

KNOWLEDGE AND PRACTICE ON EXCLUSIVE BREASTFEEDING
AND ASSOCIATION WITH WORK-RELATED FACTORS AMONG
MOTHERS IN HOSPITAL UNIVERSITI SAINS MALAYSIA

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SCHOOL OF HEALTH SCIENCES

UNIVERSITI SAINS MALAYSIA

2024

KNOWLEDGE AND PRACTICE ON EXCLUSIVE BREASTFEEDING
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MOTHERS IN HOSPITAL UNIVERSITI SAINS MALAYSIA

By

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Dissertation submitted in partial fulfillment of

the requirements for the degree of

Bachelor in Nursing (Honours)

AUGUST 2024

CERTIFICATE

This is to certify that the dissertation entitled “Knowledge and Practice On Exclusive Breastfeeding And Association With Work-Related Factors Among Mothers In Hospital Universiti Sains Malaysia” is the research work done by Ms “Nur Hanim Natasha binti Mohd Rosdi” during the period from October 2023 until August 2024 under my supervision. I have read this dissertation and in my opinion it conforms to acceptable standards of supervision of scholarly presentation and is fully adequate, in scope and quality, as a dissertation to be submitted in partial fulfilment for the degree of Bachelor of Nursing (Honours).

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DECLARATION

I hereby declare that this dissertation is the result of my investigations, except where otherwise stated and duly acknowledged. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at Universiti Sains Malaysia or other institutions. I grant Universiti Sains Malaysia the right to use the dissertation for teaching, research and promotional purposes.



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ACKNOWLEDGEMENT

With heartfelt gratitude, I extend my deepest appreciation to the individuals whose support and contributions made this study possible. To the remarkable mothers at Hospital Universiti Sains Malaysia (HUSM), your willingness to participate and share your experiences has enriched this research immeasurably.

I am profoundly thankful to Puan Hasni Embong and Dr Norhasmah binti Mohd Zain, my supervisor and co-supervisor, whose wisdom and steadfast guidance have been a guiding light through this journey.

Special appreciation goes to Mr Mohd Rosdi b Mohd Amin and Mrs Roslina bt Rawi @ Che Teh for staying by my side from my day 1 of life. All my efforts, perseverance, and sacrifices are dedicated to you. Thank you for being the calm to my storm.

I am eternally grateful for the friends with whom I shared caffeine-fuelled sleepless nights and endless rants of data analyse. Thank you all for your profound impact and for being part of this meaningful journey.

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ABSTRAK

Penyusuan susu ibu eksklusif (EBF) ialah memberi bayi hanya susu ibu dan tiada cecair atau pepejal lain, kecuali ubat-ubatan atau vitamin yang diperlukan. Untuk 6 bulan pertama kehidupan bayi, pendekatan ini disyorkan bagi menyediakan nutrien penting, antibodi, dan sokongan imun untuk pertumbuhan dan perkembangan yang terbaik. Kajian ini bertujuan untuk menilai pengetahuan dan amalan penyusuan eksklusif dalam kalangan ibu selepas bersalin di Hospital USM serta hubungannya dengan faktor-faktor berkaitan pekerjaan. Satu kajian rentas-seksional telah dijalankan ke atas ibu selepas bersalin yang melahirkan di HUSM pada September 2023. Data dikumpul menggunakan soal selidik dari 152 ibu bekerja yang memenuhi kriteria penyertaan kajian. Data yang dikumpulkan dianalisis secara statistik menggunakan perisian SPSS versi 27. Kajian menggunakan statistik deskriptif dan ujian Pearson Chi-square. Keputusan mendapati 115 (75.7%) peserta mempunyai tahap pengetahuan cemerlang dan 91 (59.9%) peserta mempunyai tahap amalan penyusuan eksklusif cemerlang. Akhirnya, tiada hubungan yang signifikan antara tiga faktor berkaitan pekerjaan [jam kerja ($p = 0.559$), bilik persendirian untuk menyusukan susu ($p = 0.233$), tempoh cuti bersalin ($p = 0.697$)] dengan amalan penyusuan eksklusif dalam kajian ini. Namun, terdapat hubungan yang signifikan antara penyediaan peti sejuk untuk menyimpan susu ibu dan amalan penyusuan eksklusif ($p = 0.011$). Kesimpulannya, keputusan ini menekankan keperluan inisiatif sokongan tempat kerja yang berfokus untuk meningkatkan amalan EBF ibu bekerja. Pembuat dasar dan

pengamal kesihatan boleh meningkatkan ketersediaan sumber seperti peti sejuk untuk menyimpan susu yang diekspreskan, sekaligus mencipta keadaan yang menyokong penyusuan susu ibu eksklusif yang berterusan.

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ABSTRACT

The process of feeding a baby breast milk straight from the mother's breast is known as breastfeeding. Exclusive breastfeeding is giving babies only breast milk and no other liquids or solids, except for necessary drugs or vitamins. During the first six months of a baby's life, this approach is advised entirely to provide the essential nutrients, antibodies, and immune support needed for the best possible growth and development. In addition to decreasing the risk of infections, it strengthens the link between mother and child, improving long-term health. This study seeks to assess the knowledge and practice of EBF among mothers in Hospital USM along with the association with work-related factors. A cross-sectional study was conducted on mothers given birth at HUSM in September 2023. Data for the study was collected using a self-administered questionnaire. A total of 152 working mothers fulfilled the inclusion criteria of the study and was selected through purposive sampling. Data collected were statistically analysed using the SPSS software version 27. The study used descriptive statistics and Pearson Chi-square. The results demonstrated 115 (75.7%) of participants have an excellent level of EBF knowledge and 91 (59.9%) of participants have an excellent level of EBF practice. Lastly, there were no association between three work-related factors [working hours ($p = 0.559$), private room to express breastmilk ($p = 0.233$), maternity leave period ($p = 0.697$)] and level of EBF practice. in this study. However, there is a significant association between availability of refrigerator to store breastmilk and level of EBF practice ($p = 0.011$). In

conclusion, these results highlight the necessity of focused workplace assistance initiatives to improve working mothers' EBF practice. Policymakers and healthcare practitioners can improve the availability of resources such as freezers for keeping expressed milk, so creating circumstances that favour prolonged exclusive breastfeeding.

CHAPTER 1

INTRODUCTION

1.1 Background of the study

Breastfeeding or nursing is a process in which a mother will feed her milk to a child. Breastfeeding can be done directly from the breast or may be done by pumping it out from the breast and fed to the infant. According to World Health Organization, (2019), breastmilk is the most ideal source of nutrition for infants as it is sanitary and filled with antibodies. Breastmilk also plays its role in providing the much-needed nutrients and energy for the primary months of an infant's life. This will continue up until the second year of life with gradually adding other sources to fulfil the nutritional needs (World Health Organization, 2019).

Breastfeeding is essential to ensure the infant achieves their optimal growth, development, and health. There are two types of breastfeeding which are exclusive breastfeeding and partial breastfeeding. Exclusive breastfeeding is defined as feeding an infant with only breast milk without feeding any solid foods, even water or formula (Valeii, 2021). (World Health Organization, 2015) also recommends for infants to be exclusively breastfed for the first six months of their lives except for drops, syrups of vitamins, minerals, or medicines, and oral rehydration salts.

Malaysia has acknowledged the importance of breastfeeding and has implemented several initiatives to encourage mothers to breastfeed. For example, the implementation of baby-friendly hospitals and clinics and the formation of breastfeeding support groups for mothers. Moreover, the government did launch a policy called Malaysian Breastfeeding Policy that encourages all mothers to breastfeed their children up until six

months to two years old (Bahagian Pemakanan Kementerian Kesihatan Malaysia, 2023b). This is done in an effort to ensure every newborn baby in Malaysia is getting its appropriate nutrition.

According to Fatimah Jr et al., (2010) 14.5% of infants under 6 months were exclusively breastfed in the overall population in Malaysia. Early beginning frequency was 63.7%, while maintained breastfeeding prevalence for up to two years was 37.4% and it is still below the target levels that needed to be achieved by 2025 set by WHO. Only 44% of newborns worldwide receive breastmilk within an hour of delivery, and 40% of infants breastfeed exclusively for six months (Sultana et al., 2022). Another study done in Ampang, Selangor shows that only one-third of the people in the study used EBF for six months, a lower percentage than the 39% of participants who did so for less than six months. Similar research was conducted in another Selangor district, where it was shown that 33% of respondents exclusively breastfed for six months, while 15% used mixed infant feeding (Johari & Mohd Shukri, 2018).

1.2 Problem Statement

However, despite the measures taken by the government and the benefits of breastfeeding, the prevalence of exclusive breastfeeding in Malaysia is still relatively low. A study carried out at seven private hospitals in Malaysia shows that 40% of mothers chose to exclusively breastfeed their babies (Adlina et al., 2006). Another study carried out in Klang Valley shows that 93% of the mother breastfed their babies in the hospital but only 33% of them continue to exclusively breastfeed until four months old maximum and the rest of the 21% only exclusively breastfed them until six months old (Bachtiar et

al., 2011). Moreover, the likelihood that working moms will breastfeed their children exclusively for six months is lower (Johari & Mohd Shukri, 2018).

Globally, a study has shown that the overall prevalence of exclusive breastfeeding is also reasonably low among mothers in Bangladesh which is 35.9% (Hossain et al., 2018). In Singapore, the prevalence shows a good percentage in early birth, but it declines to 42% percent of infants getting breastfed and only 1% of the infants get exclusive breastfeeding (Chua & Win, 2013). According to Chua & Win (2013), the prevalence is also lower in employed mothers in comparison with homemakers starting from 1 month after delivery. The study also shows that working mothers stopped breastfeeding due to their need to return to work. The study done in Vietnam also shows that the implication of exclusive breastfeeding is still relatively low in southern rural Vietnam compared to the numbers recommended by WHO (My et al., 2022). In addition to this, the numbers of employed women practicing exclusive breastfeeding in urban India are also lower than in rural India which was 52% in 2016 (Chowdhury et al., 2021).

Several studies regarding exclusive breastfeeding have been done. However, only a few focus on the working and employed mothers' point of view on this matter. Therefore, this study is done to gain insights from the working mothers on exclusive breastfeeding along with proving interventions and solutions to encourage breastfeeding among working mothers.

1.3 Research Questions

1. What is the level of knowledge of exclusive breastfeeding among mothers in Hospital USM?
2. What is the level of practice of exclusive breastfeeding among mothers in Hospital USM?
3. Is there any association between work-related factors and level of practice of exclusive breastfeeding among mothers in Hospital USM?

1.4 Study Objective

1.4.1 General Objective

To determine the level of knowledge and practice of exclusive breastfeeding and associated with work related factors among mothers in HUSM

1.4.2 Specific Objectives

- I. To determine the level of knowledge of exclusive breastfeeding among mothers in Hospital USM.
- II. To determine the level of practice of exclusive breastfeeding among mothers in Hospital USM.
- III. To determine the association between work-related factors with level of practice exclusive breastfeeding among mothers in Hospital USM.

1.5 Study Hypothesis

Hypothesis 1

Hypothesis H_0 : There is no significant association between work-related factors and the level of practice of exclusive breastfeeding among mothers in Hospital USM.

Hypothesis H_1 : There is a significant association between work-related factors and the level of practice of exclusive breastfeeding among mothers in Hospital USM.

1.6 Significance of Study

Breastfeeding is a crucial component in providing nutrients for an infant's optimal growth. However, with the reasonably low prevalence of exclusive breastfeeding, immediate and massive efforts and initiatives are needed to ensure that mothers are more compliant towards the advice of implementing exclusive breastfeeding.

The concerned prevalence of exclusive breastfeeding practice can lead to further decline in exclusive breastfeeding practice trend. Thus, it is important to promote exclusive breastfeeding among mothers and provide solutions to working mothers and eliminate all the barriers one must go through to implement exclusive breastfeeding. At the end of this study, appropriate interventions and solutions can be provided to improve the feeding practices towards infants among working mothers. The findings from this study may also contribute some extra knowledge in this area. Apart from that, this study may provide insights into what it is like for working mothers to practice exclusive breastfeeding. It will provide a basis for the hardship of breastfeeding on employed mothers for other researchers to take note of.

1.7 Conceptual and Operational Definitions

Definitions for operational terms used in this research proposal are as shown below:

- Knowledge** Understanding of or information about a subject that you get by experience or study, either known by one person or by people generally and the state of knowing about or being familiar with something (Cambridge Dictionary, 2023). This study refers to working mothers' knowledge regarding exclusive breastfeeding in terms of benefits of EBF to mothers and babies, colostrum, effectiveness of breastfeeding, expressign milk, problems regarding breastfeeding and breastfeeding practice.
- Practice** Actions rather than thoughts or ideas (Cambridge Dictionary, 2023d). In this context, it refers to working mothers' practice of exclusive breastfeeding in terms of practice of EBF and formula feeding.
- Breastfeeding** Relates to the activity of feeding a baby directly with milk from the breasts (Cambridge Dictionary, 2023a). In this study, it refers to mothers who are breastfeeding their babies.
- Exclusive** Limited to only one person or group of people, not including something (Cambridge Dictionary, 2023c). In this study, it refers to the exclusive type of breastfeeding for babies which only uses breast milk.
- Employed** Having a job working for a company or another person (Cambridge Dictionary, 2023b). In this study, it refers to mothers who are employed.

Work-related	Connected with someone's job or with paid work in general (Cambridge Dictionary, 2023d). In this study, it refers to the factors that hinder practice of exclusive breastfeeding connected to the employed mothers' work.
Exclusive Breastfeeding	Exclusive breastfeeding is breastfeeding a child with only breastmilk and no other foods or drink for the first 6 months (Kementerian Kesihatan Malaysia, 2009). According to World Health Organization, (2015), exclusively breastfeeding means that a baby should receive only breastmilk as source of nutrition for their first 6 months of life.
Temporary worker	A group of workers hired for a brief period of time, typically for particular projects or to cover for permanent staff at busy times of the year—is referred to as a temporary workforce. These labourers may consist of contract employees, temporary agency workers, and independent contractors (Airswift, 2023). In this study, it refers to mothers who has a temporary jobs during the time of data collection.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The knowledge and practices of exclusive breastfeeding among working mothers, as well as the physiology of lactation, are discussed in this chapter's literature review. The major conclusions of the literature evaluations are divided into a few categories according to the research's primary term. This chapter covered the most recent articles as well as pertinent issues. The conceptual framework that will be used to guide this suggested investigation is discussed.

2.2 Physiology of Lactation

Breastfeeding practice has been around ever since the earth has created. It is a known feeding practiced by mammals on earth. Breast milk is the primary source of nutrition for an infant. The milk production cycle will begin right after a baby has been born and before the baby starts to latch onto the mother. Lactation is a process where mammary glands located in one's breasts will produce and release milk. It occurs during and after the gestational period as a hormonal and biological response. Lactation is triggered by the presence of specific hormones such as prolactin and oxytocin and the process is called lactogenesis. Hormones such as estrogen and progesterone also indirectly play their roles in lactogenesis (World Health Organization, 2009).

Lactation will require a woman to go through stages of female development that involve changes in composition, size, and shape. The stimulation of the mammary glands

by the proper hormones is necessary for their development, growth, and secretory functions. The anterior lobe of the pituitary releases prolactin hormone in response to parturition, which influences the mammary glands' acinar cells, which produce and secrete various milk constituents. Impulses from sensory receptors in the nipple or areola pass to the hypothalamus when the nipple or areola is suckled, causing the posterior pituitary gland to release 12 oxytocin hormones. Myoepithelial cells are stimulated to contract when oxytocin enters the breasts through the circulation in both breasts then will cause the milk to be expelled into the baby's mouth in around thirty seconds upon suckling (Neville, 1999).

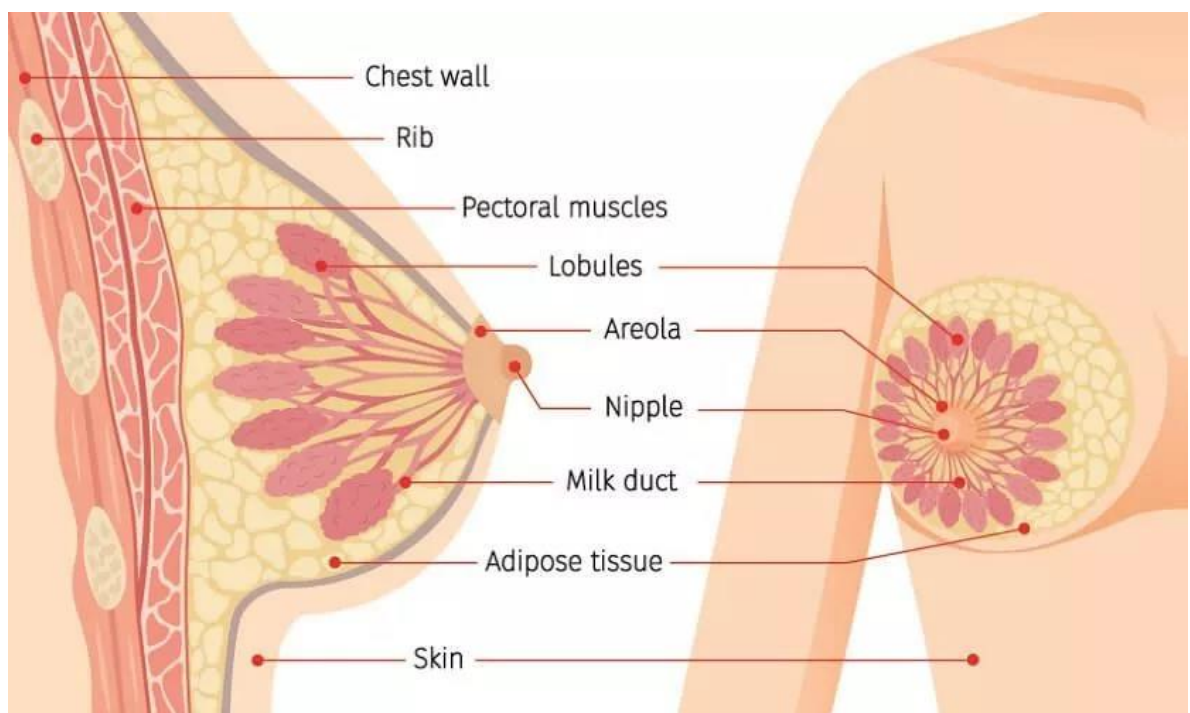


Figure 2. 1 Anatomy of Breast

Source: Knapp, 2020

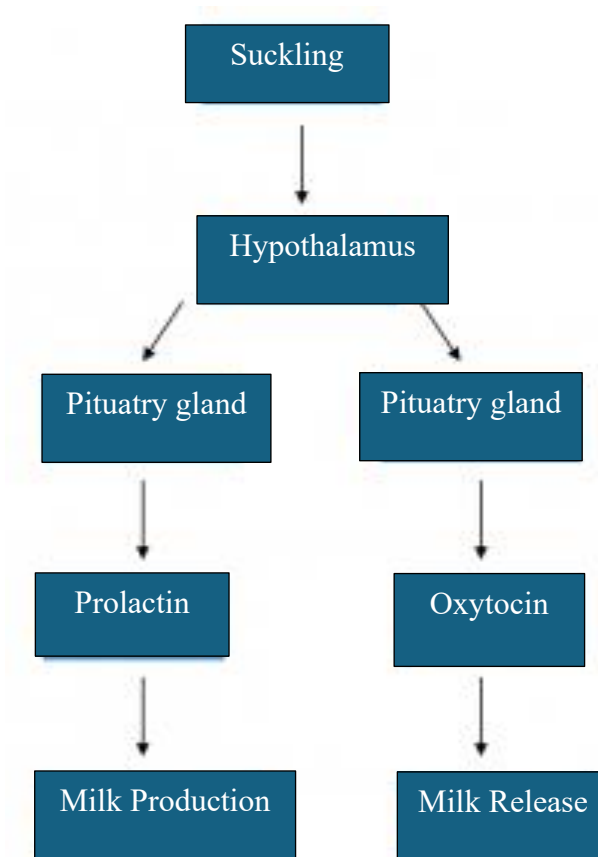


Figure 2. 2 Roles of prolactin and oxytocin in lactation.

Source: (Fitzgerald, 2022)

Maintaining lactation is very crucial and can be done by regularly ejection of milk either by pumping or direct breastfeeding and stimulation of the nipple. This will cause the anterior pituitary gland to release prolactin and the posterior pituitary gland to release oxytocin. The mammary gland requires hormonal signals for the continuous synthesis and secretion of milk; while prolactin and oxytocin function independently on various cellular receptors, their simultaneous action is necessary for effective lactation (Pillay & Davis, 2023).

In lactogenesis, there are different stages of breastmilk composition. The first milk being produced is called colostrum. It is a yellowish, sticky and thick milk that is good