikap terhadap penyusuan*)

Circle the numbers that suit your view

(*Bulatkan nombor yang paling menepati pandangan anda*)

| Options (Pilihan jawapan) Statement (<i>Penyataan</i>) | Strongly agree (<i>Sangat setuju</i>) | Agree (<i>Setuju</i>) | Unsure (<i>Tidak pasti</i>) | Disagree (<i>Tidak setuju</i>) | Strongly disagree (<i>Sangat tidak setuju</i>) |
|--|---|-----------------------------------|---|--|--|
| 1) I breastfeed my baby up until the age of 6 months old (<i>Saya memberikan susu badan kepada bayi saya sehingga berumur 6 bulan</i>) | 5 | 4 | 3 | 2 | 1 |
| 2) I breastfeed my baby every 2-4 hours (<i>Saya memberikan susu badan kepada bayi saya setiap 2-4 jam</i>) | 5 | 4 | 3 | 2 | 1 |
| 3) Baby will get the benefit of breastfeeding after weaning (<i>Bayi akan mendapat faedah penyusuan badan setelah putus susu</i>) | 5 | 4 | 3 | 2 | 1 |
| 4) I started feeding my baby with formula milk first before giving breastfeeding (<i>Saya mula menyusukan bayi saya dengan susu</i>) | 5 | 4 | 3 | 2 | 1 |

| | | | | | |
|---|---|---|---|---|---|
| <i>formula terlebih dahulu sebelum memberi susu badan)</i> | | | | | |
| 5) I will change to formula milk if breastfeeding causes diarrhea to my baby <i>(Saya akan bertukar ke susu formula jika penyusuan badan menyebabkan bayi saya cirit-birit)</i> | 5 | 4 | 3 | 2 | 1 |
| 6) After breastfeeding, I will burp my baby <i>(Selepas penyusuan badan, saya akan sendawakan bayi saya)</i> | 5 | 4 | 3 | 2 | 1 |
| 7) Formula milk is more convenient than breastfeeding <i>(Susu formula lebih mudah diberikan berbanding susu badan)</i> | 5 | 4 | 3 | 2 | 1 |
| 8) Mother's health and hygiene are essential for safe breastfeeding <i>(Kesihatan dan kebersihan ibu adalah penting untuk penyusuan badan yang selamat)</i> | 5 | 4 | 3 | 2 | 1 |
| 9) I stop giving breastfeed after notice changes in my body shape <i>(Saya berhenti memberikan penyusuan badan setelah menyedari terdapat perubahan pada bentuk badan saya)</i> | 5 | 4 | 3 | 2 | 1 |
| 10) I feel the bonding between me and my baby increases during breastfeed <i>(Saya merasakan ikatan antara ibu dan anak semakin kuat ketika penyusuan badan)</i> | 5 | 4 | 3 | 2 | 1 |

(D) Child feeding practice (Amalan penyusuan anak)

For **questions 1-4**, you can tick **ONLY 1 answer**
(Untuk **soalan 1-4**, anda hanya boleh tanda **1 jawapan sahaja**)

1. Type of milk that is given to your child

(Jenis penyusuan yang anda beri kepada anak anda):

- Only Breastmilk** (Hanya susu badan)
- Breastmilk and infant formula milk** (Susu badan bersama susu formula bayi)
- Only infant formula milk** (Hanya susu formula bayi)

2. Duration of giving breastmilk (Tempoh anda memberi susu badan)

- No breastmilk was given** (Tidak memberi susu badan)
- Less than 3 months** (Kurang dari 3 bulan)
- 3 months – 6 months** (3 bulan – 6 bulan)
- More than 6 months** (Lebih dari 6 bulan)

3. Reasons for giving infant formula milk (Sebab-sebab memberi susu formula bayi):

- No infant formula milk was given** (Tidak memberi susu formula)
- Working / not enough time** (Keluar bekeja / tidak cukup masa)
- Insufficient milk** (Susu tidak mencukupi / susu ibu telah kering)
- Often tired/exhausted** (sering keletihan)
- Have illness that does not allow breastfeeding practice**
(mempunyai penyakit yang tidak membenarkan untuk memberi susu badan)

4. When did you start giving infant formula milk to your child?

(Bilakah anda mula memberi susu formula kepada anak?)

- No infant formula milk was given** (Tidak memberi susu formula)
- Before baby is 3 months old** (Sebelum bayi berumur 3 bulan)
- Before baby is 6 months old** (Sebelum bayi berumur 6 bulan)
- After baby is 6 months old** (Selepas bayi berumur 6 bulan)

For **questions 5 & 6**, you can tick **MORE than 1**
(Untuk **soalan 5 & 6**, anda boleh tanda **LEBIH dari 1 jawapan**)

5. Who had encouraged you to breastfeed your child?

(Siapakah yang menggalakkan anda memberikan susu badan kepada anak anda?)

- Healthcare staff (doctor / nurses / dietitian / nutrition)**
(Kakitangan penjagaan kesihatan [doktor / jururawat / pakar diet / pakar pemakanan])
- Family (husband / parent / siblings)**

(Keluarga [suami / ibubapa / adik-beradik])

Friends / colleagues (*Rakan / rakan sekerja*)

6. How did you get information about the benefits of breastfeeding?
(*Bagaimanakah anda mendapat informasi tentang kebaikan susu ibu?*)

Family, Relatives and Friends (*Keluarga / saudara mara dan rakan-rakan*)

Nurses / Doctor (*Jururawat / doktor*)

Books / magazines / newspaper / internet (*Buku / majalah / surat khabar / internet*)

Social media / television / radio (*media social/televisyen/radio*)

The end. Thank you for your cooperation
(*Tamat. Terima kasih atas kerjasama anda*)

APPENDIX 7: GANTT CHART

| Project | 2021 | | | 2022 | | | | | | | | | |
|---|------|-----|-----|------|-----|-----|-----|-----|-----|------|-----|------|-----|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | July | Aug | Sept | Oct |
| Identify research problem | ■ | ■ | | | | | | | | | | | |
| Discussion with supervisor regarding research title | ■ | ■ | | | | | | | | | | | |
| Review of an article for literature review | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
| Proposal draft preparation | | ■ | ■ | ■ | ■ | | | | | | | | |
| Proposal presentation | | | | | ■ | | | | | | | | |
| Proposal submission | | | | | ■ | ■ | | | | | | | |
| Ethical approval | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Obtained permission from the relevant party | | | | | | | | | | | | ■ | |
| Data collection | | | | | | | | | | | | ■ | ■ |
| Data analysis and Discussion | | | | | | | | | | | | ■ | ■ |
| Thesis presentation | | | | | | | | | | | | ■ | ■ |
| Thesis submission | | | | | | | | | | | | ■ | ■ |

APPENDIX 8: BUDGET

| No | Items | Cost |
|-------|----------------|----------|
| 1. | Printing | RM100.00 |
| 2. | Binding | RM40.00 |
| 3. | Internet data | RM100.00 |
| 4. | Transportation | RM60.00 |
| Total | | RM300.00 |

APPENDIX 9: APPROVAL FROM NMRR



JAWATANKUASA ETIKA & PENYELIDIKAN PERUBATAN
(Medical Research & Ethics Committee)
KEMENTERIAN KESIHATAN MALAYSIA
d/a Kompleks Institut Kesihatan Negara
Blok A, No 1, Jalan Setia Murni U13/52,
Seksyen U13, Bandar Setia Alam,
40170 Shah Alam, Selangor.



Tel: 03-3362 8888/8205

Ref : 22-00730-3HG (2)

Date: 22-August-2022

SITI NORINA BINTI AMAT RAKIM
UNIVERSITI PUTRA MALAYSIA (UPM)

Dear Sir/ Mdm,

ETHICS INITIAL APPROVAL: NMRR ID-22-00730-3HG (IIR)
Knowledge, Attitude, and Practice of Exclusive Breastfeeding (EBF) Among Postnatal Mothers attending Balakong Health Clinic, Selangor

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.

3. The investigators and study sites involved in this study are:

KLINIK KESIHATAN BALAKONG

Siti Norina binti Amat Rakim (Principal Investigator)

Dr. Lee Khuan

Dr. RuthPackiavathy a/p Rajen Durai

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 08, dated 22-Jul-2022
2. Patient Information Sheet & Informed Consent Form (Eng)_Version 04, dated 23-Jul-2022
3. Patient Information Sheet & Informed Consent Form (BM)_Version 04, dated 23-Jul-2022
4. Clinical Report Form/ Data Collection Form_Version 4.0, dated 25-Dec-2021
5. Questionnaire_Version 05, dated 02-Aug-2022
6. Investigator's documents : Declaration of Conflict of Interest (COI), IA-HOD-IA, and CV:
 - a) Siti Norina binti Amat Rakim (Principal Investigator)
 - b) Dr. Lee Khuan
 - c) Dr. RuthPackiavathy a/p Rajen Durai

5. Please note that ethical approval is valid until **21-August-2023**. The following are to be reported upon receiving ethical approval. Required forms can be obtained from the National Medical Research Registry (NMRR) website:

- i. **Continuing Review Form** has to be submitted to MREC within 2 month (60 days) prior to the expiry of ethical approval.

APPENDIX 10: APPROVAL FROM JKNS

| | | |
|--|---|---|
|  | JABATAN KESIHATAN NEGERI SELANGOR Tingkat M.9,10,11,14,17 & 18 , No.1, Wisma Sunway Jalan Tengku Ampuan Zabedah C 9/C , Seksyen 9 40100 Shah Alam Selangor Darul Ehsan |  |
| | | Tel : 03-5123 7333,03-5123 7334,03-5123 7335,03-5123 7401 Faks : 03-5123 7202 (Pengarsh),03-5123 7209 (Pengurusan), 03-5123 7299 (Perubatan),03-5123 7389 (Pergajian), 03-5123 7399(Kesihatan Awam),03-5123 7402 (BKRM), 03-5123 8604 (Farmasi) |
| | | Portal Rasmi : www.jknselangor.moh.gov.my |
| | | Ruj Kami : JKNS/KA/Q-712/04-01 Jld 19 (29) Tarikh : 6 Oktober 2022 |
| <p>Cik Siti Norina binti Amat Rakim Pelajar Tahun Akhir Bachelor Kejururawatan Jabatan Kejururawatan Fakulti Perubatan dan Sains Kesihatan Universiti Putra Malaysia Jalan Universiti 1, 43400 Serdang, Selangor</p> <p>Puan,</p> <p>MAKLUMBALAS PERMOHONAN MENGGUNAKAN FASILITI JABATAN KESIHATAN NEGERI SELANGOR UNTUK MENJALANKAN PENYELIDIKAN BERTAJUK "NMRR ID-22-00730-3HG (IIR) – KNOWLEDGE, ATTITUDE, AND PRACTICE OF EXCLUSIVE BREASTFEEDING (EBF) AMONG POSTNATAL MOTHERS ATTENDING BALAKONG HEALTH CLINIC, SELANGOR"</p> <p>Dengan hormatnya saya merujuk kepada perkara di atas.</p> <p>2. Sukacita dimaklumkan bahawa Bahagian Kesihatan Awam, Jabatan Kesihatan Negeri Selangor tiada halangan untuk membenarkan Puan menjalankan penyelidikan yang "NMRR ID-22-00730-3HG (IIR) – Knowledge, Attitude, And Practice Of Exclusive Breastfeeding (EBF) Among Postnatal Mothers Attending Balakong Health Clinic, Selangor" di fasiliti kesihatan di bawah:</p> <p>2.1 PKD Hulu Langat : KK Balakong</p> <p>3. Oleh yang demikian, diharapkan agar pihak Puan dapat menghubungi pegawai unit kualiti daerah di bawah terlebih dahulu untuk perbincangan lanjut. Dipohon juga kerjasama dari pihak Puan agar tidak mengganggu perkhidmatan dan mematuhi etika sewaktu menjalankan penyelidikan di fasiliti yang terlibat. Berikut adalah senarai direktori pegawai unit kualiti yang terlibat :-</p> | | |

Ringkasan Projek Penyelidikan**Tajuk Penyelidikan:**

Knowledge, Attitude, and Practice of Exclusive Breastfeeding (EBF) among postnatal mothers attending Balakong Health Clinic, Selangor

Nama dan Jabatan Ketua Penyelidik:

Siti Norina binti Amat Rakim, Pelajar Bacelor Kejururawatan, Jabatan Kejururawatan, Fakulti Perubatan dan Sains Kesihatan, Universiti Putra Malaysia

Nombor pendaftaran NMRR: NMRR ID-22-00730-3HG (IIR)

Rujukan kelulusan MREC: 22-00730-3HG (1)

Tarikh mula penyelidikan: 07 Oktober 2022

Tarikh tamat penyelidikan: 14 Oktober 2022

Objektif penyelidikan:

Tujuan penyelidikan ini adalah untuk mengkaji tahap pengetahuan, sikap dan amalan penyusuan susu badan secara eksklusif di kalangan ibu selepas bersalin di Klinik Kesihatan Balakong, Selangor. Hasil dapatan daripada penyelidikan ini akan dijadikan sebagai rujukan untuk sebarang penambahbaikan dalam program pendidikan kesihatan dan intervensi untuk pengendalian sendiri terhadap penyusuan pada masa hadapan.

Ringkasan metodologi penyelidikan:

Kajian ini adalah kajian berbentuk kajian rentas silang. Oleh itu, setiap peserta akan menerima satu set soal selidik yang terdiri daripada empat bahagian iaitu bahagian A (Demografi Sosial), bahagian B (Pengetahuan penyusuan badan), bahagian C (Sikap terhadap penyusuan badan), dan bahagian D (Amalan penyusuan badan). Semua peserta dikehendaki untuk menjawab semua soalan yang terdapat dalam setiap bahagian. Ia akan mengambil masa selama 10 hingga 15 minit. Penyertaan peserta dalam kaji selidik ini adalah secara sukarela dan mereka berhak untuk menarik diri daripada kajian ini pada bila-bila masa.

APPENDIX 12: TURNITIN

| ORIGINALITY REPORT | | | |
|--------------------|--|--------------|----------------|
| 17% | 14% | 6% | 8% |
| SIMILARITY INDEX | INTERNET SOURCES | PUBLICATIONS | STUDENT PAPERS |
| PRIMARY SOURCES | | | |
| 1 | journals.iium.edu.my Internet Source | | 4% |
| 2 | Submitted to Universiti Teknologi MARA Student Paper | | 1% |
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