ARTIKEL ASLI/ORIGINAL ARTICLE

Working Mothers’ Knowledge of Exclusive Breastfeeding in Hospital Canselor Tuanku Muhriz (HCTM)

(Pengetahuan Penyusuan Susu Ibu Secara Eksklusif dalam Kalangan Ibu Bekerja di Hospital Canselor Tuanku Muhriz (HCTM))

ROZIAH ARABI, ROHANI MAMAT, NORAINI ABD RASHID & RUFINA BAKRI

ABSTRACT

Exclusive breastfeeding (EBF) is very crucial for the health of infant as well as mother. However, the prevalence of exclusive breastfeeding is very low especially among working mother. Since the prevalence of EBF might be influenced by the level of knowledge on EBF, researcher comes to critical thinking to conduct this study to evaluate level of knowledge on EBF among working mother. A cross sectional design study was carried out to determine knowledge level on exclusive breastfeeding among working mother, and its relationship with demographic data in Hospital Canselor Tuanku Muhriz (HCTM). A total 283 respondents were recruited to participate in this study. The respondents’ knowledge level on exclusive breastfeeding was identified using Kim & Chapman (2013) Questionnaire on Knowledge and Practice about Exclusive Breastfeeding. The result showed that majority of the respondents (56.9%) had high knowledge on exclusive breastfeeding. For demographic data, factors such as age, level of education, and family income had shown a significant association (p < 0.05) with level of knowledge on exclusive breastfeeding. In conclusion, the level of knowledge of EBF was identified among working mother, yet it has been influenced by mother’s sociodemographic background.

Keyword: Knowledge; exclusive breastfeeding; working mother

INTRODUCTION

Exclusive breastfeeding is defined as no other food or drink, not even water, except breast milk for 6 months of life, but allows the infant to receive oral rehydration salt, drops and syrups of vitamins, minerals and medicines when needed (WHO 2001). As a global public health recommendation, newborns should be given breastfeeding exclusively as early at first hour of life till six months old by all mothers nevertheless working or not. Working mother is encouraged to continue breastfeeding even though they have to back to work after completed the confinement leave. In every Breastfeeding Initiative Hospital, the support group for breastfeeding will provide and teach the working mother with adequate information regarding storage of expressed breast milk (EBM) as preparation before return to work (Murtagh & Moulton 2011).

The United Nation Children’s Fund (UNICEF) (2014) report that only 32.6% babies breastfed exclusively out of 136.7 million babies delivered worldwide. Moreover, according to UNICEF (2012) result of breastfeed in East Asia was worrisome. Apart from that, the percentage of
infant get an exclusive breastfeeding (EBF) for the first six months after delivery in Malaysia within 2005 to 2009 was only 27% (UNICEF 2011). Lifestyle of working mother (Tan 2011) and higher income (Leong 2009) was likely potential contributor of lower EBF in Malaysia. Our country starts target to achieve at least 30% rate of exclusive breastfeeding in 2015 since on 2011 only 23.7% of baby breastfed exclusively (Heng 2012). In addition, according to Yang (2011) among mother who comes to health clinic only 22.9% of them gave exclusive breastfeeding to their children until 6 months years old. Thus, these issues indicate that the target was not achieved and the issues must be taken to consider for prevention and care.

The knowledge level regarding exclusive breastfeeding was well discussed in numerous studies. Good knowledge may enhance practice and the effectiveness of EBF. As stated in study by Peterside et al. (2013) about 59.7% of respondent knew the absolute definition of exclusive breastfeeding (EBF) and only 15% of mother able to state the meaning of EBF (Chaudhary Shah & Raja 2011). Study by Akinremi & Samuel (2015) shows the least respondent (36.2%) has the knowledge on exclusive breastfeeding in the first 6 months of life. On the other hand, Oche et al. (2011) reported that only 30% out of respondent get 50% score which is considered as having adequate knowledge on exclusive breastfeeding. This study also shows the knowledge regarding exclusive breastfeeding is very low.

In addition, a study by Obilade (2015) and Afrose et al. (2012) state that knowledge regarding EBF is influenced by level education of the mother while Laanterá et al. (2010); Karimi et al. (2014) and Nyanga et al. (2012) states that demographic factor such as gender, age, parity, educational level, time of pregnancy and breastfeeding history have significantly associated with knowledge scores. Meanwhile, Loan (2013) reviewed that ethnicity was not significantly associated with the knowledge level on EBF and this was contrary with the study by Obilade (2015) where, in his study, ethnic group had significant association with level of knowledge on EBF.

Several study has discussed on the association between the employment status and the level of knowledge on exclusive breastfeeding. There are significant association between employment status and knowledge level (Karanci & Yenal 2014). A study on mother’s social/economic aspects and level of knowledge about breastfeeding carried out by Boff et al. (2015) had found that there was a positive association between the knowledge score and the family income. This study had revealed that, mother with higher family income most likely to score good knowledge. However, Afrose et al. (2012) and Laanterá et al. (2010) showed that there was no significant association between the level of knowledge and family income.

This study aims to determine the knowledge level of exclusive breastfeeding among working mother in HCTM and its association with demographic data (age, race, level of education, employment status and family income).

HCTM is a tertiary hospital and also a baby friendly hospital initiative (BFHI) since 2012. It was located in Cheras. As, a BFHI hospital, HCTM had provide some kinds of antenatal or breastfeeding education like breastfeeding talk every morning from Monday to Friday, Antenatal class once a month especially for primed mother, and bed side teaching regarding breastfeeding in ward. In addition, HCTM also has lactation unit which provide support group where mother can refer if there is question regarding exclusive breastfeeding at any time. With this study, the effectiveness of BFHI in HCTM can be portrayed and the extent of knowledge on EBF can be determined.

METHODOLOGY

This study employed a cross sectional design. The number of population involved in this study was 1439. Purposive random sampling method was used to obtain samples in this study, where researchers consciously select the participant according to the characteristics that had been indicated for the study. Data was collected from 93% (283) respondents, out of the total 303 number of sample size based on inclusion criteria such Malaysian working mother, married women, pregnant women with at least Gravida 2 Para 1 who attending the clinic for antenatal check-up at O&G clinic HCTM, Para 1 delivered a healthy baby and able to read and understand English or Bahasa Malaysia language.

The questionnaire was adapted and modified from the Cross-sectional Study Questionnaire of Knowledge and Practice about Exclusive Breastfeeding by Kim & Chapman (2013). This questionnaire contains 2 parts where Part A about demographic of participant and Part B have 13 questions to assess the knowledge level of EBF. The reliability of the instrument for present sample was measured by Cronbach’s alpha value using KR20, the Cronbach’s Alpha value for knowledge was 0.793, practice was 0.70 and Cronbach’s Alpha value for both parts was 0.784. The questionnaire was adapted and modified from the Kim & Chapman (2013) in English version and back to back translation was done to the questionnaire in bilingual version, English and Malay language to ensure the wording and phrasing of the question can be understand by the Malaysian people. The questionnaire was validated by two contents expert.

The data was analysed using IBM SPSS version 23 and for this study the analysis techniques were frequency, percentage and Chi-square. The analysis for level of knowledge will be frequency and percentage for descriptive statistic, while for inferential statistic; Chi-square was used to test on association between demographic data and knowledge level of EBF.
RESULTS

A total of 283 working mothers participated in this study on knowledge on exclusive breastfeeding. Levels of knowledge were categorized as high (total score of 9-13), moderate (score of 8) and low (score of 0-7). Most of the respondents scored high level of knowledge with total number of 161 (56.9%), as compared to 65 (23%) respondents scored low level of knowledge. While, the remainder 57 (20.1%) of the respondents had scored moderate level of knowledge.

For the association between sociodemographic data and the knowledge level, generally, maternal age, level of education and family income had significant association with the knowledge level on EBF. From the table of analysis, majority of the respondent who were age between 25-35 years old had high knowledge of exclusive breastfeeding with total number of 116 (55.2%) followed by 41 (19.5%) for moderate knowledge and 53 (25.3%) for low knowledge. The finding of this analysis had revealed there are significant relationship between age of respondent and level of knowledge on exclusive breastfeeding with the p-value < 0.05. Thus, it could be conclude that, there is association between knowledge level and age of respondents.

Based on the Table 1, most of the Malay respondent had high knowledge with total number of 114 (55.9%) with knowledge scoring of 9-12 followed by 42 (20.6%) for moderate knowledge; total knowledge score was 8 and 48 (23.5%) for low level of knowledge with total score for knowledge was 2-7. From this analysis, the p value was 0.062. Thus, it shown that, there was no association significant between level of knowledge and race. It could be said that, race of respondent did not correlated with the level of knowledge.

Majority of the respondent with degree and above, have high level of knowledge with total number of 77 (65.8%), only 15 (12.8%) had low knowledge while 25 (21.4%) had moderate knowledge. This analysis had revealed the value of Chi-Square was 27.225 with an associated significant level of 0.000. Thus, it could be conclude that, there was an association significant between these two variables.

For association between knowledge level and employment status, majority 93 (32.9%) respondents working in government sector scored high level of knowledge followed by 32 (21.0%) of them scored moderate level of knowledge and 27 (17.8%) of government worker scored low level of knowledge. Whereas, about 68 (24.0%) respondents who were working in private sector had high knowledge, 25 (19.1%) of them had moderate knowledge and 38 (29.0%) of private worker had low level of knowledge. However, there was no association significant between these two variables since the p value was 0.079 (p < 0.05).

<table>
<thead>
<tr>
<th>Demographic Data</th>
<th>Knowledge level n/%</th>
<th>Total n (%)</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High (9-13)</td>
<td>Moderate (8)</td>
<td>Low (0-7)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 25</td>
<td>1 (14.3%)</td>
<td>1 (14.3%)</td>
<td>5 (71.4%)</td>
</tr>
<tr>
<td>25-35</td>
<td>116 (55.2%)</td>
<td>41 (19.5%)</td>
<td>5 (71.4%)</td>
</tr>
<tr>
<td>&gt; 35</td>
<td>44 (66.7%)</td>
<td>15 (22.7%)</td>
<td>7 (10.6%)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malay</td>
<td>114 (55.9%)</td>
<td>42 (20.6%)</td>
<td>48 (23.5%)</td>
</tr>
<tr>
<td>Chinese</td>
<td>16 (41.0%)</td>
<td>10 (25.6%)</td>
<td>13 (33.4%)</td>
</tr>
<tr>
<td>Indian</td>
<td>28 (80.0%)</td>
<td>4 (11.4%)</td>
<td>3 (8.6%)</td>
</tr>
<tr>
<td>Others</td>
<td>3 (60.0%)</td>
<td>1 (20.0%)</td>
<td>1 (20.0%)</td>
</tr>
<tr>
<td>Level of education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary school</td>
<td>22 (34.4%)</td>
<td>13 (20.3%)</td>
<td>29 (45.3%)</td>
</tr>
<tr>
<td>Diploma and others</td>
<td>62 (60.8%)</td>
<td>19 (18.6%)</td>
<td>21 (20.6%)</td>
</tr>
<tr>
<td>Degree and above</td>
<td>77 (65.8%)</td>
<td>25 (21.4%)</td>
<td>15 (12.8%)</td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>93 (61.2%)</td>
<td>32 (21.0%)</td>
<td>32 (21.0%)</td>
</tr>
<tr>
<td>Government</td>
<td>68 (51.9%)</td>
<td>25 (19.1%)</td>
<td>38 (29.0%)</td>
</tr>
<tr>
<td>Family Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low income (≤ RM5000)</td>
<td>90 (50.6%)</td>
<td>38 (21.3%)</td>
<td>50 (28.1%)</td>
</tr>
<tr>
<td>High income (≥ RM5000)</td>
<td>71 (67.6%)</td>
<td>19 (18.1%)</td>
<td>15 (14.3%)</td>
</tr>
</tbody>
</table>
Majority 90 (50.6%) of the respondent from low family income, whom income ≤ RM5000 had high knowledge while only 38 (21.3%) respondents had moderate knowledge and 50 (28.1%) of them had low level of knowledge. In addition, the result also revealed that, among respondents who had high family income, which income ≥ RM5000, only 15 (14.3%) respondents had low level of knowledge and the number of respondent was increases with increasing level of knowledge from moderate to high with respective total respondents 19 (18.1%) and 71 (67.6%). The most of respondent who had high knowledge was from low family income. Since the p value was 0.010, less than 0.05, there was an association significant between these variable. Thus, family income could be said affecting the level of knowledge.

DISCUSSION

In this study, researchers found that majority of the respondents had high knowledge of exclusive breastfeeding. This finding similar to study by Kob et al. (2012) where majority of their respondent have a good knowledge regarding exclusive breastfeeding. In contrast, another study conducted by Karanci & Yenal (2014) showed that the knowledge level of working mother towards exclusive breastfeeding was inadequate. Similarly, study by Abasiattai et al. (2014); Afrose et al. (2012); Akinremi, & Samuel (2015); Oche et al. (2011) also identified that the knowledge among working mother was low and insufficient. The possibility of the working woman in this study for having high knowledge on exclusive breastfeeding is because of HCTM was recognised as Baby Friendly Hospital on 2012. Every pregnant mother obtains prenatal check-up at HCTM were exposed to breastfeeding talk as a preparation for delivery. As a routine requirement, prenatal mothers are scheduled to attend the breastfeeding talk at least for session during pregnancy. One of study by Abasiattai et al. (2014) revealed that most of mother got information regarding breastfeeding during antenatal health talk.

AGE RELATED TO LEVEL OF KNOWLEDGE ON EXCLUSIVE BREASTFEEDING

This study revealed that most of working mother within the age of 25 to 35 years had more knowledge on exclusive breastfeeding compare to the younger age working mother. As well as study by Akinremi & Samuel (2015) found that level of knowledge among woman increases as the age increased.

The finding of this study was supported by most of the previous studies. The study conducted by Akinremi, & Samuel (2015); Laanterä et al. (2010); and Zhou et al. (2010) suggested similar result with this study where the age of mother had significant association with knowledge score on EBF. In contrast, several studies had found that there was no significant association between these two variables. Study conducted by Karimi et al. (2014) and Nyanga et al. (2012) had revealed that maternal age do not influence the level of knowledge on EBF. Thus, to conclude for this study, age of mother might associate with the level of knowledge on exclusive breastfeeding among working mother. The level of knowledge increases with the increase of age.

RACE RELATED TO LEVEL OF KNOWLEDGE ON EXCLUSIVE BREASTFEEDING

Most of Malay respondent had high knowledge among race group. However, from the analysis result, there was no significant association between race and level of knowledge. There was lack of research studies regarding level of knowledge and race. In this study, it found that there was no significant association between these two variables. This could be said that, race group does not correlated with the level of knowledge on exclusive breastfeeding. This finding was similar to study done by Loan (2013) where the result revealed that there was no statistically significant difference in knowledge according to race. In contrast, another study had shown that, the race group was significantly associated with level of knowledge (Obilade 2015). However, for this study, race of mother did not specify that the mother had good knowledge on EBF.

EDUCATIONAL STATUS RELATED TO LEVEL OF KNOWLEDGE ON EXCLUSIVE BREASTFEEDING

Maternal’s level of education might associate to knowledge level on exclusive breastfeeding. In this study, the association between level of education and knowledge level had been analyzed. A finding shows that working mother with degree had very good knowledge on exclusive breastfeeding, whereas, working mother who got education until secondary school had lack of knowledge on exclusive breastfeeding. Mothers with higher education were identified to have more knowledge and limited education was a major factor of lack of knowledge (Afrose et al. 2012). The knowledge level was increases with the increases of maternal educational level (Punjab & Garg 2010).

In addition, this analysis also appeared to be significantly associated between level of education and level of knowledge on exclusive breastfeeding. The result of this study was similar to several previous studies. Research done by Karimi et al. (2014); Laanterä et al. (2010); Nyanga et al. (2012); Obilade (2015) and Zhou et al. (2010) had reported that educational level was significantly associated with knowledge level on exclusive breastfeeding. Higher education level had impact on knowledge level of EBF and there was significantly associated between education level ad knowledge level (Punjab & Garg 2010). However, the result of this study was contrary with a study done by Al-Binali (2012) where the result showed that there was no significant association between both variables. This means that, level of education on EBF is associated with the level
of knowledge where mothers with higher education were most likely to score good knowledge.

EMPLOYMENT STATUS RELATED TO LEVEL OF KNOWLEDGE ON EXCLUSIVE BREASTFEEDING

From the analysis of association between employment status and level of knowledge, this study revealed that most of government worker had high level of knowledge compared to working mother from private sector. However, this study reviewed that, level of knowledge on EBF is not correlated with employment status. This finding was supported by the study done by Karanci & Yenal (2014) where in their case, the government worker seem to had high level of knowledge regarding EBF. In contrast, study conducted by Afrose et al. (2012) had reported that, in his study, most of the government worker had poor knowledge.

FAMILY INCOME STATUS RELATED TO LEVEL OF KNOWLEDGE ON EXCLUSIVE BREASTFEEDING

Family income might influence the level of knowledge on exclusive breastfeeding. However, there was limited study discuss on this relationship. Analysis on association between family income and level of knowledge was done and found out that; family income had influence the level of knowledge on EBF. In this study, respondent from the low family income was the majority among those who had high knowledge level on EBF. In contrast, a study carried out by Boff et al. (2015) reported that mother with higher family income tense to had higher knowledge.

This study also revealed that there was significant association between these two variables where family income and level of knowledge on EBF were correlated. This finding was same to a study done by Boff et al. (2015) which showed the significant association between family income and level of knowledge. However, this result was in contrary with the study conducted by Afsoros et al. (2012) and Laanterä et al. (2010) where the result showed that, family income was not significantly associated with the level of knowledge on EBF. In short, for this study, family income had association with the level of knowledge on EBF where working mother from low family income were the most of respondent who scored good knowledge.

This study showed that majority of the working mother in HCTM has good knowledge on exclusive breastfeeding. Statistically proven that the level of knowledge on exclusive breastfeeding were also associated with the working mother’s age, level of education and family income.

CONCLUSION

In conclusion knowledge level on exclusive breastfeeding are various according to working mother age, race, education background, working status, and family income. So, this study had measure the level of knowledge on exclusive breastfeeding and come out with possible recommendation that may help overcome the factors that contribute to barrier in exclusive breastfeeding among working mother such as developing intensive health education package for working mother since antenatal care. As others studies, this study also have its own limitation where it was difficult to establish causality as it uses cross-sectional study design. In addition, this study was hospital based and therefore focused on working mother who presented for antenatal check-up. The finding of this study might not represent of what obtains at community level. Furthermore, the researcher unable to control bias due to the data was collected by means of responding questionnaire, depending on the respondent’s trustworthiness. The best recommendation can be implementing for this study is developing intensive health education package on EBF for working mother since antenatal care.

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