SOCIO DEMOGRAPHIC FACTORS ASSOCIATED WITH DURATION OF EXCLUSIVE BREASTFEEDING AMONG MOTHERS ATTENDING MATERNAL CHILD HEALTH CLINICS IN KUCHING, SARAWAK, 2009.

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DECLARATION

No portion of the work referred to in this thesis has been submitted in support of an application for another degree of qualification of this or any other university or institution of higher learning.

Signature: [Signature]

Name: NOOR HAFIZAN BINTI MAT SALLEH

Date: 20 October 09
DEDICATION

To my beloved husband Muhd Nazman and my daughter Wardina, for their loving patience and limitless support.
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<td>Millennium Development Goal</td>
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<td>WHO</td>
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<td>WHA</td>
<td>World Health Assembly</td>
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<td>NHMS</td>
<td>National Health Morbidity Survey</td>
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<td>MCH</td>
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<td>SPSS</td>
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<td>EBF</td>
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<td>LACHS</td>
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ABSTRACT

SOCIO DEMOGRAPHIC FACTORS ASSOCIATED WITH DURATION OF EXCLUSIVE BREASTFEEDING AMONG MOTHERS ATTENDING MATERNAL CHILD HEALTH CLINICS IN KUCHING, SARAWAK, 2009.

Noor hafizan binti Mat Salleh

The main objective of the study was to identify the socio demographic factors associated with the duration of exclusive breastfeeding practices among mothers attending Maternal Child Health (MCH) Clinic in Kuching, Sarawak. A cross sectional study among 159 mothers in 3 MCH clinics in Kuching were conducted in April and Mei 2009. A systematic random sampling method was used and data was collected through a set of supervised self completed questionnaire. Data was analyzed using Statistical Package for Social Science (SPSS) version 14.0. The results of the study showed 88.1% mothers in Kuching district practiced breastfeeding and the rate of exclusive breastfeeding till 6 months postpartum was 39%. There was a significant correlation between the ethnicity and working status with the duration of exclusive breastfeeding practice. The common reasons for mothers to discontinue breastfeeding were “lactation problem” and “working”. The most common lactation problem was a “milk insufficiency”. Regarding the knowledge of exclusive breastfeeding, all the mothers were knowledgeable with the score more than 6 (median score=6). However there was no significant association between the knowledge of exclusive breastfeeding and the duration of exclusive breastfeeding.
ABSTRAK


Noor Hafizan binti Mat Salleh


Keputusan kajian menunjukkan seramai 88.1% ibu di daerah Kuching mengamalkan penyusuan ibu dan seramai 39% pula dapat mengekalkan amalan penyusuan ibu secara penuh sehingga 6 bulan selepas bersalin. Daripada kajian ini, didapati terdapat hubungan yang signifikan di antara status pekerjaan dan keturunan ibu dengan tempoh amalan penyusuan ibu secara penuh. Manakala alasan-alasan biasa yang menyebabkan ibu-ibu tidak dapat meneruskan amalan penyusuan ibu secara penuh adalah “masalah penyusuan” dan juga “bekerja”. Masalah penyusuan yang paling biasa pula adalah “susu tidak mencukupi”. Semua ibu yang terlibat di dalam kajian ini mempunyai pengetahuan yang bagus mengenai amalan penyusuan secara penuh selama 6 bulan, tetapi analisis menunjukkan ianya tidak mempunyai hubungan yang signifikan dengan tempoh amalan penyusuan ibu secara penuh.
CHAPTER 1
INTRODUCTION AND LITERATURE REVIEW

1.1 Introduction

Human milk is a highly complex and unique fluid that is strikingly different from the milks of other species, including the cow. Milk composition and the length of lactation have been modified and adapted to meet the needs of each particular species (Walker, 2006). Breast milk’s nutrient composition is constantly changing to meet baby’s growing needs and the baby should be fed with nothing else for the first six months of life. Breastfeeding has been found to be vital for child survival, beneficial for mothers’ health and also contributes positively to the nation’s economy, to employers, families and communities. Research shows that babies who are breastfed exclusively for 6 months experience fewer illnesses because breast milk contains nutrients and substances that protect baby from several infections. Poor infant feeding practices are a major contribution to child mortality, malnutrition and poor growth.

Breast milk would effectively be the baby’s first immunization. Breastfeeding practice, especially exclusive breastfeeding (EBF) is one of the good practices that have the greatest potential to save child lives and central to achieve the Millennium Development Goal (MDG) for child survival. However, despite the demonstrated benefits of breastfeeding, worldwide current data show that only about one third of children are being exclusively breastfeed from 0 to 6 months of life and this is far from the ideal recommendation of EBF for the full 6 months. Most babies are not exclusively breastfed and globally, only 39% of babies breastfeed exclusively even in the first 4 months of life (WABA, 2004). The prevalence and duration in many countries are still lower than the international
recommendation of EBF for the six months of life (WHO, 2002). As an example, the EBF rate in India has declined from 41% in 1969 to 33% in 1979 (Reddy, 1995).

Malaysia is also another country with low prevalence of EBF despite the government's commitments to protect and promote current breastfeeding practices. One of the major strategies undertaken by the Ministry of Health was the implementation of The Baby Friendly Hospital Initiative (BFHI) initiated in 1992 following World Health Organization (WHO) and United Nations Children's Fund's (UNICEF) strategies to strengthen maternity practices to support breastfeeding. The BFHI has been implemented in about 16,000 hospitals in 171 countries and it has contributed to improving the establishment of exclusive breastfeeding world-wide. While improved maternity services help to increase the initiation of EBF, support throughout the health system is required to help mothers sustain EBF. The Malaysian government developed a breastfeeding policy in 1993, and subsequently formed the national Baby Friendly Hospital Initiative Recognition Committee. By 1998, WHO declared Malaysia as a third country in the world to have all its public hospitals achieving Baby Friendly Hospital status.

The findings from the National Health Morbidity Survey (NHMS) in 2006, suggested that the programme and initiative taken by the Malaysia government were effective in improving the practice of early initiation of breastfeeding and ever breastfeeding but it was not effective in sustaining EBF practice. The study in Sarawak regarding breastfeeding and the use of maternal health services noted most of mothers used prenatal and postnatal care services were more likely to initiate breastfeeding but the duration of breastfeeding still was shorter and less than 6 months (Kwa, 1993). Another study in Kuala Lumpur among Chinese mothers noted, although all most all (99.9%) breastfed their babies at birth but the duration for exclusively breastfed was short and only 22.27 +/- 33.76 days (Lim & Mary, 2006). The
rate of EBF in Malaysia is well below the levels considered ideal by WHO.

Research into the socio demographic variables and factors related to the habits of mothers on a population level can be of great utility to identifying factors affecting the duration of EBF. Nevertheless, regional differences in breastfeeding practices underscore the need for focused diagnoses that can guide intervention measures aimed at promoting, supporting and protecting breastfeeding. With a very few exceptions, all mother should able to exclusively breastfeed their children as recommended.

In view of all these, there is a need to do the study among the mothers to understand in depth maternal socio demographic factors that are associated with the duration of EBF practice because they personally play a crucial role in determining the success of this practice.

1.1.1 Purpose of the study

The objective of the study is to identify the socio demographic factors associated with the duration of EBF practice among mothers attending Maternal and Child Health (MCH) Clinics in Kuching, Sarawak.

1.1.2 Background of the study area

Kuching is the capital city of Sarawak, Malaysia's largest state situated on the island of Borneo. Kuching Division consists of three administrative districts namely Kuching, Bau and Lundu Districts. The population of Kuching Division in 2007 was estimated to be 673,600 and in Kuching District, the population was 593,000. The majority of the population is comprised of Iban, Chinese, Malay, Bidayuh and Melanau ethnicity. The rest is made up of the other indigenous groups such as Kenyah, Kayan, Kedayan and others (Divisional Health Office, Sarawak Health Department 2007).
In Kuching District, there are 20 health clinics providing MCH services. However, only 3 clinics were chosen based on the amount of workload. The clinics with the highest workload based on the data from Kuching Divisional Health Office in 2007 were Jawa Maternal and Child Health Clinic (Jawa MCH) at P. Ramlee Road, Gita Maternal and Child Health Clinic (Gita MCH) at Kampung Gita and Kota Sentosa Health Clinic (Sentosa HC) at Batu Tujuh.

In 2007, of the 111,737 patients utilizing MCH services in these three clinics in Kuching District, approximately 34% was at Jawa MCH, 32% at Sentosa HC and 34% at Gita MCH (Kuching Divisional Health Office, 2007).

1.1.3 Significance of the study

The findings of NHMS III survey showed the prevalence of EBF had declined significantly in the urban area. The prevalence of EBF for infants below the age of four months in urban localities in 1996 (NHMS II) was 25.5% and this had declined to 12.9% in 2006. The prevalence for the infants below six months was lower and at 10.8%. Despite the benefits of EBF and the multiple programmes promoting it, this practice is not optimally appreciated. This could be due to many contributory factors. The findings of this study would contribute to the deeper understanding of breastfeeding practices in a community in Sarawak and provide input for the planning of the MCH programme to improve this practice.
1.2. Literature Review

1.2.1. Introduction

Breastfeeding is a key tool in improving child survival and if EBF practice up to six months of life, it can avert up to 13 percent of under-five deaths in developing countries (Veneman, 2008). The ability to lactate is a natural characteristic of all mammals (Akers & Groh-Wargo, 2005). The distribution of women choosing to breastfeed continues to vary among different cultures, ethnic backgrounds, education levels, and ages. During the early part of the 1900’s women began to use cow’s milk en masse for infant feeding. Since that time, many mothers have been offering formula to their babies. The 1980’s saw the highest rise in breastfeeding, but during the 1990’s breastfeeding rates trended downward.

In 1999, only 65.5% percent of mothers in upstate New York initiated breastfeeding (Healthy People 2010). The Healthy People 2000 Initiative had set the following goals, 75% of mothers to initiate breastfeeding, 50% of mothers to be EBF at 6 months, and 25% of mothers to be breastfeeding at 12 months. These goals were not met, either nationally or in New York State. The Healthy People 2010 has set the same goals to be achieved by 2010 and currently the goals are still not being reached. In 2002, the study done by National Immunization Survey showed only 13.3% was being exclusively breastfeed at six months. These rates are significantly lower than the target set by Healthy People 2010.

The National Breastfeeding Survey 2001 in Singapore found about 94.5% of the mothers attempted breastfeeding, at 1 month 71.6% were still breastfeeding, 49.6% continued to do so at 2 months, and 29.8% persisted till 4 months and by 6 months, the breastfeeding prevalence rate fell to 21.1% (Foo et al, 2005 ). The survey indicated that, EBF is still not a
common practice in Singapore. There are various factors to be significant in influencing mother’s decision to breastfeed.

In Jordan, as in neighbouring countries in the Middle East, higher education and higher employment rates in recent years among women have had an impact on traditionally based infant feeding, whereby the results of the study showed employed women were more likely not to practice EBF compared to unemployed women (Khassawneh et al, 2006). However, a study done in Hong Kong, even though working is perceived as a barrier to breastfeeding, but working may not stop mothers who want to breastfeed their babies (Wu et al, 2007). A similar finding in Nairobi, Kenya showed working mother was successful in maintaining some breastfeeding after they returned to work, although EBF rates were low (Lakati et al, 2002).

Women face attitudinal conflicts between breastfeeding and postpartum employment because each role makes different normative and social demands (Lindberg, 1996). The public increasingly considers breastfeeding as something that ‘good’ mothers do to their infants. At the same time the growing acceptance of maternal employment adds new dimensions to the meaning of motherhood. The participation of women in the labour force in developing countries is reported to have a negative effect on breastfeeding, as work competes for mother’s time and generates income that can be used for purchasing formula (Grummer-Strawn, 1996).

In Malaysia, the findings of NHMS III in 2006 suggested that breastfeeding practice in the country was common but not optimal. Even though two thirds of infants were initiated early for breastfeeding and almost all infants were ever breastfed, the prevalence of EBF among children below six months was less than 15%. Compared to other countries in the
South East region, Malaysia was among the countries with the lowest prevalence of EBF. Findings of the NHMS III also showed that the percentage of infants who were exclusively breastfed fell rapidly after the age of two months during which the percentage of infants consuming infant formula began to rise. No information was available to determine factors that may explain this finding but other studies suggested that mothers working status have a negative effect on breastfeeding (Alison, 2004; Butler et al. 2004). In Malaysia, about half of the work forces are women. Generally the maternity leave is about two months in both the public and private sector.

A study in Los Angeles, Los Angeles Country Health Survey (LACHS) from 2002 to 2003 found that 82% of Los Angeles Country women initiated breastfeeding compared to 79% in 1999 to 2000. However, only half of all mothers were still breastfeeding their infants at six months of age. The results also revealed that breastfeeding duration to six months practiced by mothers aged less than 20 years was only 36%, those aged 20 to 29 years was 47% and those aged 30 years old and older was 55%. This result revealed that age is one of the socio demographic factors that are associated with the duration of EBF. The younger mothers tend to stop EBF earlier compared to the older mother.

Ethnicity has had an association with breastfeeding duration in some studies from multicultural communities, although the direction of the association is inconsistent (Forster et al, 2006). Whilst there are trends across countries and cultural groups regarding the factors which influence or predict breastfeeding outcomes, it seems clear from the literature that there are many factors that influence breastfeeding. Different factors will be in play depending on individual circumstances. There are however, certain groups for whom the evidence is consistent, regardless of culture and ethnicity, and for whom the risk of early breastfeeding cessation (or non-initiation of breastfeeding) is higher, such as younger women.
who have less education and who are single (Forster et al, 2006).

The study in selected rural and semi-urban communities in Kemaman, Terengganu in Malaysia found although breastfeeding is widely practiced, their duration was shorter (Wan, 1995).

1.2.2 Exclusive Breastfeeding: The Definition and Duration.

EBF as defined by WHO and UNICEF in 1993 as

"no drink or foods other than breast milk are given to the baby; no pacifier or dummies or artificial teats are given to baby; most exclusively breastfed newborn babies breastfeed at least eight to twelve times in 24 hours, including night feed"

The most ideal duration for EBF is for the first six months of life and it is a recent global recommendation that is based on the study findings whereby the infant will get optimal benefits. In 2000, WHO commissioned a thorough review of published scientific literature on the optimal duration of EBF and the conclusions led to World Health Assembly (WHA) to recommend six months of EBF as a global public health recommendation (WHA 54.2, 2001 and Global Strategy, 2002).

1.2.3 The Benefit of Exclusive Breastfeeding

EBF benefits the child and the mothers. It provides protection against infection and develops immunity in the child. It also contains antigenic inhibiting properties, which plays a role in decreasing allergies in the alimentary tract. Studies have shown that breastfeeding can reduce infant mortality and morbidity rate (Fatimah et al, 1997) and prevent development of sudden infant death syndrome (Howard & Laurence, 1998). Research on this topic has shown that breastfeeding reduces the incidence and severity of diarrhea, lower respiratory infections,
otitis media, urinary tract infections, bacterial meningitis, bacteremia, botulism and necrotizing enterocolitis (WABA, 2004). Breastmilk has shown to have a possible protective effect against sudden infant death syndrome, type I diabetes, atherosclerotic disease, Crohn’s disease, ulcerative colitis, lymphoma, allergic disease and other chronic digestive disease (WABA, 2004).

Health benefits of breastfeeding for the mother include decreased postpartum bleeding and more rapid uterine involution, faster return to prepregnant weight, increased child spacing, improved bone mineralization postpartum and reduced risk of ovarian and breast cancer (WABA, 2004). Besides, families do not have to buy formula milk which is costly and thus can save on expenditure.

1.2.4 Exclusive Breastfeeding: Safe, Sound and Sustainable

EBF is safe because it contains protective factors which help to prevent and fight infections and reduce the risk of allergic conditions. EBF is sound because nutrients in breast milk are present in the right quantity and with special quality. EBF is sustainable because it can contribute to the household’s food security. Breastfeeding is superior way of providing ideal food for the healthy growth and development of infants; it is also an integral part of the reproductive process with important implications for the health of mothers (WABA, 2004).

1.2.4 Conclusion

The literature highlights that breastfeeding has been found to be vital for child survival and is also beneficial for mothers’ health. Breastfeeding contributes positively to the nation’s economy, to employers, families and communities. Breastfeeding practice, especially EBF is one of the good practices that have the greatest potential to save child lives.
as demonstrated by extensive research. Even though breastfeeding practice in Malaysia is
common but it is not optimal and the country is among the countries with the lowest
prevalence of EBF. Numerous factors may influence this practice and varying prevalence
may differ from one population to another population and between cultures.

1.1. Statement of the problem

EBF practice is low in Malaysia despite increasing programmes and initiatives taken
by the government to promote the practice. The Second National and Health Morbidity
Survey (NHMS II) in 1996 showed that although ever breastfeeding was almost universal,
only one third of infants below four month of age were exclusively breastfed. The findings of
subsequent survey ten years later, NHMS III in 2006 showed the trend was declining. In
Sarawak, data on EBF is very limited. The data on the prevalence of EBF till 6 months
postpartum in Kuching District in 2004 was 1.4%, which was far below the WHO target and
the national prevalence as well.

Figure 1.1 conceptualizes the factors that could be associated with EBF at all levels.
The focus for the study is to look into the socio demographic factors that are associated with
the duration of EBF practice among mothers in view of the need to emphasise the benefits
and also the need to arrest the declining practice rate. This could be an input for planning and
implementation of programme addressing breastfeeding practice in Sarawak.

Numerous studies regarding breastfeeding have shown the high significance of
breastfeeding benefits for child survival. They also addressed multiple factors influencing
low rates of EBF, rendering the latter difficult breastfeeding behaviour to prescribe.

My research questions are: