BREASTFEEDING PRACTICES IN A RURAL COMMUNITY IN KEDAH

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ABSTRACT:
Breast feeding has been actively encouraged in Malaysia in the last few years in all public hospitals. This study proposes to find out the prevalence of breast feeding in three villages in a rural community in Kedah, Malaysia. This was a cross sectional study on breastfeeding practices in Kubang Pasu, a district of Kedah. Majority of the mothers initiated breast feeding but exclusive breastfeeding was only 21% for four months and predominant breastfeeding was about 12.6%. The breastfeeding practice was more prevalent among women from the higher educational strata and higher income than those from the lower strata and lower income (\( p<0.05 \)). Mothers with a positive attitude on breastfeeding and those who possess a higher knowledge were associated with a longer mean total duration of breastfeeding (\( p<0.05 \)). Spouse and family members played an important role in building up a mother’s confidence to breast feed her child. Majority of the mothers received breast feeding information before birth from mainly the doctors and nurses. Older mothers, housewives and mothers with formal education practiced a longer duration of breast feeding (\( p<0.05 \)). The study also showed that there is an increase in the knowledge of breast feeding among the mothers and that they have a positive attitude to breastfeeding. Most of the mothers initiated breast feeding early and they received support on breastfeeding from the nurses and doctors. (JUMMEC 2010; 13 (1): 38-44)

KEYWORDS: exclusive breastfeeding, predominant breastfeeding, rural Malaysia

Introduction
Feeding practice during infancy is an important determinants of future physical and mental well-being because of rapid growth spurt and developmental of organ and tissue occurring during the first year of life (1, 2). They vary with socio-economic stratification and are regulated by a variety of factors such as education, custom beliefs and taboos (1, 3). Breastfeeding is the optimal feeding practice for infants in view of its benefits to both children and mothers. The advantages of breastfeeding include fulfilling the nutritional needs of infants, immunological protection, bacteriologic ally safe, minimal allergic reaction, economical, mother to child bonding, increased birth spacing and many others (4, 5). UNICEF estimated that, if every baby was exclusively breastfed from birth up to 6 months, 1.5 million lives would be saved each year (6, 7). Thus in 1981 the World Health Organization (WHO) introduced the code of ethics to safeguard the marketing practices which are detrimental to breastfeeding.

The WHO Global Data Bank on Breastfeeding presently covers 94 countries and 65% of the world’s infant population (<12 months). Based on the latest data, it is estimated that 35% of these infants are exclusively breastfed between 0-4 months of age. In South-East Asia, the ever-breastfed rate has increased somewhat in recent years, for example in Thailand it increased from 90% in 1987 to 99% in 1993. The increase in exclusive breastfeeding rates is due mainly to breastfeeding campaigns, and additional Baby-friendly Hospitals and trained breastfeeding counselors (8)

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In Malaysia, active national promotion on breastfeeding began since 1976. Early local studies documented that breastfeeding is widely practiced in rural areas, particularly among Malay mothers (9, 10, 11, 12). Recent findings from Sarawak reported that more children are being breastfed than in earlier decades. However, the median duration of breastfeeding is similar to that of earlier researches in Peninsular Malaysia i.e. 3 months (13).

This purpose of this study is to assess the prevalence of breastfeeding practices among women of reproductive age (15–49 years old) in three selected rural villages in Kubang Pasu District, Kedah and also to investigate the relationship between the attitude of the mother towards breast feeding and the duration of breast feeding.

**Materials and Methods**

This was a cross sectional descriptive study on practices of breastfeeding and it was conducted in three rural areas, namely Kampung Keda Wang Tepus, Kampung Changkat Setol and Felda Bukit Tangga in Kubang Pasu, Kedah. The kampungs were selected due to the closeness to the health centres. The selection criteria may have introduced a bias in the study. The study was conducted from 8-15 June 2005. The inclusion criteria for our sample was women in their reproductive age (15 – 49 years old) with at least one living child aged two years old, regardless of their marital status. Every woman was randomly selected from a household who fulfilled the criterion was included in the study. A household may report one or more respondents. However, women who were unable to breastfeed due to serious illnesses (heart disease, cancer, nephritis, and active or untreated TB, HIV or AIDS, active herpes lesions on the breast and severe malnutrition) were excluded from this study. The interview was a face-to-face using a structured questionnaire. The questionnaire was pre-tested at the Obstetric & Gynaecology and Paediatrics Wards in Hospital Tengku Ampuan Rahimah, Klang to minimise errors. Errors related to the understanding of ever breast fed, exclusive breast fed were modified so that the mother understood their meaning. Despite this there were problems for the mothers to understand as some of them were uneducated. The collected data was then coded, computed and analysed using the SPSS version 10. The knowledge on breastfeeding among the respondents was assessed based on a list of 12 true-or-false statements. These statements were further categorized into 3 categories namely benefits of breastfeeding (5 statements), techniques of breastfeeding (4 statements) and contraindications of breastfeeding (3 statements). The Chi-square test was used to determine the associations and the level of significance was set at $p<0.05$.

![Figure 1: Age distribution of Respondents](image)
Results
There were 115 mothers who fitted the inclusion criteria and they were interviewed face to face. Majority of the mothers 111 (96%) respondents were married. Only 3% of them were widowed and one respondent was a single mother. Figure 1 shows that the age distribution of female respondents who fall within the reproductive age group of 15 to 49 years old. The majority of mothers 49 (42.6%) were aged between 45 to 49 years age group. Mothers aged between 35 to 39 years comprised 17 (14.8%) of the study population, followed by the age group of 25 to 29 years 16 (13.9%), 40 to 44 years 15 (13.0%), 30 to 34 years 13 (11.3%) and 20 to 24 years 5 (4.4%). There were no young respondents aged between 15 to 19 years. All respondents interviewed were Malays since they were from a rural area in Kedah.

Most of the respondents 43 (37%) had primary level of education. This was followed by lower secondary 28 (24%) and upper secondary level education 23 (20%). Meanwhile, a total of 16 (14%) respondents were not educated formally or only had informal education. Only 6 (5%) received tertiary education. More than half of the respondents 69 (60%) were unemployed. This group included a majority of homemakers, which is not uncommon in a kampung setting. A total of 24 (21)% of the total study population were employed. Self-employed respondents were those that involved in home businesses e.g. seamstress. They made up of about 22 (19 %) of the study population.

The mean income per capita for the study population was RM206. In Figure 2 about 75 (54.8%) of the study population was found to have an income per capita of below RM 200. In contrast, there was only 2 (1.74%) who earned between RM600 and RM800.

Knowledge on Breastfeeding
The 12 point questionnaire to find out the knowledge level of the mothers was used and the results are shown in Figure 3. Three respondents or 2.6 % of mothers managed to obtain a perfect score of 12. There were no mothers who scored below 3. Those who scored 7 and above were considered to have high knowledge on breast feeding and those who had 6 or lower were considered to have low knowledge.

Half of the total respondents 55 (47.8%) correctly answered all 5 statements regarding the benefits of breastfeeding. Out of 4 statements regarding the techniques of breastfeeding, most respondents 46 (40.0%) scored 50% i.e. 2 statements were correctly answered. A high knowledge was considered to be more than 7 correct answers and the low level of knowledge was considered to be 6 and below.

![Figure 2: Financial status of Respondents](image-url)
Attitudes towards Breastfeeding

Of the 115 respondents who were interviewed, a total of 113 (98%) mothers had positive attitude regarding the practice of breastfeeding. Only 2% of them were not sure. None felt that breastfeeding was not beneficial.

Reasons for Breastfeeding

Most mothers 75 (65.2%) cited child’s health as the main reason for breast feeding. The next most popular reason was that ‘breastfeeding is more economical’ which was cited by about 17 (14.7%) of the mothers. This was followed closely by 15 (13.3%) who said that ‘breastfeeding strengthens the bond between my child and me,’ and about 10 (9.3%), cited ‘convenience’ and only 8 (7.3%), cited that ‘breast milk is nutritious’ and 4 (3.3%) cited mother’s health and others e.g. prevention of cervical cancer, religious reasons 3 (2.6%).

Breastfeeding Practice

Almost all the mothers 114 (99%) initiated breastfeeding but exclusive breast feeding for a period of 4 months was only by 24 (21.0%) of the mothers and predominant breastfeeding practice (breast feeding with addition of water) was about 14 (12.2%) and complementary breast feeding (breast feeding with addition of food or fluid) was 75 (65.2%). Majority of the mothers 53 (46.0%) breast fed between 20 to 30 months whereas 25 (21.7%) breast fed between 10-20 months and about 28 (24.3%) breast fed between 0- 10 months. There were only 8 (7.5%) who breast fed after 30 months. A large proportion of mothers 104 (90%) received support to breastfeed their child while only 11 (10%) of them did not. The main source of support was from their spouses 42 (36.5%), followed by family members 40 (35.4%), health personnel 27 (23.4%) and others like friends and neighbours constituted only 6 (5.2%).

Information on Breastfeeding

About 110 mothers (96.0%) received information on breastfeeding and only a minority of them 5 (4%) had never been informed. From the informed group 83 (79%) of them obtained information before the birth of their child whereas about 18 (16.6%) received it after birth of their child only and 5% received both before and after delivery. In this section, respondents were required to rank the following three sources of information i.e. mass media, family members and health personnel with 1 being the least helpful and 3 being the most helpful. Approximately 92 (80%) of mothers felt that health personnel (e.g. maternity ward nurses and doctors) were the most helpful source of information and about 90 (78%) of mothers listed mass media as the least helpful source (p>0.05).
Relationship between age and duration of breastfeeding

Most of the mothers in the older age group i.e. > 32 years to 49 years old practiced breastfeeding for a longer duration when compared to the younger mothers (< 32 years) breastfed for a shorter time (p<0.05). Therefore the duration of breastfeeding, whether exclusively or otherwise, increases with the mother’s age.

Relationship between educational level and duration of breastfeeding

Mothers who received formal education tend to breastfeed longer compared to uneducated mothers or those who were educated informally. Education plays an important part in increasing the awareness among mothers on the benefits of breast milk to both mother and child (p<0.05).

Relationship between occupational status and duration of breastfeeding

Unemployed mothers including homemakers practiced breastfeeding for a longer duration with 12 (17%) of them breastfeeding for about a year while 36 (52%) mothers breastfeeding for more than a year. In contrast, a shorter duration was noticed among employed and self-employed mothers. This result is not surprising as many mothers claimed that lack of time at home prevented them to breastfeed their child (p>0.05).

Relationship between financial status and duration of breastfeeding

Figure 4 shows that mothers with a higher financial status (RM600–RM799) have a lower mean duration of breastfeeding (19.83 months) when compared with mothers with lower income. As breast milk is more economical compared to infant formula milk, therefore mothers who earn a lower income in this area have a tendency to breastfeed longer period of time although this findings is not significant (p>0.05).

Relationship between attitudes of mothers and duration of breastfeeding

The relationship between attitude of the mothers and duration of breastfeeding was assessed. There were no mothers with a negative attitude; all agreed that breastfeeding is good for the baby and the mother. Among mothers who felt that breastfeeding was good, a majority of them 80 (69.5%) respondents tend to breastfeed longer. Only 2 mothers were unsure and both of them still breastfed for more than a year (p>0.05).

![Figure 4: Relationship between Financial Status and Duration of Breastfeeding](image-url)
The relationship between knowledge on breastfeeding and duration of breastfeeding

As shown above, mothers who scored more than 50% in more than seven correct answers in the knowledge questions demonstrated a longer duration of breastfeeding. This could be due to the fact that mothers who are aware of the benefits, techniques and contraindications of breastfeeding would naturally breastfeed longer ($p>0.05$).

Discussion

Majority of the mothers 114 (99%) in the rural villages of Kedah ever breastfed their children and this finding is consistent with findings from earlier studies (1, 10, 12) on the practice of breastfeeding in rural areas which reported a prevalence of more than 90%. A more recent study (6) of an urban community in 2002 revealed a high prevalence of 99.3%.

However, the incidence of exclusive breastfeeding in this study was only 21% while predominant breastfeeding and complementary feeding was higher. A similar survey in Kubang Pasu Maternal and Child Health Centre in 2004 mothers in the district found similar results. However, the national health and morbidity study (NHMS) in 2006 found the exclusive breastfeeding to be 14.9%. A high proportion of 46% of the mothers breastfed their children for an average of 20 to 30 months in this study. Most of them who initiated breastfeeding were homemakers or unemployed and they had low monthly income and received some formal education up to primary school level ($p<0.05$). The educational level, working status and income level of the families were not found to be significantly associated with the duration of breastfeeding in this study ($p<0.05$). In another survey, breastfeeding duration was significantly higher among mothers with primary education compared to those with tertiary education (3, 14). However, a study by Siah & Yadav (6) proved otherwise. Low educational level, lack of social exposure and mobility in many ways restrict the career choices and capability of these women. As a result they are tied down to perform traditional women’s role as housewives and breastfeeding practice is commonly expected of them. However, it cannot be overlooked that breastfeeding is a rational and natural choice by the mothers, and apart from being a traditional practice, breastfeeding is also encouraged by Islam, the religion of the community.

This study also showed that mothers with a reasonably high knowledge (more than 7 correct answers) on breastfeeding do so for a longer duration of time i.e. more than a year and those who reflected a positive attitude towards breastfeeding tended to breastfeed longer. This shows that knowledge and attitude play an important role in one’s decision to breast feed and also the duration of breastfeeding. A high percentage of mothers felt that the most helpful source of information on breastfeeding comes from health personnel e.g. doctor, nurses and staff in the maternity ward. This proves that the government’s efforts in promoting and educating the public on breastfeeding are showing signs of success.

However, while most mothers were aware of the benefits of breastfeeding, many were still unsure about the correct technique and conditions or practices that contraindicated breastfeeding. Incorrect breastfeeding methods can affect the initiation, pattern and duration of breastfeeding besides reducing the mothers’ confidence and breastfeeding skills when faced with repeated failure to express milk. Furthermore, multiple unproductive trials leave the babies unsatisfied, frustrated and in return irritate or discourage the mothers. In contrary, successful breastfeeding eventually raises the confidence and evokes interest in mothers who feed their children with milk from their breasts.

Clearly, the knowledge and attitude of breastfeeding among the mothers is interrelated and it provides a positive feedback to each other. However, ignorance of breastfeeding can lead to undesirable medical conditions such as infant infection.

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