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## **The Relationship between Mothers' Educational Level and Feeding Practices among Children in Selected Kindergartens in Selangor, Malaysia: A Cross-sectional Study**

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### **ABSTRACT**

Child feeding practices was directly influence nutritional status of a child. Maternal education level has long been associated with child feeding practices. Thus, this study aims to compare the various feeding practices and nutritional status of the children according to different level of maternal education. This was a cross-sectional study which was conducted among kindergarten school children aged 4 to 6 years old in Selangor, Malaysia. One hundred forty two children (n = 142) of mothers from secondary school qualification (n = 70) and diploma and above qualification (n = 72) from urban (7 kindergartens) and rural (2 kindergartens) area were involved in this study. A feeding practices questionnaire comprising of questions regarding sociodemographic data, anthropometry measurement, feeding practices and three days diet record. Overall, children of mothers with secondary school qualification had higher prevalence of wasted (14.3%), 67.1% mothers had exclusively breastfed them up to 6 months and their mother had higher rate of using reward (82.9%). However, children of mothers from diploma and above qualification had higher prevalence of obese (13.9%), had higher fast food intake (70.8%) and had higher frequency of skipped breakfast (47.2%). There is a significant different ( $p < 0.05$ ) between energy and fat intakes among boys and girls of mothers from different education level. In addition, there is significant ( $p = 0.05$ ) negative ( $r = -0.26$ ) excellent relationship between children's BMI of mothers from secondary school qualification and their energy intake. The findings of this study suggested that education levels of mother were affecting the child feeding practices and finally determined the child's nutritional status.

**Key words:** Feeding practices, maternal education, children, nutritional status

### **INTRODUCTION**

Mothers are people who are responsible to feed their children and concurrently create the eating practices of their children. Poor nutritional status of children reflects an imbalance in dietary intake and affected by multiple environmental and socioeconomic factors such as low income families (Hong *et al.*, 2006), maternal education level (Pongou *et al.*, 2005; Hien and Hoa, 2009), child's birth order and duration of breastfeeding (Kamal *et al.*, 2010). Among all of these factors, mother's education had greater impact on nutritional status of children (Liaqat *et al.*, 2006; Hien and Kam, 2008). This is proven by a study done by Abdalla *et al.* (2009) which stated that low

education mothers result in various degrees of malnutrition. However, it does not mean that mothers with high education level had healthy children only (Liaquat *et al.*, 2006).

According to Willey *et al.* (2009), mother's education can determined child growth and health. It is because each mothers from different education level showed different practices (Webb *et al.*, 2009). It is shown that reduced odds of stunted were decreased with increase lengths of formal maternal education (Semba *et al.*, 2008). This is supported by Ramli *et al.* (2009) which stated that mothers who had improve their education, nutritional information and reduce poverty can reduced prevalence of stunted in children.

Besides that, low education level also can affect mother's ability to take care of their child in appropriate way (Matthew *et al.*, 2009). However, most mothers in developed countries were still not practicing exclusive breastfeeding until 6 months (Fewtrell *et al.*, 2007). In the South-east Asian region, Malaysia has the lowest prevalence of exclusive breastfeeding (Fatimah *et al.*, 2010). This practice are uncommon because nowadays, most of the mothers are working and have higher household income. This has lead the mothers to use infant formula milk rather than breast milk (Tan, 2009).

Besides that, mothers of low education level tend to introduce complementary feeding at inappropriate time. A study done by Hendricks *et al.* (2006) revealed that mothers with college education started complementary food at correct time compared to those mother with low education. This is happened because mother with high education level have knowledge on correct timing of complementary feeding compared to mothers from low education level (Aggarwal *et al.*, 2008).

As discussed, mothers are the main caregivers for the children and thus have stronger effects on child stunting compared to fathers (Semba *et al.*, 2008). Besides that, stunted was also associated with low levels of maternal education. Thus, in order to overcome the prevalence of malnutrition among children, mothers need to improve their education, boost women's health status and create healthful environments (Khan *et al.*, 2007). Although many studies done before shows that mother's education level can influence the feeding practices but there is still limited study done among kindergartens children in this setting.

Thus, this study was done to study the relationship between maternal education level and feeding practices among children aged 4 to 6 years old in selected kindergarten in Selangor. This study also looks into the comparison between children feeding practices adopted by each level of mother's education level to see whether at which level of education among mothers had better feeding practices. Besides that, this study also discovered the children's nutritional status for each different maternal education level to see the prevalence of malnutrition among them.

## **MATERIALS AND METHODS**

This study was a cross-sectional study which carried out in selected kindergartens in Selangor, Malaysia. Nine kindergartens were selected using simple random and convenient samphing method. Two areas in Selangor including urban and rural were selected to represent sample population (7 in urban areas and 2 in rural areas). The inclusion criteria were children aged 4.00 to 6.99 years old, no medical problems such as asthma, cleft lip/palate, congenital heart failure, kidney disease, inborn error and diabetes mellitus, children of selected kindergarten in Selangor and taken care by his or her mother. However, children were excluded from the study if they were less than 4.00 or more than 6.99 years old, having medical problems such as asthma, cleft lip/palate, congenital heart failure, inborn error, diabetes mellitus and kidney disease, have siblings who registered in the same kindergarten and sent to baby-sitter.

The sample size was calculated based on formula created by Krejcie and Morgan (1970) which then plus with 20% drop out. After calculated, the total sample size was 163 subjects and then subjects were selected using convenient and simple random sampling method. However, only 142 subjects were eligible to involve after some of them fall in exclusion criteria. This study was done using feeding practice questionnaire, measurement of height, weight and BMI and also three days diet record.

A self-reported Feeding Practice Questionnaire in Malay version that modified from several studies was used to collect the data. The feeding practices questionnaire including several parts. Sociodemographic part were modified from United States Agency for International Development, USAID (2008), Karim and Kheng (2000), Lian *et al.* (2007) and centers of disease control and prevention (CDC, 2009). Meanwhile, exclusive breastfeeding part was modified from Hop *et al.* (2000), feeding practices part modified from Freedman and Alvarez (2010), child dietary habit part were modified from Rosas *et al.* (2011) and Taylor *et al.* (2011) and parental feeding practices part modified from Musher-Eizenman and Holub (2007). Mothers of selected children aged 4 to 6 years old were given consent form in order to participate in this study. Those mothers who accept obtained the questionnaire after anthropometry data of their children were recorded. The questionnaire then was collected after three days later.

Body weight was measured three times by using digital electronic scale (SECA 813) and child was asked to stand on the electronic scale which placed on a flat and hard surface. Height was recorded three times using stadiometer (SECA 217) and taken in standing position with their head according to Frankfort horizontal plane before the height measurement was obtained. Body Mass Index (BMI) was calculated as weight in kilograms divided by the square of height in meters. The children then were categorized using WHO and CDC growth chart to assess their nutritional status.

Two days in weekdays and one day in weekend were included in three days diet record. The researcher obtained the children's intake while they were at kindergartens and the rest was fulfilled by their mothers.

**Statistical analysis:** Data was analysed using Statistical Package for Social Science, SPSS version 17.0. Two way Analysis of Variance (Two way ANOVA) and Correlation were used to assess the data. Two ways Analysis of Variance (Two way ANOVA) was used to compare means between macronutrients intakes among children from different level of maternal education. Meanwhile, Pearson rank correlation was used to determine relationship between children's BMI and their energy intakes. For both test, it was used 5% error, 95% confidence interval. However,  $p < 0.05$  as a level of significance in Two way ANOVA while  $p = 0.05$  as a level of significant in Pearson rank correlation. Meanwhile, data for three days diet record were analyzed using nutrient analysis software (Diet 4) to assess their nutrients intake.

## RESULTS

A total of 250 children's mother aged 4 to 6 years old received questionnaire together with consent form. Of these 250 mothers, only 161 mothers completed and returned the questionnaire forms, giving a response rate of 64.4%. However, some of them (11.8%) were excluded from the study because they fall into the exclusion criteria. Thus, the total participants involved in this study were 142 subjects.

The results (Table 1) showed that among the 142 subjects, 52.8% ( $n = 75$ ) were boys and 67% ( $n = 67$ ) were girls. About 44.4% ( $n = 63$ ) children aged 6 years were involved while 40.1% ( $n = 57$ )

Table 1: Sociodemographic data of children aged 4 to 6 years old

Parameter	n	%
<b>Sex</b>		
Boys	75	52.8
Girls	67	47.2
<b>Age</b>		
4 years	22	15.5
5 years	57	40.1
6 years	63	44.4
<b>Ethnic</b>		
Malay	129	90.8
Chinese	7	4.9
Indian	6	4.2
<b>Location</b>		
Urban	90	63.4
Rural	52	36.6
<b>Maternal education level</b>		
Secondary school	70	49.3
Diploma and above	72	50.7
<b>Paternal education level</b>		
Secondary school	82	57.7
Diploma and above	55	38.7

Table 2: BMI-for-age among children of mothers from different level of education according to WHO and CDC growth chart

Child's weight classification	Mothers education level			
	WHO		CDC	
	Secondary school (%)	Diploma and above (%)	Secondary school (%)	Diploma and above (%)
Severely wasting	14.3	12.5	28.6	27.8
Wasting	27.1	22.2	35.7	18.1
Normal	48.6	45.8	25.7	36.1
Overweight	5.7	5.6	5.7	4.2
Obese	4.3	13.9	4.3	13.9

were children aged 5 years and 15.5% (n = 22) were children aged 4 years. Majority of respondents were Malay (90.8%), Chinese (4.9%) and Indian (4.2%). 63.4% (n = 90) of children were from urban area while 36.6% (n = 52) of children were from rural area. 49.3% (n = 70) of mothers had secondary school qualification and 50.7% (n = 72) of mothers had diploma and above qualification. 57.7% (n = 82) of fathers had secondary school qualification and 38.7% (n = 55) of fathers had diploma and above qualification.

**Prevalence of severely wasting, wasting, normal, overweight and obese:** The results (Table 2) indicated that when WHO growth chart was used, 48.6% (n = 34) children of mothers from secondary school qualification and 45.8% (n = 33) children of mothers from diploma and above qualification were normal (15-85th percentile). However, when CDC growth chart was used, 25.7% (n = 18) children of mothers from secondary school qualification and followed by 36.1% (n = 26) children of mothers from diploma and above qualification were normal (25-85th percentile). Other than that, when using CDC growth chart, 28.6% (n = 20) children of mothers from secondary school qualification and 27.8% (n = 20) children of mothers from diploma and above qualification

were severely wasted (<5th percentile). Contradict with the results found when using WHO growth chart, 14.3% (n = 10) children of mothers from secondary school qualification and 12.5% (n = 9) children of mothers from diploma and above qualification were severely wasted (<3rd percentile). However, different results were obtained when referring to their mother's educational level. It is shown that, 14.3% children of mothers from secondary school qualification were wasted (3-15th percentile). 13.9% children from diploma and above qualification were obese (>97th percentile).

**Duration of exclusive breastfeeding:** The findings of this results (Fig. 1) presented that 67.1% (n = 47) mothers from secondary school qualification had exclusively breastfed their infant for more than six months. 37.5% (n = 27) mothers from diploma and above qualification had exclusively breastfed their infant for more than six months. 2.9% (n = 2) mothers from secondary school qualification and 1.4% (n = 6) mothers from diploma and above qualification had exclusively breastfed their infant until the age of 6 months. In contrast, 59.7% (n = 43) mothers who had exclusively breastfed their infant for less than six months were mothers from diploma and above qualification. Meanwhile, only 27.1% (n = 19) mothers from secondary school qualification had breastfed their infant for less than six months. However, there were some data which not reported by mothers.

**Fast food intake:** The results (Fig. 2) indicated that the highest frequency of fast food intakes was once in two weeks. It is shown by 70.8% (n = 51) children of mothers from diploma and above qualification followed by 60% (n = 42) children of mothers from secondary school qualification. Meanwhile, 14.3% (n = 10) children of mothers from secondary school qualification and 8.3% (n = 6) children of mothers from diploma and above qualification were never took fast food at all.

**Breakfast habit:** Seventy percent (n = 49) children of mothers from secondary school qualification had took breakfast for everyday. Meanwhile, only 52.8% (n = 38) children of mothers from diploma

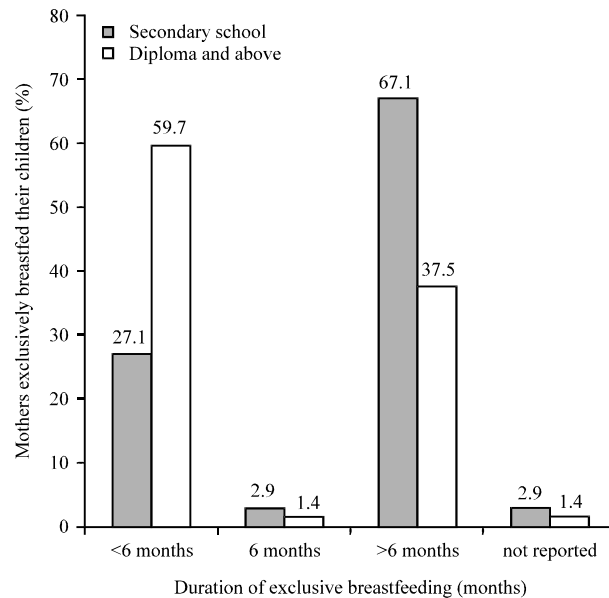


Fig. 1: Exclusive breastfeeding practices among mothers of children aged 4 to 6 years old according to mothers education level

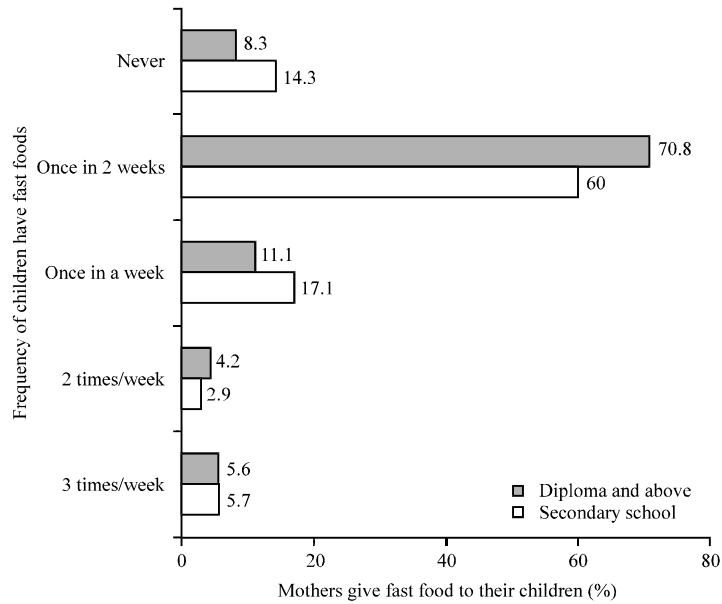


Fig. 2: Fast foods consumptions among children aged 4 to 6 years old

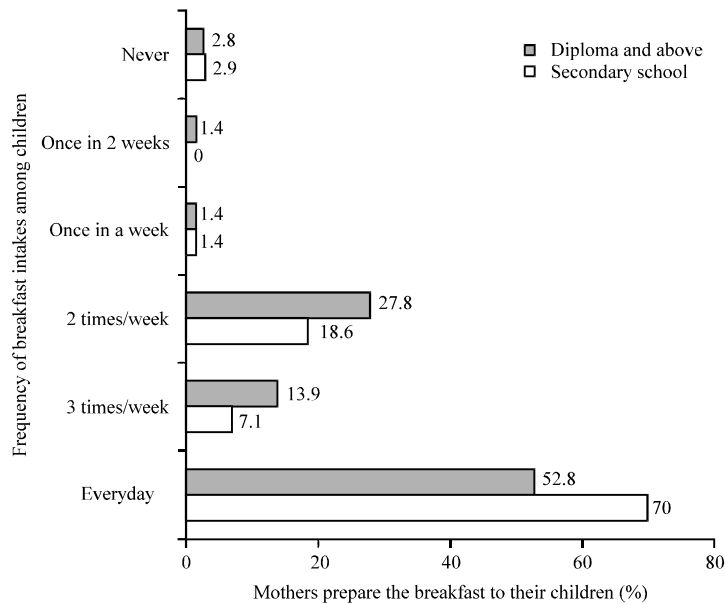


Fig. 3: Breakfast intakes among children with mothers at different education level

and above qualification took breakfast everyday. Besides that, 13.9% (n = 10) children of mothers from diploma and above qualification had took breakfast three times in a week compared to only 7.1% (n = 5) children of mothers from secondary school qualification (Fig. 3).

**The use of reward to encourage children to eat:** The 82.9% (n = 58) mothers from secondary school qualification had used reward to make their children eat whatever they were asked to eat.

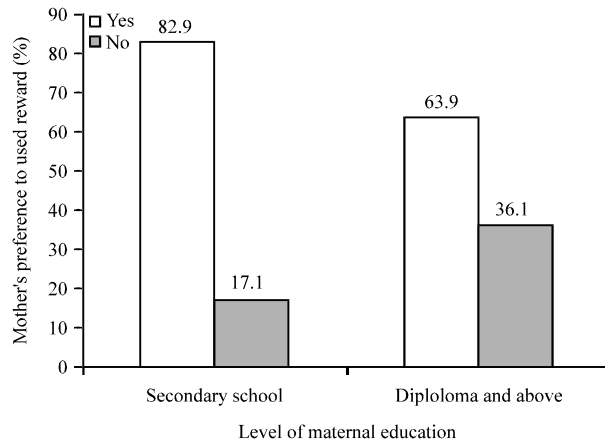


Fig. 4: The percentage of mothers from different education level that give reward to persuade their children to eat

Table 3: Macronutrients intakes among children of mothers with different education level

	Secondary school			Diploma and above			F-stats <sup>a</sup> (df)	p-value
	Boys n = 33	Girls n = 37	Total n = 70	Boys n = 42	Girls n = 30	Total n = 72		
Energy	1480.2±434.3	1423.7±342.6	1451.3±386.8	1379.9±433.2	1150.3±345.2	1284.3±412.4	7.94 (1,138)	0.006*
Protein	56.7±15.2	53.5±13.5	55.0±14.3	53.5±19.7	46.8±14.9	52.8±16.4	3.30 (1,137)	0.07
Fat	55.3±22.4	51.4±16.4	53.2±19.4	48.5±17.2	39.6±16.9	44.8±17.5	8.98 (1,137)	0.003*
Carbohydrate	210.3±191.6	187.2±47.5	198.1±135.4	183.2±58.5	153.1±47.3	184.2±103.6	3.10 (1,137)	0.08

Values are Mean±SD. \*The mean difference is significant value less than 0.05 levels

Table 4: Relationship between children's BMI of mothers from different education level and their energy intakes

	r-value	p-value
Secondary school	-0.26*	0.03
Diploma and above	-0.11	0.34

\*Correlation is significant at the 0.05 level (2-tailed)

However, 36.1% (n = 46) mothers from diploma and above qualification more prefer not to use reward in order to persuade their children to eat (Fig. 4).

**Macronutrients intake versus mother's educational level:** The results (Table 3) showed that there was a significant (p = 0.02) difference between maternal education level and energy intakes of their children and the mean did not differ significantly between children of mothers from secondary school qualification and mothers from diploma and above qualification. Besides that, there was a significant (p = 0.00) difference between maternal education level and fat intakes of their children. However, the mean for children of mothers from secondary school qualification was significantly different from the children of mothers from diploma and above qualification.

**Relationship between children's BMI of mothers from different education level and their energy intakes:** There is a significant (p<0.05), negative excellent correlation (r = -0.26) between children's BMI of mothers from secondary school qualification and their energy intakes. The correlation coefficient is negative (r = -0.26), indicating a negative correlation between children's BMI and their energy intakes (Table 4).



## DISCUSSION

Generally, the estimation of overweight, obese and undernutrition was different when using WHO standard versus the CDC reference (De Onis *et al.*, 2007). It is proven by these results whereas when CDC growth chart is used, most of the children were found undernourished compared to when WHO growth chart was used. However, the different result was found when comparing nutritional status among children of mothers from different education level. That is, children of mothers from secondary school qualification seemed to have the highest prevalence of wasted children compared to children of mothers from diploma and above qualification which seemed to have the highest prevalence of obese children. Similar finding with this result was found in a study done by Kamal (2011) which revealed that the risk of stunted among children were low in high level education mothers. This is also supported by a study done by Rahman *et al.* (2009) where the higher risk of wasted was among children with low maternal education level. In contrast with this result, another study done at Nghean province found that the higher risk of children to be underweight and wasted were children from mothers who had completed junior high school. (Hien and Kam, 2008). Besides that, number of children in family (Hien and Kam, 2008) and children from low socio-economic background (Amuta *et al.*, 2009) also contributed the children to be underweight, stunted and wasted. Consistent with a study done by Opara *et al.* (2010), the prevalence of underweight and stunted were higher among children from elite and the rich families which usually have educated parents. It is because, their parents were very concerned about their children's education which eventually reduced the children's food intake. A part from that, a study done by Nader *et al.* (2006) indicated that child within the range of normal BMI has low tendency to be overweight by early adolescence compared to the child in the range of BMI over the 85th percentile which had greater likelihood to be overweight. This happens as early as preschool years and then become emphasized during school-age years.

Differ with exclusively breastfeeding practices, it is shown that mothers with high education level did not exclusively breastfed their infant according to the recommendation which was at 6 months. This could be due to some factors such as the mother was working, mothers preferred infant formula milk and the child may be taken care by other people such as maid or grandmother. According to Niger *et al.* (2010), uneducated mothers breastfed their children for a longer duration compared to educated mothers. This is supported by a study done by Memon *et al.* (2010) that reported that mothers with less education had breastfed their infant for 6-11 months compared to higher educated mothers. Besides that, Vafae *et al.* (2010) revealed that low education mothers tend to exclusively breastfeeding compared to high education mothers. Moreover, a study done in Ethiopia also showed that lower rate of exclusive breastfeeding were among mothers with higher education level (Alemayehu *et al.*, 2009). Contrary with this result, a study done by Hendricks *et al.* (2006) found that child feeding practices including exclusively breastfeeding up to 6 months were improving with college educated mothers compared to those mothers from high school education. This was due to mothers that have low education level have high tendency to stop breastfeeding early or not to breastfed their children at all (Forster *et al.*, 2006). Consistent with a study done by Webb *et al.* (2009) found that there was a high tendency to initiate exclusive breastfeeding among mothers with an intermediate level of schooling (>3 to = 6 years) compared to no education mothers (<1 year). Besides that, multiparous (had given birth for more than once) mothers and mothers aged between 23 and 27 years more likely to initiate exclusive breastfeeding.

Besides exclusive breastfeeding practices, fast food intakes also could be affected by maternal education level. This study showed that the higher intakes of fast food were among children of

mother with higher level of education and caused by multiple factors. The factors such as lack of education regarding nutritional content of fast food which could result in obesity, time or money constraints, availability of fast food at home, lack of awareness regarding healthy foods (Boutelle *et al.*, 2007) and purchase snack from fast food restaurant (Larson *et al.*, 2008) could be the reason for higher intake of fast food among children. Besides that, a study done among preschool-age children has shown that TV/video viewing also could be the contributing factor. It was shown that the possibility for each one hour increase in TV/video viewing per day will result in an increase in taking of one or more fast food in a week (Taveras *et al.*, 2006). However, another study found that parents with higher level of education had children who less watched television (Proctor *et al.*, 2003). Aside from TV/video viewing, fast food advertisement, branding and trends in fast food consumption also could influence the taste preference among children. Thus, it will lead the children to gain weight and become obese later (Rosenheck, 2008). Besides that, another study revealed that higher weight and less healthy eating habits reflects the frequency of eating at 'fast food' restaurants. In addition, other factors such as work far away from home, had children and the existence of convenience food outlets could contribute high intake of fast food (Jeffery *et al.*, 2006).

Besides higher fast food intakes, those children of mothers from diploma and above qualification also showed that some of the them had skipped their breakfast. Contradict with a study done by Lazzeri *et al.* (2006) which stated that children with lower education mothers rarely took breakfast. In addition, study done by Chin and Nasir (2009) also found that parent's total year of schooling was not affected intake of breakfast among their children. In the meantime, some studies had relate between breakfast skipping practices and the effects in later life which eventually developed obesity in youth. This was due to breakfast skippers tend to be physically inactive person (Timlin *et al.*, 2008), increased weight gain (Niemeier *et al.*, 2006), consumed more added sugars (Deshmukh-Taskar *et al.*, 2010), experienced excess hunger and overeating (Miech *et al.*, 2006), consumed fast foods (Niemeier *et al.*, 2006) and took large portion sizes during next meals (Lioret *et al.*, 2009). Apart from that, breakfast skipped was influenced by several factors including limited access to food outlets, lack of appetite (Chin and Nasir, 2009) and lack of opportunity to be physically active because of crime rates, limited access to safe areas to play and parental perceptions about the safety of playground (Papas *et al.*, 2007). Besides that, it also caused by parents who did not have enough time to prepare breakfast for their children. In addition, children with single parent or low-income household also tend to skipped breakfast (Deshmukh-Taskar *et al.*, 2010) and a study done by Vereecken *et al.* (2009) also reporting similar finding. However, those who were practiced breakfast were more likely to continue this eating habit later in their life and thus resulted in less likely to be chronically obese compared with those who never took breakfast (Merten *et al.*, 2009). It is because children that consumed breakfast had low BMI (Body Mass Index) compared with those children who skipped the breakfast (Gleason and Dodd, 2009).

However, differ with the practice of used reward among mothers from different education level. These findings indicated that, low educated mothers tend to give reward to ensure their children eat certain food compared to higher educated mothers. However, there was limited study on the relationship between maternal education with the used of reward among mothers because most of the study relate between the used of reward and the effect of being rewarded among children and between types of food used as a reward and maternal education level. A study done by Vereecken *et al.* (2004) reported that food and sweet usually used as a reward in order to persuade children to eat. In addition, the study also showed that the used of soft drinks as a reward were

high among mothers that have low education level compared to mothers that have higher education which more prefer to use fruits and vegetables as a reward. In the meantime, a study done by Wardle and Cooke (2008) used a 'sticker' as a reward in order to persuade children to eat pieces of red pepper everyday besides increased their preference to that food. It is shown that groups which are rewarded tend to eat more rather than groups without reward. Findings from a longitudinal study also found that child eating compliance was associated with the use of food as a reward, neutral prompts and praise (Orrell-Valente *et al.*, 2007). In contrast, another study revealed that lower intake of fruits and vegetables were found among children which have been rewarded (Kroller and Warschburger, 2008). Besides that, using food as a reward can result in children to overeating then become overweight (Rhee *et al.*, 2006). However, lean children less sensitive to reward compared to obese children. It is because, obese children were unable to inhibit ongoing motor responses. That is, obese children more prefer smaller immediate reward rather than larger delayed reward (Nederkoorn *et al.*, 2006).

Other than that, this study also indicated that there was a difference between energy and fat intake among children of mothers from different education level. When it was compared with the Recommended Nutrient Intakes (RNI) of Malaysia, almost all the children had excessive energy intake when except for girls of mothers from diploma and above qualification. 1482 kcal (n = 33) of energy taken by boys with mothers from secondary school and 1380 kcal (n = 42) of energy taken by boys with mothers from diploma and above qualification. From that, it was shown that all boys had exceeded the RNI value which recommends boys aged 4 to 6 years old to take about 1340 kcal day<sup>-1</sup>. In contrast with boys, about 1150 kcal (n = 30) of energy taken by girls of mothers from diploma and above qualification meanwhile 1424 kcal (n = 37) of energy taken by girls of mothers secondary school qualification, respectively. However, girls aged 4 to 6 years old were recommended by RNI to take about 1290 kcal day<sup>-1</sup>. So, girls of mothers from secondary school qualification had exceeded the RNI value. Other than that, according to RNI, children aged 4 to 6 years old were recommended to take about 30-45 g of fat per day. Boys of mothers from secondary school qualification had the highest intakes of fat which was about 55.3 g (n = 33), followed by boys of mothers diploma and above qualification, 48.5 g (n = 42). However, both of them exceed the recommended intakes. In contrast with fat intakes among girls whereas girls of mothers from diploma and above took about 39.6 g (n = 30) while girls of mothers from secondary school took about 51.4 g (n = 37). From that, it was shown that girls of mothers from secondary school qualification had the highest intake compared to girls of mothers with diploma and above qualification and also had exceed RNI value.

Apart from that, another study showed that better nutritional status of children was influenced by maternal education level (Rayhan and Khan, 2006). The results of this study also indicated that child's BMI among mothers from secondary school qualification correlated with their energy intake. Meaning that, mothers from low education level could affect their children's intake and thus determined the BMI status. In addition, another study revealed that mother's education had significant relationship with the prevalence of underweight (Sharifzadeh *et al.*, 2010). Contradict with another study, it is shown that overweight status was negatively associated with maternal education (Rose and Bodor, 2006). Moreover, similar finding also found in a study done by Gregory *et al.* (2010) which indicated that maternal education did not predict child BMI and child BMI was the only independent predictor.

## **CONCLUSION**

The findings of this study revealed that children of mothers with secondary school qualification had higher prevalence of wasting after normal, their mothers had exclusively breastfed them up to 6 months and their mother had higher rate of using reward. However, children of mothers from diploma and above qualification had higher prevalence of obese after normal, had higher fast food intake and had higher frequency of skipped breakfast. As reported, it could be concluded that majority of mothers with secondary school qualification had better feeding practices rather than mothers with diploma and above qualification. However, most of them lack of information regarding the appropriate feeding practices compared to mothers from diploma and above. Thus, it is important for mothers to have knowledge to give care to their children.

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