

Breast Feeding and Mothers Employment

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Abstract

Background: An important factor influencing duration of breastfeeding is mother's employment status. The nutritional, immunological, psychological and economic benefits of breastfeeding are well documented. Both UNICEF and the World Health Organization recommend mothers should breastfeed exclusively for at least 6 months.

Objectives: To determine how the employment and the employment variables (type of work, time of return to work and hours of work) influence the breast feeding practices.

Methods: A cross-sectional study was carried out on a sample of 200 employed mothers who had their last child been completed at least tow years. Data were collected using a questionnaire form. It was carried out during the period from 1st of April to 1st of September, 2000, in Baghdad city/ AL-Risafa in 6 different places where employed mothers of young children were expected to be found.

Results: The study revealed that the impact of employment status was noted on the breast feeding

initiation time, breast feeding duration and complementary food initiation time. The majority of employed mothers (56.1%) who worked shorter hours breast-feed for longer durations and starts weaning after the fourth months of the infant's age. The highest percentage of employed mothers (75.9%) with maternity leave of six months or more breast feed for a year or more and (66.1%) start weaning later than the fourth month of the infant's life.

Conclusions: The study recognizes that employed mothers who worked shorter hours and mothers with longer maternity leaves breast feed for longer durations and start weaning later than mothers who worked long hours and mothers with shorter maternity leaves. It was concluded that most work-places lack accommodations to support breast-feeding.

Keywords: breast feeding, mother employment, infant feeding, work

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Introduction:

An important factor influencing duration of breastfeeding is mother's employment status. The nutritional, immunological, psychological and economic benefits of breastfeeding are well documented⁽¹⁾.

Both the UNICEF and the World Health Organization recommend mothers should breastfeed exclusively for at least 6 months⁽²⁾.

People from all walks of life play a role in fostering breastfeeding. When health care professionals, legislators, employers, business owners, and community and family members work together, their efforts can increase the number of women who start breastfeeding and the length of time they continue to breastfeed⁽³⁾. Women have always worked, especially in their childbearing years. Finding a way to care for a child and to work has always been a problem.

Women need control over their own time so that they can attend to a baby when they want to⁽⁴⁾.

The major problems facing working women who wishes to breast -feed are:

1-Lack of reliable help at home.

2-Lack of nearby nursery with good quality care.

3-Lack of facilities at the work-place for nursing and caring for the baby.

4-Long working hours or distance and transport problems to work.

5-Social and family problems.

6-Lack of empathy from surrounding colleagues and responsible officials at work place⁽⁵⁾.

Methods:

A cross-sectional study was carried out during the period from 1st of April to 1st of September, 2000, in Baghdad city/AL-Risafa in 6 different places ,these places include two schools (Al-Khansaa' and Al-Zahraa' Secondary schools for girls), two colleges (Baghdad University/College of Medicine, Al-Mustansirya University/College of Science), one governmental offices (Ministry of Health), two hospitals (Baghdad Teaching Hospital and Al-Alwia Pediatric Hospital), two factories (one governmental; Plant Oil Company and one private; Al-Qairawan Textile Factory in Al-Taji). These places were chosen to cover most types of work where employed mothers of young children were expected to be found.

Data collection was carried out for three hours/day, 3 days/ week over the period of the study.

A sample of 200 mothers of reproductive age, who had delivered their last child between 1-4-1997 and 31-3-1999.

The inclusion criteria for the sample include:

1-Should be between 20-45 years old.

2-Married with at least one living child aged two years or less.

3-Being employed before the birth of the youngest living child.

The data was collected using a questionnaire form, the questionnaire include information under 3 main headings:

Information related to the mother; these include general information concerning the mothers, knowledge and practice of breast-milk expression. Beside the above information there was part that includes questions about the employment status and work circumstances.

Information related to the youngest living child; including details on breast-feeding practices.

Information related to some socio-demographic characteristics of husband.

The data collected was handled using descriptive statistics (Frequencies and Percentages) and were analyzed using the chi-square (X^2) test and the student t-test to determine the association between variables and to study the differences between means, respectively. $P < 0.05$ was considered as a cut-off value for significance.

Results:

1: the Sample characteristics:

Table (1) shows that the majority of employed mothers were in the age of a mean of (34.2 ± 5.6) years, the mean number of years of schooling was 14.0 ± 4.4 years and the mean number of children was (2.4 ± 1.5) children. Their husbands have been within (36-45) years of age, had completed institute or college education and were actively employed.

Among 200 employed mothers (93.5%) were working outside home, only (4.5%) were students and employed and only (2%) were working at home. The majority (91%) was working in the government sector, only (7%) in private sector and 2% in both sectors (as two shifts).

Of the employed mothers 45% held professional or managerial jobs including (doctors, dentists, pharmacists, engineers, teachers and managers). The remaining (55%) held clerical, service jobs or otherwise including (clerical, secretary, nurse, cleaner, factory workers, tailor and cook).

Regarding employment during pregnancy (95%) of the employed mothers were working while they were pregnant. The highest percentage (74.2%) of these employed during pregnancy were working for the whole nine months of pregnancy, followed by (15.7%) who were working for eight months, (5.2%) for seven months and (4.7%) for the first 6 months of pregnancy.

Among mothers who took a 12 months maternity leave, all mothers who worked in the governmental sector reported that they received full salary for the first 6 months of maternity leave, while mothers employed in the private sector reported that their contracts did not permit paid maternity leaves.

After completion of the maternity leave, (87%) of employed mothers reported that they returned to their previous post, while 13% returned to other posts. Of the latter (62%) reported that "the works need" was the main reason for changing post followed by "work competition" (38%).

Regarding the husband's attitude toward wife's employment, the majority (75%) was encouraging followed by (21.5%) discouraging and only 3.5% were neutral regarding wife's employment.

2: Relationship of work variables to breast-feeding practices:

Breast feeding and type of work:

Upon studying the relationship of the type of work to breast-feeding patterns, table (2) shows that the majority of mothers (68.5%) who held professional or managerial jobs practice bottle feeding and only (22.5%) practiced breast-feeding. The same finding was seen for mothers who held clerical, service and other jobs. with no significant association between the type of work and breast-feeding pattern ($p > 0.05$).

Regarding the breast-feeding duration table (2) also shows the majority of mothers (55.0%) who held clerical, service or other jobs tend to continue breast feeding for a year or less of their

infant's age. While the majority of mothers (51.7%) who held professional jobs tend to breast-feed for longer duration. Statistical analysis shows that the mean duration of breast-feeding among mothers in professional or managerial jobs (12.5±6.9 months) was higher than the mean duration of breast-feeding among clerical service or other jobs (11.9±5.4 months), with no significant difference between these two groups (t=0.6, d.f. =197, p>0.05).

Breast feeding and number of hours worked

Table (3) reflects that if mothers worked shorter hours, the highest frequency (65.1%) of mothers continued to breast feeding their infants beyond the infant's first birthday. While for mothers who worked longer hours, the highest frequency (57.8%) of mothers continued to breast-feed their infants for a year or less. Statistical analysis shows no significant association between number of hours worked and breast-feeding duration (p>0.05).

Table (3) also shows that among mothers who worked shorter hours the majority (54.4%) of mothers who worked shorter hours start complementary food after the 4th months of their infants age, while the majority (89.3%) of mothers who worked longer hours start weaning earlier. Statistical analysis shows a significant association between the number of hours worked per week and infant's weaning age (p< 0.05).

Breast feeding and the length of maternity leave:

Out of 200 employed women (81%) took maternity leaves but of different lengths, the highest frequency (75%) of mothers took nearly a one year leave (10-12months).

Table (4) illustrate that if the mother returns to employment before or at 6 months postpartum, the highest frequency (74.3) breast feed for a year or less with a significant statistical association between the length of maternity leave and breast feeding duration. Table (4) also shows that the majority of mothers (57.1%) who return to employment at or before 6 months postpartum tend to start complementary food at or before the fourth month of the infants age with statistical significant association between the time of return to employment and complementary food initiation time with (p< 0.05).

Breast feeding and the work place accommodations:

When the work-place accommodation for b.f. was studied, it was found that among 196 mothers who were employed outside home (30%) reported the presence of a child-care facility at or near the work-place, the majority 64% said that there was none and (6%) had no idea. Breast-feeding breaks was enjoying only by 25% of employed mothers, the majority (64%) did not, 10% were occasionally allowed to take the break and only (1%) did not try to take the break.

When the mothers were asked if they were allowed to leave the work-place to the near-by child-care center or home to breast-feed their children, only (20%) said "Yes", the majority (76.5%) said "No" and (3.5%) reported that they were occasionally allowed to do so.

Regarding the presence of a private place at work to breast feed or to express breast milk, out of 196 employed mothers only (9%) reported the presence of such a place and (91%) denied the presence of such a place.

3: Attitude of mother's husbands and employers concerning breast feeding:

Out of 196 mothers employed outside home (71%) reported their embarrassment to breast feed in the work-place. The majority of the employed mother's husbands (85.5%) encourage breast feeding.

Regarding employers, the majority (47%) were encouraging breast feeding and only (5%) discouraging it.

Discussion:

The present study was designated to describe the influence of employment on breast feeding practice among mothers employed in different jobs.

Data were collected by direct interviews with each mother with a detailed questionnaire; embarrassment of a few mothers to answer certain questions in presence of others (due to lack of privacy) when data were collected may have resulted in slight information bias.

The present study shows that the majority of employed mothers were of 30-34 years of age, college graduates and primiparous. This finding is

consistent with the finding of Ryan and Martinez⁽⁶⁾, who conducted a survey in the United State of America on b.f. among working mothers. They reported that the majority of employed mothers were older than 25 years, college educated and primiparous.

The present study shows that the majority of mothers who held both professional or managerial jobs and other jobs tend to practice bottle-feeding more. This finding is supported by a study conducted by Gielen et al.⁽⁷⁾ in USA survey where they reported no such association between work type and feeding pattern. Another study done by Kurinij et al.⁽⁸⁾ on mothers delivering in Washington, pointed out that mothers who held professional jobs tend to breast feed for longer durations than women who held other jobs which is inconsistent with the finding of the present study. The same finding was reported by a study held by Duke et al.⁽⁹⁾ which shows that mothers with professional jobs tend to breast feed for longer durations than other jobs.

The findings of the present study strongly support the hypothesis that mothers who worked longer hours breast feed for shorter durations and start weaning earlier than mothers who worked shorter hours. These findings are consistent with other studies. Kurinij et al.⁽⁸⁾ in a survey on employed mothers in Washington reported that full-time employed mothers breast feed for shorter durations than part-time employed mothers. Auerbach and Guss⁽¹⁰⁾, who surveyed 567 employed women who were b.f., reported the same finding. They pointed out that (66.7%) of full-time employed mothers weaned before the 12 months and that (55%) of mothers who worked part-time weaned their infants at 12 months or later.

Another study reported by Hawkins et al.⁽¹¹⁾ in a sample of employed mothers in U.K, they reported that employed mothers working part time were more likely to breast feed for at least 4 months than full time employed mothers.

Flexible working schedule was among factors associated with increase the likelihood of continuing breast feeding after returning to work it was reported by a study conducted by Chen et al.⁽¹²⁾.

,this findings in consist with the findings of Duke et al.⁽⁹⁾ who surveyed 180 female physicians shows that part-time or full-time work, income

level, and practice setting or type of practice, did not influence the duration of breastfeeding.

Another study conducted by Cooklin et al.⁽¹³⁾ reported that Part-time work among new mothers has almost as big a negative impact on breastfeeding rates as returning to work full-time.

The present study illustrates that early return to employment is associated with shorter duration of b.f. and early initiation of complementary food (table 4). These findings are consistent with Gielen et al.⁽⁷⁾ a USA study which reported that mothers who initiate b.f. were less likely to continue b.f. and start weaning their infants in conjunction with resuming employment, it is also consistent with Auerbach and Guss,⁽¹⁰⁾ and kurinij et al.⁽⁸⁾. another study conducted by Hawkins et al.⁽¹¹⁾ reported that the longer the delay of her return to work post partum the more likely she was to breast feed for at least 4 months.

The same reported by Baker and Milligan⁽¹⁴⁾ in which they report that the leave entitlement are associated with the increase of time away from work post partum and increase in duration of breast feeding. A study conducted by Duke et al.⁽⁹⁾ inconsistent to the present study reported that factors like length of maternity leave and part time or full time work did not influence the duration of breast feeding.

The finding of the present study suggest that employed mothers face many difficulties regarding work-place accommodation to breast feed or express breast milk. The same finding was reported by Kurinij et al.⁽⁸⁾ who reported that 35% of employed mothers were able to leave work to breast feed. They also pointed out that expression of breast milk is possible but difficult in many work situations. In spite of this they reported that (79%) of mothers had a private place to express their breast milk. This finding differs from that of the present study which was only (9%) , this difference may be related to the small sample size in Kurinij et al.'s study (39 mothers only).another study conducted by Hawkins et al.⁽¹¹⁾ reported that mother were more likely to breast feed for at least 4 months if their employers offer flexible work arrangement.

On studying husband's attitudes toward b.f., the present study shows that the majority of fathers encourage b.f. No study was found dealing with the father's attitude but Mac Gowan et al.⁽¹⁵⁾ reported in their study that mothers found that a

father supportive of b.f. played an important role in mothers' decision to breast-feed. Another study conducted by Ludvigsson⁽¹⁶⁾. Reported that (94.6%) of partners (the father of infant) were most often positive toward breast feeding .another study inconsistent with our study conducted by Anderson and Wallace⁽¹⁷⁾ who reported that only (5%) of fathers supported breast feeding.

Conclusions:

Mothers who work longer hours breast-feed for shorter durations and start complementary food earlier than mothers who work short hours. Most work places lack accommodations to support breast feeding such as the presence of a private place for breast- milk expression or the presence of child care centers. It is recommended that there is a need for widespread and continues information and advice on lactation management skills .Work place should be adapted and modified according to the need of lactating employed mothers.

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Table (1): Distribution of employed mothers according to socio-demographic characteristic

Employed mothers characteristics	No	%	Mean± s.d
Mother's age (years)			34.2 ± 5.6
20-24	4	2.0	
25-29	35	17.5	
30-34	63	31.5	
35-39	49	24.5	
>40	49	24.5	
Total	200	100	
Educational status			14.0 ± 4.4
Illiterate	7	3.5	
Primary school	7	3.5	
Secondary school	61	30.5	
Institute and college	125	62.5	
Total	200	100	
No. of children			2.4±1.5
1	64	32.0	
2	57	28.5	
3	45	22.5	
4	20	10.0	
>5	14	7.0	
Total	200	100	
Husband's age (years)			39.1 ± 6.9
<25	5	2.5	
26-35	60	30.0	
36-45	101	50.5	
>46	34	17.0	
Total	200	100	
Husband's educational status			14.2 ± 3.6
Primary school	11	5.5	
Secondary school	51	25.5	
Institute and college	138	69.0	
Total	200	100	
Husband's employment status			
Actively employed	183	69.0	
Unemployed/ retired	17	8.5	
Total	200	100	

Table (2) Relationship of employment type to breast feeding practices.

Breast-feeding practices	Employment type				
	Professional or Managerial jobs		Clerical, service or other jobs		Total
	No.	%	No	%	
Breast feeding pattern:					
Breast feeding	20	22.5	29	26.1	49
Bottle feeding	61	68.5	74	66.6	135
Mixed feeding	8	8.9	8	7.2	16
Total	89	100	111	100	200
$X^2=0.49$, d.f. =2 , $p>0.05$					
Breast feeding duration (months)					
<12					
>12	43	48.3	60	55.0	103
Total	46	51.7	49	45.0	95
$X^2 \pm s.d=$	89	100	109	100	198
$t=0.6$, d.f.= 197, $p>0.005$	12.5±6.9		11.9±5.4		

Table (3) Distribution of breast feeding duration and complementary foods initiation time by the number of weekly working hours.

Breast-feeding practices	Number of working hours/ week				
	20-30		>30		Total
	No.	%	No.	%	
Breast feeding duration (months)					
≤12	36	43.9	67	57.8	103
>12	46	56.1	49	42.2	95
Total	82	100	116	100	198
$X^2= 3.68$, d.f.= 1, $p>0.05$					
Complementary foods initiation time (months)					
≤4					
>4	34	45.3	109	89.3	143
Total	41	54.7	13	10.7	54
$X^2= 45.1$, d.f.=1, $p\leq 0.05$	75	100	122	100	197

Table (4) Timing of return to employment (maternity leave length) with breast feeding duration and complementary foods initiation time.

Breast feeding practices	Timing of return to employment postpartum (months)				
	≤6		>6		Total
	No.	%	No.	%	
Breast- feeding duration (months)					
≤12	26	74.3	53	42.1	79
>12	9	25.7	73	75.9	82
Total	35	100	126	100	161
$X^2=11.4$, d.f.= 1, $p\leq 0.05$					
Complementary foods Initiation time (months)					
≤4					
>4	20	57.1	43	33.9	63
Total	15	42.9	84	66.1	99
$X^2= 6.2$, d.f.= 1, $p\leq 0.05$	35	100	127	100	162

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