

# Maternity Leave Access and Breastfeeding Practices among Working Mothers in an Urban Residential Area of East Delhi

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## Abstract

**Background:** Despite the provision of maternity leave benefits under the maternity benefit amendment act, its access by working mothers in the community is unknown. **Objectives:** The objective is to find out access to maternity leave among working mothers and its association with breastfeeding practices. **Materials and Methods:** A cross-sectional, community-based study was conducted among 150 working mothers with children 6 months to 3 years of age. Chi-square tests and logistic regression were applied to find the association of breastfeeding practices with maternity leave and independent predictors of exclusive breastfeeding (EBF), respectively. **Results:** Paid maternity leave was accessed by majority (103, 68.7%) of the working mothers. EBF among mothers working in government organizations was more (Adjusted odds ratio: 2.3, 95% confidence interval: 1.0–5.1) than in private organizations. **Conclusion:** Lower proportion of mothers in private organizations had availed paid maternity leave as compared to government organizations. Increase in coverage of maternity benefits in the private sector is needed.

**Keywords:** Exclusive breastfeeding, maternity leave, working mothers

## INTRODUCTION

In India, recently the establishment of the Maternity Benefit Amendment Act, 2017 increased the duration of entitlement of paid maternity leave from 12 to 26 weeks.<sup>[1]</sup> This provision is aligned with the WHO recommendations that exclusive breastfeeding (EBF) should be continued till 6 months of age.<sup>[2]</sup> Studies show that in working mothers, breastfeeding rates are lower due to the challenges they face as an employee to continue EBF such as the need to return to work early.<sup>[3,4]</sup> Provision of paid maternity leave with longer duration can positively affect breastfeeding among employed mothers in terms of exclusivity and also its duration.<sup>[5]</sup> Although maternity benefit is entitled to working women, the extent to which these provisions actually reach the working mothers in the community is limited. Various factors affecting EBF outcomes and its association with maternal employment have been explored, but there is a paucity of published data regarding the actual utilization of maternity leave by the beneficiaries. This study aimed to generate evidence regarding the maternity benefits reaching working women at the community level and its association with breastfeeding practices.

## MATERIALS AND METHODS

A community-based survey was conducted in Dilshad Garden in East Delhi after approval from the institutional ethics committee vide letter no. IEC-HR/2018/36/29R was obtained. Due to the unavailability of data, we considered the proportion of working mothers availing paid maternity leave as 50%. With an absolute precision of 8%, the calculated sample size was 150 (Epi Info™ 7.2.2.6, Atlanta, GA). Eligibility criteria were: Working woman residing in the residential area of Dilshad Garden for at least 6 months, who was employed at least 8 weeks before the date of delivery and had a child in the age group of 6 months to 3 years. In cases where the mother had more than one child meeting the eligibility criteria, the youngest child was included in the study. We

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excluded working mothers with adopted children as it would not be possible to assess breastfeeding practices in such cases. A semi-structured, prevalidated, and interviewer-administered schedule was used for data collection including information about (a) sociodemographic details such as age, education status, income, and type of family, (b) delivery related details such as the mode of delivery, gestational age at birth, (c) maternity leave details including pay status, leave duration, and type of organization, and (d) infant feeding practices including breastfeeding initiation and EBF. Questionnaire for infant feeding practices was partially adapted from the WHO's manual of "Indicators for assessing infant and young child feeding practices."<sup>6</sup> Maternity leave and workplace details recorded were pertaining to the organization where mothers were employed at the time of conception. Households were approached consecutively to look for eligible participants and face-to-face interview was conducted by the principal investigator. The outcome measures were: (1) Proportion of working mothers of children 6 months to 3 years having availed paid maternity leave (2) Odds ratios for the association of maternity leave availed status and breastfeeding practices. As mothers opt for unpaid maternity leave also, which can influence the breastfeeding duration, we have considered both paid and unpaid maternity leave together.

### Statistical analysis

The SPSS software (IBM SPSS, Version 20.0, Armonk, NY, USA) was used for data analysis. Paid maternity leave availed and maternity leave duration in various organizations were expressed in proportions with 95% confidence intervals (CIs). Normally distributed variable such as mother's age was presented as mean and standard deviation and non-normally distributed data such as the duration of EBF were expressed as median and interquartile range. Chi-square test was applied to explore the association of breastfeeding practices such as early initiation of breastfeeding, EBF for 6 months, current breastfeeding status, and the use of feeding-bottle with the duration of maternity leave. Mann-Whitney U test was applied to find the statistical significance of the observed differences between duration of EBF in the groups based on the duration of maternity leave availed. Adjusted odds ratios (AORs) were computed by multivariate logistic regression analysis by including the variables with  $P < 0.25$  in the model. Pay status of maternity leave, and mother being a healthcare provider were also included in the regression model as we considered it to have a bearing on EBF. All the tests were two-tailed and  $P < 0.05$  was considered statistically significant.

## RESULTS

With response rate of 82.4% (150/182), we included 150 mothers in the study. The bio-social characteristics of the working mothers and children are depicted in Table 1. Around half of the mothers (52.7%) were employed in a government organization. About two-third (68.7%, 95% CI: 61.2%–76.1%) of the participants had access to paid maternity leave. Majority (83.1%, 95% CI: 74.4%–91.8%) of

**Table 1: Bio-social characteristics of working mothers and children (n=150)**

Variable	n (%)
Education status of mother	
Postgraduate level	90 (60.0)
Graduate level	60 (40.0)
Type of family	
Nuclear	77 (51.3)
Joint	73 (48.7)
Socioeconomic status <sup>#</sup>	
Upper	77 (51.3)
Upper middle	73 (48.7)
Age of the child (months), median (IQR)	24 (14-32)
Age of the mother (years), mean (SD)	32.7 (3.24)
Place of delivery	
Private facility	86 (57.3)
Government facility	64 (42.7)
Mode of delivery	
Normal	114 (76.0)
Cesarean	36 (24.0)
Gestation at birth	
Term	135 (90.0)
Preterm	15 (10.0)
Type of workplace	
Private organization	79 (47.3)
Government organization	71 (52.7)

<sup>#</sup> Modified Kuppuswamy socio economic scale IQR: Interquartile range, SD: Standard deviation

the mothers working in government organization had access to paid maternity leave, whereas among the mothers in the private organization it was 55.7% (95% CI: 44.7%–66.6%). In private organization, mothers who availed no maternity leave were 35.5%, maternity leave of <26 weeks was availed by 24.0%, and maternity leave of ≥26 weeks was availed by 40.5% and in case of mothers employed at government organization they were 7.0%, 12.7%, and 80.3%, respectively. It was found that EBF for 6 months was more in mothers with paid maternity leave of 26 weeks (OR: 5.8, 95% CI: 1.5–26.5) than those mothers with shorter duration of paid maternity leave. The introduction of bottle-feeding was twice as much ( $P = 0.046$ ) among mothers employed in private organizations as compared to those working in government organizations. The breastfeeding practices among working mothers with respect to maternity leave duration are given in Table 2. EBF for 6 months among mothers working in government organization was more (AOR: 2.3, 95% CI: 1.0–5.1) than in private organization [Table 3].

## DISCUSSION

Around two-thirds of working mothers had access to paid maternity leave. In our study, we only included mothers working in formal sector. We also found that half of the working mothers, in our study were employed in government organizations which is higher as compared to those in the

**Table 2: Breastfeeding practices with respect to the duration of maternity leave, including paid and unpaid (n=150)**

	Maternity leave		OR (95% CI)
	≥26 weeks (n=89), n (%)	<26 weeks or none (n=61), n (%)	
Early initiation of breastfeeding			
Yes	19 (21.5)	11 (18.3)	1.2 (0.5-2.8)
No	70 (78.5)	50 (81.7)	
EBF for 6 months			
Yes	36 (40.5)	18 (29.5)	1.6 (0.8-3.2)
No	53 (59.5)	43 (70.5)	
Median (IQR) duration of EBF (weeks)	21.8 (8.30-26.00)	13 (1.00-26.00)	-
Currently breastfeeding (n=73)*			
Yes	32 (60.4)	14 (70.0)	0.6 (0.3-2.0)
No	21 (39.6)	6 (30.0)	
Bottle feeding			
Yes	74 (83.5)	48 (78.7)	1.3 (0.6-3.0)
No	15 (16.5)	13 (21.3)	

\*Current breastfeeding status in children 6 months-2 years of age. IQR: Interquartile range, EBF: Exclusive breastfeeding, OR: Odds ratio, CI: Confidence interval

**Table 3: Multivariate binomial logistic regression analysis for significant predictors of exclusive breastfeeding for six months (n=150)**

Independent variable	Exclusive breastfeeding		Unadjusted OR (95% CI)	Adjusted OR (95% CI)
	Yes, n (%)	No, n (%)		
Mother's education status				
Postgraduate	29 (32.2)	61 (67.8)	0.6 (0.3-1.3)	0.7 (0.3-5.1)
Graduate <sup>#</sup>	25 (41.7)	35 (58.3)		
Socioeconomic status				
Upper	24 (31.2)	53 (68.8)	0.6 (0.3-1.3)	0.7 (0.3-1.4)
Upper middle <sup>#</sup>	30 (41.1)	43 (58.9)		
Healthcare provider mother				
Yes	16 (44.4)	20 (55.6)	1.6 (0.7-3.4)	1.0 (0.4-2.6)
No <sup>#</sup>	38 (33.3)	76 (66.7)		
Type of organization				
Government	33 (46.5)	38 (53.5)	2.4 (1.2-4.7)	2.3 (1.0-5.1)
Private <sup>#</sup>	21 (26.5)	58 (73.5)		
Maternity leave duration (paid and unpaid) (weeks)				
≥26	36 (40.5)	53 (59.5)	1.6 (0.8-3.2)	2.5 (0.8-7.7)
None or <26 <sup>#</sup>	18 (29.5)	43 (70.5)		
Paid maternity leave availed				
No	18 (38.3)	29 (61.7)	1.1 (0.6-2.4)	2.9 (0.9-9.4)
Yes <sup>#</sup>	36 (35.0)	67 (65.0)		

<sup>#</sup>Reference category. \*Statistically significant, OR: Odds ratio, CI: Confidence interval

general population. This may be due to the many government organizations such as hospitals and administrative offices in the vicinity of the surveyed area. We could not find any study for paid maternity leave access from India. There are few studies from abroad exploring access to paid maternity leave. A study from Thailand<sup>[7]</sup> has also reported similar results, whereas in the United States reportedly lower proportion of mothers had access to paid maternity leave.<sup>[8]</sup> This could be because, in the United States, provision of unpaid/paid leave to employees on childbirth/adoption is at the discretion of the employer under the Family and Medical Leave Act.<sup>[9]</sup>

We found majority of mothers employed in government organizations had access to paid maternity leave of ≥ 26 weeks. We could not find any published study which explored maternity leave duration across government and private organizations. Working mothers with less than two children are entitled provision of paid maternity leave of 26 weeks under the Maternity Benefit Amendment Act. Compliance of the private sector to it should be ensured to increase access to maternity leave among working mothers.

There was no significant difference in breastfeeding practices such as 6 months of EBF or bottle-feeding practices and

others, between those mothers who had availed maternity leave of  $\geq 26$  weeks or shorter duration. Apparently, the present provision of maternity leave duration is not having a significant effect on breastfeeding practices. Longer maternity leave duration was found to be significantly associated with higher proportion of EBF by Chai *et al.*<sup>[5]</sup> Although we found that EBF was longer in mothers with maternity leave of  $\geq 26$  weeks, the difference was not statistically significant. Lesser duration of EBF was found significantly associated with shorter maternity leave in some studies.<sup>[10,11]</sup> The cut-off for the duration of maternity leave in our study was 6 months whereas, in the aforementioned studies the cut-off was 2 or 3 months. Either the maternity leave duration must be extended or factors, other than the duration of maternity leave, should be explored to enhance breastfeeding practices.

Those mothers working in government organizations had a higher 6 months EBF as compared to private organizations, and this was found to be an independent predictor. Such association between EBF and the mother working as a government employee has been noted in other studies too.<sup>[12,13]</sup> More studies, comparing organizations are needed to find out what specific factors in an organizational environment promote breastfeeding. Policies to improve breastfeeding practices among working mothers should focus on providing supportive environment for breastfeeding. Similar to our findings, maternal education status was not associated with EBF in Central Ethiopia.<sup>[11]</sup> Unlike our observation, in Brazil paid maternity leave was significantly associated with EBF.<sup>[14]</sup> However, the EBF status was observed in infants below 6 months in the study whereas in our study children above 6 months were included. This could explain why the findings were different. We did not find socioeconomic status to be a predictor of 6-month EBF but in another study from India done in a southern state, socioeconomic status was significantly associated with EBF.<sup>[15]</sup> Since the study used a tool other than modified Kuppaswamy scale for socioeconomic status and also included nonworking mothers the difference in findings is plausible.

### Limitations of the study

The results are not generalizable as it has been conducted in a single residential area of Delhi, and all the mothers were formal sector employees. We could not find out the facilitators and barriers faced by the employers in providing maternity benefits. This could have provided a better insight into the issue. Future studies can explore this domain. The statistical tests applied are exploratory in nature and not confirmatory as the sample size was primarily for estimating the paid maternity leave access in the community.

### CONCLUSION

Around one-third of the working mothers in formal sector did

not have access to paid maternity leave. Availability of paid maternity leave and 6 month-EBF was more among mothers employed in government sector as compared to private. There is a need to increase the coverage of maternity benefit for mothers working in the private sector.

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### Conflicts of interest

There are no conflicts of interest.

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