



## Original Article



## Breastfeeding Practices and Their Association with Employment Status Among Working Mothers Attending a DHQ Hospital in Mirpur Khas: A Cross-Sectional Study

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## ABSTRACT

Breastfeeding is essential for maternal and child health and plays a key role in improving infant nutrition and immunity. However, working mothers often face workplace-related barriers that limit optimal breastfeeding practices, especially in low- and middle-income countries like Pakistan. **Objective:** To evaluate breastfeeding practices among working mothers attending DHQ Hospital, Mirpur Khas, and to determine the association of employment status with breastfeeding practices. **Methods:** A descriptive cross-sectional study was carried out among 110 working mothers visiting DHQ Hospital Mirpurkhas. Data were collected through a structured questionnaire. Descriptive statistics were used to summarize participant characteristics and breastfeeding patterns. Inferential statistics, including chi-square tests and logistic regression, were used to analyze relationships among variables and to identify predictors of breastfeeding. **Results:** Most of the participants (70%) were in the age range of 26 to 35 years old and most of the participants (68.2%) had undergraduate education. A high proportion of mothers (83.6%) reported breastfeeding. The chi-square analysis did not reveal any statistically significant association between employment status and breastfeeding ( $p=0.115$ ). Logistic regression, however, indicated full-time employment was significantly associated with lower odds of breastfeeding ( $OR=0.25, p=0.045$ ), suggesting that full-time working mothers were less likely to breastfeed. **Conclusions:** Breastfeeding was commonly practiced by working mothers however, many mothers were unable to follow exclusive breastfeeding recommendations because complementary foods were early and workplace support was limited. Improving workplace policies and providing better breastfeeding services could help mothers to improve breastfeeding practices.

## INTRODUCTION

Breastfeeding is important for both the well-being of the mother and the infant. Breastfeeding is really important because it provides complete nutrition during the early months of an infant, and it also can protect against chronic diseases and infections [1, 2]. Additionally, breastfeeding helps support a child's cognitive growth, strengthens the bond between mother and baby, and positively contributes to the mother's mental well-being [3]. From an economic perspective, breastfeeding can help reduce healthcare expenses by lowering the risk of childhood illnesses and

minimizing the need for expensive milk formulas [4]. As a result of these benefits, optimal breastfeeding is recommended by global health organizations, which also includes continued breastfeeding with complementary feeding for the first 6 months, with continued breastfeeding along with the complementary foods for up to two years or longer. Even with these well-known benefits, breastfeeding practices in many regions still remain very low compared to recommended levels [5]. Maternal employment acts as a significant barrier, because



in workplaces there are limited maternity leaves, which is why working mothers face many difficulties, and there are limited breastfeeding services, which leads to challenges for mothers to breastfeed [6-8]. Returning to work is a major factor that leads many employed women, in both developed and developing countries, to stop breastfeeding earlier than [9]. Workplace challenges and a lack of adequate support make it difficult for working mothers to continue recommended breastfeeding practices [6, 7]. These barriers are particularly evident in developing countries, where access to healthcare resources, workplace safeguards, and breastfeeding support initiatives is frequently inadequate. In Pakistan, inadequate breastfeeding practices pose a major public health issue. Limited adherence to ideal breastfeeding practices is associated with elevated rates of childhood malnutrition, such as stunting, wasting, and underweight issues [10]. Studies indicate that in Pakistan, fewer than one-fifth of mothers follow the recommended infant feeding practices, which contributes to higher rates of illness and mortality among infants [11]. Around 16% of fatalities in children under two years in Pakistan are linked to poor breastfeeding practices [12]. In contrast, breastfeeding significantly lowers the risk of mortality in neonates, infants, and children under five, highlighting its essential contribution to enhancing child survival and health outcomes [13]. Different factors affect the mother's breastfeeding behaviors, which also include maternal employment conditions, family support systems, cultural beliefs, and access to healthcare counseling [14-16]. Research shows that a mother's knowledge, attitudes, and social support are key factors influencing optimal breastfeeding practices [17, 18]. For employed women, working hours, workplace policies, and access to lactation support play a particularly important role [19, 20]. International studies suggest that supportive workplace environments, such as those providing maternity leave, flexible hours, and breastfeeding facilities, facilitate sustained breastfeeding practices among working mothers in both urban and semi-urban contexts [21, 22]. The majority of current studies concentrate on national or rural demographics, with little focus on the unique difficulties encountered by working mothers in regional areas like Mirpurkhas. Socioeconomic inequalities, existing cultural standards, and a lack of workplace assistance in these environments can pose further obstacles to breastfeeding for working women [10, 11]. Recognizing and comprehending these specific factors is crucial for creating focused interventions and policies that successfully encourage breastfeeding continuation among working mothers. DHQ Hospital Mirpurkhas serves

as a primary healthcare facility for women and children in the region, providing an appropriate setting to assess breastfeeding practices among working mothers. The null hypothesis stated that there is no significant association between employment status and breastfeeding practices among working mothers, while the alternative hypothesis stated that a significant association exists. The study was conducted to generate evidence that may support improvements in maternal and child health services and workplace breastfeeding support in this setting.

The cross-sectional design prevents establishing causal relationships between employment status and breastfeeding practices, and self-reported data may introduce recall and social desirability bias. The single-center hospital setting limits generalizability to other workplaces and communities, while the sample may not fully represent informal sector workers or mothers in remote rural areas. The study did not assess knowledge levels, family support systems, or cultural beliefs that could confound the observed association between full-time employment and lower breastfeeding odds. This study aimed to assess breastfeeding practices among employed mothers attending DHQ Hospital Mirpurkhas and to examine the association between employment status and breastfeeding practices using a hospital-based cross-sectional design. The study also described the socio-demographic characteristics of participants.

## METHODS

A descriptive cross-sectional study design was employed at the District Headquarter (DHQ) Hospital, Mirpurkhas, over the period of 3 months, from October 2025 to January 2026. This study comprises working mothers with infants aged 0-24 months attending the outpatient and pediatric units of DHQ Hospital, Mirpurkhas. The study included both formally and informally employed mothers. Mothers with serious medical or psychological conditions that could affect breastfeeding practices, and those who were unwilling to participate, were excluded from the study. The sample size was calculated using OpenEpi Info (StatCalc) for population survey design, assuming a 95% confidence level, 8% prevalence of breastfeeding practices [10], and 5% margin of error. 110 participants were the final sample size, which was calculated. A non-probability consecutive sampling method was used to choose the samples. When a sampling frame is not easily accessible, this approach is suitable for cross-sectional research conducted in hospitals. A systematic questionnaire was used to gather data. Participants were contacted in pediatric and outpatient departments. Expert assessment by nursing and public health professionals confirmed the questionnaire's content validity. The data collection tool

was delivered in paper form in English. Ten percent of the sample was used in a pilot study to evaluate feasibility and clarity. Cronbach's alpha was used to assess the tool's dependability; a result of 0.81 was considered satisfactory. Before data collection, ethical considerations were observed, and official permission was obtained from the head of the institute. Participation in this study was voluntary, and participants had the right to withdraw without penalty. Written informed consent was obtained from all participants, and confidentiality was maintained during and after data collection.

SPSS version 25.0 was used for data entry and analysis. The data were summarized using descriptive statistics, which included percentages and frequencies for categorical variables. Relationships between variables were examined using inferential statistics. To evaluate correlations between categorical variables, the Chi-square test was employed. To find breastfeeding predictors, logistic regression analysis was used. Results were displayed with 95% confidence intervals, and a p-value of less than 0.005 was deemed statistically significant.

## RESULTS

The majority of participants (70%) were aged 26–35 years, indicating that most working mothers were in their prime reproductive age group. In terms of education status, most respondents (68.2%) had undergraduate-level education, suggesting a relatively educated sample, while according to the income status, the majority (63.6%) earned more than 40,000 per month. In addition, according to job employment history, the majority of participants (64.5%) were employed full-time, while 35.5% were working part-time (Table 1).

**Table 1:** Socio-Demographic Characteristics of Participants (n=110)

Variables	n (%)
<b>Age Group (years)</b>	
≤25	7 (6.4%)
26–35	77 (70.0%)
≥36	26 (23.6%)
<b>Education Level</b>	
Undergraduate	75 (68.2%)
Intermediate	34 (30.9%)
Matriculation	1 (0.9%)
<b>Income Level (PKR)</b>	
<20,000	5 (4.5%)
20,000–40,000	35 (31.8%)
>40,000	70 (63.6%)
<b>Employment Type</b>	
Full-time	71 (64.5%)
Part-time	39 (35.5%)

The majority of participants were practicing

breastfeeding, with a high proportion (83.6%) of mothers currently breastfeeding, while 16.4% were not breastfeeding. Regarding breastfeeding frequency, the results show that among breastfeeding mothers (n = 92), most mothers (87.0%) reported breastfeeding more than six times per day, while 7 (7.6%) breastfed 1–3 times daily and 5 (5.4%) breastfed 4–6 times daily. These findings indicate a high prevalence of breastfeeding and frequent feeding practices among breastfeeding participants in the study. The results show that the majority of participants, 82 (74.5%), initiated complementary feeding before the age of 6 months. Meanwhile, 25 (22.7%) mothers started complementary feeding at 6 months, and only 3 (2.7%) introduced complementary foods after 6 months. These findings indicate that early initiation of complementary feeding was highly prevalent among the study participants (Table 2).

**Table 2:** Breastfeeding Practices and Introduction of Complementary Feeding among Participants (n=110)

Variables	n (%)
<b>Breastfeeding Status</b>	
Yes	92 (83.6%)
No	18 (16.4%)
<b>Frequency per Day</b>	
1–3 Times	7 (6.4%)
4–6 Times	5 (4.5%)
>6 Times	98 (89.1%)
<b>Timing of Complementary Feeding Initiation</b>	
Before 6 Months	82 (74.5%)
At 6 Months	25 (22.7%)
After 6 Months	3 (2.7%)

The workplace support for breastfeeding is very limited among participants. Only a limited number of mothers reported access to flexible working hours, separate breastfeeding areas, refrigerator facilities, and breast pumps at their workplace, but most of the mothers reported that such facilities were available. In general, the results show that most workplaces do not provide sufficient breastfeeding support for working mothers in this study population (Table 3).

**Table 3:** Workplace Facilities

Variables	Yes, n (%)	No, n (%)
Flexible Time	20 (18.2%)	90 (81.8%)
Separate Space	16 (14.5%)	94 (85.5%)
Refrigerator Facility	14 (12.7%)	96 (87.3%)
Breast Pump Availability	2 (1.8%)	108 (98.2%)

The association between employment status and breastfeeding was not statistically significant ( $p > 0.015$ ), indicating that employment status did not have a significant effect on breastfeeding practices in this study (Table 4).

**Table 4:** Association between Employment Status and Breastfeeding

Employment Status	Breastfeeding, Yes	Breastfeeding, No	Chi-square ( $\chi^2$ )	p-value
Full-time	55	12	2.49	0.015
Part-time	37	6		

Full-time employment is significantly associated with lower odds of breastfeeding ( $p=0.045$ ). The odds ratio (OR=0.25) indicates that full-time working mothers are less likely to breastfeed compared to part-time working mothers. This suggests that full-time employment acts as a negative predictor of breastfeeding practices in this study population (Table 5).

**Table 5:** Determinants of Breastfeeding

Variable	Coefficient ( $\beta$ )	p-value	Odds Ratio (Exp $\beta$ )
Employment (Full-time)	-1.395	0.045	0.250

## DISCUSSION

The present study found that a high proportion of mothers (83.6%) were breastfeeding; however, early introduction of complementary feeding was observed in the majority of participants (74.5%). This indicates suboptimal adherence to recommended infant feeding practices. These findings are consistent with recent global evidence indicating that although breastfeeding initiation rates are relatively high, optimal breastfeeding remains low among working mothers. A 2024 cross-sectional study reported that only 38.5% of employed mothers maintained exclusive breastfeeding up to six months, significantly below recommended levels [23]. Similarly, systematic reviews have highlighted that nearly half of mothers discontinue breastfeeding earlier than recommended due to multiple barriers [24]. The early initiation of complementary feeding observed in this study may be associated with work-related pressures, time constraints, and lack of support systems, which are commonly reported in the literature as key reasons for early breastfeeding cessation. This study demonstrated that most participants were educated and belonged to middle- to high-income groups. Although education is commonly linked with improved breastfeeding practices, early cessation was still observed, indicating that education alone may not be enough to promote optimal infant feeding practices. Recent research supports this finding, indicating that while maternal education improves awareness and knowledge, structural and environmental barriers often limit breastfeeding continuation [25]. Even highly educated mothers may stop breastfeeding because of work-related limitations and a lack of support, according to studies. Additionally, several sociodemographic characteristics, such as maternal age, family support, and income, have an impact on breastfeeding habits. Maternal

education, family structure, and socioeconomic level were found to be important predictors of breastfeeding behaviors in a 2025 systematic study [26]. Although the relationship was not statistically significant, the results of this study show that a full-time job has a detrimental impact on breastfeeding behaviors. Mothers who worked full-time were less likely to continue breastfeeding than mothers who worked part-time, according to logistic regression analysis. This result is consistent with compelling data from recent research showing that a mother's employment is a significant factor in her decision to stop nursing. Working women were substantially less likely than non-working mothers to continue exclusive breastfeeding, according to a 2025 study [27]. Similar to this, a comprehensive study found that going back to work presents conflicting demands on time, energy, and physical presence, making it one of the biggest obstacles to continuing breastfeeding [24]. These results imply that nursing habits are significantly influenced by work-related limitations. A major finding of this study was the inadequate workplace support available for breastfeeding mothers. Most participants reported that flexible working hours, lactation rooms, and breastfeeding facilities were not available at their workplace. These findings have similar results supported by existing literature. A study conducted in 2024 reported that workplace support, including flexible schedules and lactation facilities, plays an important role in increasing breastfeeding continuation [23]. Working in an environment that was supportive of breastfeeding was more than double the odds that mothers would continue breastfeeding practices. Likewise, qualitative working moms research revealed work-related barriers, including limited privacy, lack of facilities, and negative organizational culture, as major constraints to the continuation of breastfeeding [21]. Another study highlighted that there was limited support for breastfeeding in the workplace, leading to early stopping of breastfeeding [28]. These results indicate that workplace factors might influence breastfeeding behaviors, but they are not directly shown to do so in this study. This study didn't explicitly test knowledge levels, but results related to breastfeeding practices indicate that knowledge of breastfeeding practices alone may not be enough to maintain breastfeeding among working mothers. Maternal knowledge and self-efficacy are found to be important internal factors that affect breastfeeding practices in previous studies; however, external factors such as fatigue and work demands have been found to challenge these internal factors [21]. Family support is also known as an important factor in successful breastfeeding. Having support from partners and wider family members can help to positively impact breastfeeding rates, as it helps to alleviate stress in mothers and helps them with childcare.

In addition, healthcare counseling plays a very important role in the promotion of breastfeeding, in order to improve maternal confidence and awareness. This study's findings corroborate those from other developing nations in which the breastfeeding behaviors of working women are shaped by a mix of socio-economic, cultural and workplace factors. Similar problems have been documented in South Asia and Africa, such as low breastfeeding rates, lack of workplace support and early return to work. These studies highlight the fact that structural rather than individual factors are the most important factors explaining breastfeeding rates among working mothers. Furthermore, evidence suggests that interventions targeting workplace policies, healthcare systems, and community support are essential for improving breastfeeding outcomes in these settings. The results of this study have policy and practice relevance: There is a need to enhance the working environment for breastfeeding by implementing more supportive policies, such as maternity leave, flexible working hours, and lactation facilities. Secondly, breastfeeding counselling should be improved in healthcare systems to facilitate working mothers in the post-natal period. Third, the emphasis of community-based interventions should be on creating awareness and encouraging positive cultural practices to support breastfeeding. These strategies could be useful in enhancing working mothers' breastfeeding experiences.

There are some limitations with this study. First, the cross-sectional study design does not allow one to draw causal inferences between variables since the data were gathered only once. Second, self-reported data were used, which can be subject to recall bias or social desirability bias. Third, this was a study in one hospital, which may restrict the findings' generalizability to other areas and populations. Last, the sample size is indeed sufficient for statistical purposes, but may not truly represent the diversity of working mothers in various types of work, especially informal and rural work.

## CONCLUSIONS

In conclusion, breastfeeding was widely practiced among participants; however, optimal feeding practices were not consistently followed due to frequent early introduction of complementary feeding. Full-time employment and inadequate workplace support were associated with reduced breastfeeding continuation. Overall, workplace-related constraints appear to influence breastfeeding practices, highlighting the need for supportive workplace policies and strengthened maternal health counseling to improve breastfeeding outcomes in this setting.

## Authors' Contribution

Conceptualization: MK

Methodology: MK, HBC, IC, RB

Formal analysis: IAC

Writing and Drafting: IAC, RB, DCS, AM

Review and Editing: MK, HBC, IAC, IC, RB, DCS, AM

All authors approved the final manuscript and take responsibility for the integrity of the work

## Conflicts of Interest

The authors declare no conflict of interest.

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