

Original Research Article

Breast Feeding Issue: A Study on Factors Affecting Termination of Breast feeding among Working Mothers

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ABSTRACT

Background: Growth and development of the infants were highly influenced by their first nutrition and breast-milk. Mothers were encouraged to give exclusively breastfeeding as soon as possible after birth up to two years old. However, for working mothers it becomes a challenge for them to continue breastfeeding.

Objectives: The aim of this study was to identify the factors that are affecting in termination of breastfeeding among working mothers. And also, the association between socio-demographic data, work related factors and workplace support with breastfeeding practice were examined.

Materials and Methods: Self-administered questionnaires were distributed to the government hospital and health clinics in Kuantan, Pahang from March until May 2015. A total of 152 participants were included in this study involving working mothers with children aged six months up to two years old. The factors affecting termination of breastfeeding among working mothers were socio-demographic data, working environment factors and breastfeeding supports were studied. Data was analyzed using the chi-square test in order to determine the relationship between breastfeeding practices with socio-demographic data, work related factors and breastfeeding supports.

Results: Most of working mothers in this study stop breastfeeding when they are returning to their work. Strongly supports from the employer at working place significantly affected breastfeeding practices ($p < 0.05$).

Conclusion: It is important for the working mothers to have a good support for continuing breastfeeding practice when returning to work from their employers so that they can exclusively breastfeed until the children reached two years old as recommended by the World Health Organization (WHO).

Keywords: Breastfeeding Practices, Working mothers, Support.

INTRODUCTION

Breast milk was the best food sources for baby. ^[1] It contains several protective enzymes such as amylase and digestive lipase that could protect baby from diarrhea and infection. ^[2] Breastfeeding is defined as the action of the child receiving breast milk directly from the mother's breast or expressed breastfeeding. ^[1] World Health

Organization (WHO) was encouraged the mothers around the world to breastfeed their infants exclusively in six months after the delivery to promote growth and development of the baby. ^[3]

Recently, women were more productive and competing in career forces at the same level of man. This phenomenon gives a negative impact on breastfeeding

rates. [4] The babies of working mothers tend to stop breastfeeding more rapidly than unemployed mothers. [5] Studies found that breastfeeding while working was more difficult for working women if workplace support was minimal. [6]

The Third National Health and Morbidity Survey (NHMS III) conducted in 2006 reported that the prevalence of breastfeeding in Malaysia was 94.7% and the prevalence of exclusive breastfeeding was 14.5%. [7] In another study found that was 31.3% of unemployed women practiced exclusive breastfeeding, the value was higher than those 25.4% of working women. [4] So that, it can be said that breastfeeding might be less suitable for working women. [4] Thus, this research was done to identify the factors affecting termination of breastfeeding among working mothers. The association among socio-demographic data, work related factors and workplace support with breastfeeding practice were examined.

MATERIALS AND METHODS

The location of this cross-sectional research study was set up in Kuantan, Pahang. A total of 152 respondents were agreed to participate with the working mothers aged between 18 to 40 years ($M = 27.75$, $SD = 0.688$). They were selected by using a convenience sampling method that directly fit in inclusion criteria. The inclusion criteria are working mothers who have children between six months to two years.

Three governmental clinics and hospital in Kuantan were selected. Employed women who had the child aged range six to two years who attend the health services from these clinics and hospitals were chosen for this study. Working mothers are those mothers who work for a salary and had returned to work. The inclusion criterion for this study was working mothers with children more than six months to know their breastfeeding practice until six months after delivery. We also included the mothers who have babies up to two years, regarding to the time

constraints for the collection of data. Mothers who were unable to breast-feed because of any illnesses were included from this study.

Self-administered questionnaire that adopted from the previous study by [8] was used in this study. The questionnaire has 40 questions. It was divided into several sections. Questions regarding socio-demographic data were in Section A whereas questions on breastfeeding information of the mothers in section B. Questions related to maternal return to work related information was in section C and workplace supports in section D. The sample size was calculated by using Raosoft sample size calculator with a confidence level of 95%. The estimated sample size calculated was 152. Those 152 respondents were successfully selected and willing to answer the questionnaire after the objectives and purposes of the study was explained.

Breastfeeding practices were determined by looking the exclusive and non-exclusive breastfeeding factors of the working mothers. Exclusive breastfeeding defined as an action of giving only breast milk to babies in the first 6 months after delivery. [6] For working mothers who do not breastfed anymore, they need to write when and why they stop giving breastfeeding and the duration of breastfeeding to their children. Several questions that we asked regarding socio-demographic data are races, level of education. There are also questions that related to their work such as type of job (professional or non-professional), types of employer (government or private), working status (full time or part time), income and work arrangement (fixed or outstation). The mothers also being asked about what were their working time (night only, day only, shift and both day and night), how many days they were working for a week and how many hours their working time for one day. Regarding to the workplace facilities we asked questions about the availability of maternity leave, breastfeeding leave, breastfeeding room, refrigerator, employer's

support, nursery and paternity leave. We defined the mothers who do not have workplace support by determine less than three workplace's support that they got. Chi-square of SPSS analysis was used to determine the association of breastfeeding practices with socio-demographic data, work related characteristics and workplace support.

An approval for this research was from IIUM Research and Ethic Committee, International Islamic University Research Ethics Committee (IREC), National Medical Research Register (NMRR) and Clinical Research Centre (CRC) of Hospital Tengku Ampuan Afzan (HTAA) Kuantan. All participants were provided with written consent, the data was collected between March to May 2015.

RESULT

The total participants of this study were 152. The range of age was among the participants were 26 and 35 years old (mean age: 27 (0.688)). Malays women were the majority by 86.8% compared to non-Malay for 13.2%. 87.5% of the participants were diploma and higher education holder, whereas 12.5% were among secondary school education level. 118 of the participants were working in professional career while another 34 mothers were working as non-professional job. 53.9% were working in government institutions while 46.1% of them were involved in private institutions. Then, 93.4% of the mothers were full-timed employees and 86.2% of them were having fixed working arrangement. Table 1 showed the socio-demographic and work factors of the participants.

At the time of data were collected, 73% mothers (114/152) had stopped breast feeding. Among these 114 mothers, 25 had stopped giving breastfeeding in the first three months after delivery (21.9%). 43 of them were between three to six months (37.7%) and another 46 mothers stopped when their babies more than six months (40.4%).

Table 1: Socio demographic data and work factors related to breastfeeding practice of the respondents (n=152)

Variable	Frequency(n)	Percentage (%)
Age Mean (SD)	27.75 (0.688)	
Ages		
Less than 25 years old	51	33.6
26 – 35 years old	76	50.0
More than 36 years old	25	16.4
Ethnic		
Malay	132	86.8
Non-Malay	20	13.2
Education level		
Secondary	19	12.5
Diploma and above	133	87.5
Type of Jobs		
Professional	118	77.6
Non-Professional	34	22.4
Type of employer		
Government	82	53.9
Private	70	46.1
Work Status		
Full time	142	93.4
Part time	10	6.6
Work Arrangement		
Fixed	131	86.2
Outstation	21	13.8
Monthly income		
≤ RM2000	41	27.0
RM2001- RM3999	75	49.3
≥ RM4000	36	23.7
Number of children		
1 only	56	36.8
2 or more	96	63.2
Working Time		
Day	91	59.9
Night	2	1.3
Shift	50	32.9
Night and day	9	5.9
Working day per week		
1-5 day	135	88.8
6-7 day	16	10.5
Working hours per day		
<9 hours	99	65.1
>9 hours	53	34.9

Table 2: Workplace support

Workplace Support	Frequency(n)	Percentage(%)
Flexible pumping time		
Yes	67	44.1
No	85	55.9
Breastfeeding room		
Yes	64	42.1
No	88	57.9
Refrigerator		
Yes	64	42.1
No	88	57.9
Breast milk pump incentive		
Yes	20	13.2
No	132	86.8
Nursery available		
Yes	55	36.2
No	97	63.8
Maternity leave		
< 3 months	64	40.5
>3 months	88	59.5
Paternity Leave		
Yes	78	51.3
No	74	48.7
Breastfeeding Leave		
Yes	42	27.6
No	110	72.4
Employer's support		
Yes	89	58.6
No	63	41.4

Table 3: Association between Breastfeeding practice with socio-demographic and work related characteristic

Characteristics	Total	Breastfeeding Practices				X ²	p-value
		Discontinue		Continue			
		N	%	N	%		
Age							
Less 25 years old	51	32	21.1	19	12.5	0.479	0.787
26 – 35 years old	76	52	34.2	24	15.8		
36 years old above	25	16	10.5	9	5.9		
Races							
Malay	132	85	55.9	47	30.9	0.868	0.351
Non-Malay	20	15	9.9	5	3.3		
Education Level							
Secondary	19	13	8.6	6	3.9	0.067	0.796
Diploma and above	133	87	57.2	46	30.3		
Type of job							
Professional	118	81	53.3	37	24.3	1.910	0.167
Non-Professional	34	19	12.5	15	9.9		
Type of Employer							
Government	82	50	32.9	32	21.1	1.833	0.176
Non-Government	70	50	32.9	20	13.2		
Working Status							
Full time	142	97	63.8	45	29.6	14.852	0.001
Part time	10	3	2.0	7	4.6		
Working Arrangement							
Fixed	131	83	54.6	48	31.6	2.489	0.115
Out station	21	17	11.2	4	2.6		
Working Arrangement							
Fixed	131	83	54.6	48	31.6	2.489	0.115
Out station	21	17	11.2	4	2.6		
Income							
<rm2000	41	30	19.7	11	7.2	4.732	0.094
Rm2001-rm3999	75	43	28.3	32	21.1		
>rm4000	36	27	17.8	9	5.9		
No of Children							
One	56	33	21.7	23	15.1	1.854	0.173
More than Two	96	67	44.1	29	19.1		
Working Time							
Day	91	58	38.2	33	21.7	2.649	0.449
Night	2	2	1.3	0	0.0		
Shift duty	50	35	23.0	15	9.9		
Day and night	9	5	3.3	4	2.6		
Working day per week							
1-5 days	135	88	58.3	47	31.1	0.081	0.777
6-7 days	16	11	7.3	5	3.3		
Working hours per day							
<9 hours	103	66	43.4	37	24.3	0.416	0.586
>9hours	49	34	22.4	15	9.9		

Regarding the reason of quitting breastfeeding, 33.4% of the working mothers claimed that it was because of insufficient milk while 29.8% were because of baby refuse to breastfeed. Then, 26.3% of mothers said that they must to return to work thus they stop giving breastfeeding. 2.7% were found because of mother's psychological and physiological problem, whereas other 7.9% were because their babies need to stay longer in hospital and new pregnancy occurs.

From total respondents, 55.9% of them claimed that they had enough time to pump the breast milk at work. Only 42.1% of mothers have the refrigerator and

breastfeeding room in their workplace. 13.2% of working mothers got an incentive to buy a breast pump from their employer while 86.8% of them purchased it by using their own salary. Next, 63.8% of mother said that their workplace does not have any available nursery at or near their workplace. Then, for 72.4% of them do not have breastfed leave. 59.5% respondents were having more than 3 months maternity leave and most of them 58.6% get employer's support. Data for those mothers who get the workplace support are provided in Table 2.

Regarding to breastfeeding duration among working mother, 25.0% of the employed mothers gave breastfeeding in the

first six months after the birth. Most of the mothers (59.2%) were given breastfeeding between seven months to one year and another 15.9% continue until 24 months.

The association between socio-demographic data and work related factors

with breastfeeding practices was analyzed by using Chi-square test. No significant association were recorded ($p > 0.05$). The associations between those factors were shown in Table 3.

Table 4: Association between Breastfeeding Practices with workplace support

Characteristic	Total	Breastfeeding Status				X ²	p-value
		Discontinue		Continue			
		N	%	N	%		
Having workplace support	70	36	23.7	34	22.4	11.890	0.001
No workplace support	82	64	42.1	18	11.8		

There was an association between breastfeeding practices with workplace support. Table 4 shows the data on the association between workplace support and breastfeeding practices.

From the table, it clearly stated that employed women with breastfeeding support continue breastfeeding (22.4%) than those who did not have workplace support (11.8%) ($P < 0.05$)

DISCUSSION

The socio-demographic result showed that 73% of working mothers were ended breastfed their infants during the data was collected. The result was higher than the prevalence of 51% stated in the previous study (Amin, et al. 2011). It also differs with the prevalence rate of 50% mentioned in the Second National Health and Morbidity survey in 1996.

Insufficient breast milk (33.4%), baby refuses the milk (29.8%), mothers need to work (26.3%), maternal problem (2.7%), and new pregnancy and hospitalization of the baby after delivery (7.9%) were the main reason why working mother stops giving breastfeeding in this study. The listed reasons were almost similar to the study conducted in southwestern Saudi Arabia, which was insufficient milk (44.0%), workplace problems (38.5%), child refusal (13.5%) and others (3.9%).^[9]

In the study, working women did not have enough time to pump the breast milk at the same time they were working (55.9%). Proper breastfeeding room and separated

refrigerator were not provided by the employers (63.8%). Most mothers told that they pump their breast milk in prayer rooms because no specific breastfeeding rooms were provided. Then, no separated refrigerator provided. The refrigerator mostly for the public use and the foods were combined altogether.

Only 20 of the respondents got breast pump incentive in this study. Giving breast pump incentive might not be practiced by all employers but it can be a productive method to motivate breastfeeding practice among employed mothers.^[10] Next, 58.6% of the participants got their employer's support in practicing breastfeeding while working but the workplace facilities and policy provided were still minimal, so the practices actually cannot be done comprehensively.

Based on the study, working status of the working mothers was the only socio-demographic data that give positive impact toward breastfeeding practices. It can be concluded that full-timed working mothers cannot give full commitment to continue breastfeeding. This result was found similar to the study by Mandal, Roe and Fein that said full-time employment make breastfeeding practices harder.^[11] However, the study is contrasted with the study conducted in Australia that clearly stated that part-time employment make mother ends breastfed earlier.^[5]

Workplace support was affected the breastfeeding practice among working mothers in Kuantan. Most of employed women without workplace facilities and

support at their workplace give up on breastfeeding. Without proper support, it seems difficult because the breastfeeding issue was related to privacy, hygiene and discipline.

In Malaysia, the breastfeeding facilities at the workplace were still low even though Malaysia has its own breastfeeding policy. [4] In spite of being policy has been established, the practice seems low both in government and private sectors because breastfeeding and working at the same time was difficult to be carried out without high support and self-encouragement by the mothers.

Seems, providing longer maternity leave for working mothers can be one of the solution but it would take long time to change the law. It cannot be denied that, breastfeeding-friendly support and the promotion of breastfeeding policies was the best way to motivate working mothers to breast-feed but it needs a lot of effort by all parties. [12]

RECOMMENDATION

Comprehensive antenatal education and constant follow up by the nurse is important. To make it more effective, a special team consists of staff nurses who are expert in the breastfeeding field should be recruited in the community center. It really needs a long and hard journey but it can be a good effort for the improvement of breastfeeding practices in Malaysia.

Then, the facilities and policy must be environmentally-friendly so that it can be easily practiced by the working mothers. It was because; most of working mothers were stopped in giving breastfeeding because they did not get the proper support at the workplace. It was understandable that not all employers can provide all the facilities but the basic facilities such as breastfeeding room and refrigerator are important to be emphasized wholly.

Limitation

Convenience sample method was used in this study. Because of the limited time, the participants were selected based on

the inclusion criteria directly. Those mothers were approached by asking the criteria, then selected respondents were given the questionnaire at the same time and the complete questionnaires were collected. This technique of sampling method will create a bias because the selecting method was not random since simple random method was the best method of sampling, but it is easier regarding to the time and space constraints.

Besides, for the best outcome of breastfeeding practices among working mothers in Kuantan the sample must be higher. The higher the sample of the data collected, the better the outcome of breastfeeding practices because it can represent the whole population directly. The Small sample population might seem un-relevant because it does not correspond to the whole working mothers in Kuantan.

CONCLUSION

Employment and breastfeeding at the same time was not an easy task. It needs a big effort by all parties included the working mothers, healthcare provider, employers and policy maker to work together as a team. Without the commitments from these people, the successfulness of breastfeeding practice in Malaysia cannot be guaranteed.

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