# DETERMINATION OF BARRIERS IN BREAST FEEDING PRACTICES AMONG FEMALE HEALTH CARE PROVIDERS WORKING IN THE TERTIARY CARE HOSPITALS OF ISLAMABAD

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## **ABSTRACT**

# Objectives:

- 1) To determine the barriers to breastfeeding practices among female doctors and nurses working in selected tertiary care hospitals of Islamabad.
- 2) To determine the statistical significance of workplace breastfeeding facilities provided to doctor and nurse mothers working in selected tertiary care hospitals of Islamabad.

**Design:** This was a cross-sectional institution-based, descriptive study.

**Duration:** The study was conducted over a period of six months from November 2021 to April 2022 at Paksitan Institute of Medical Sciences (PIMS) and Federal government Hospital (FGH).

Materials and Methods: Study was conducted on female healthcare workers of PIMS and FGH Islamabad. Study population was married female doctors and nurses with ages between 25 and 45 years who have at least one child less than 5 years of age. Ethical Approval was taken from Institutional Review Board (IRB) of Health Services Academy (HSA), Islamabad. Data were collected by using a pre-structured self-administered questionnaire. Simple random sampling technique was used for the collection of data from selected hospitals. Data were analyzed using Statistical Package for the Social Sciences (SPSS) software, version 25. Descriptive statistics were computed by running frequencies and cross-tabulations on SPSS.

**Results:** Seventy two percent of the respondents were doctors and twenty eight percent were nurses. Fifty seven percent of healthcare workers began breastfeeding less than two hours after childbirth. Sixty seven percent of healthcare workers had availed twelve weeks of paid maternity leave. There was a significant association between reasons for stopping breastfeeding and socio-demographic variables e.g., age, education, designation, and department. The association between initiation of breastfeeding and department of the respondent was also found to be significant. The duration of breastfeeding was subject to flexible break times and provision of private space for breastfeeding.

**Conclusion:** Many mothers who returned to work after 12 weeks of paid maternity leave stopped or reduced breastfeeding because they did not have enough break time, flexible work options, onsite facilities, private space for breastfeeding or pumping during their working hours.

**Keywords:** Breast feeding, Health care providers, Institutional practice

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## INTRODUCTION

Breastfeeding is an intuitive process having multiple benefits for the newborn and mother. World Health Organization (WHO) recommends that infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. This

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recommendation for breastfeeding holds true across the globe irrespective of socio-economic, cultural or ethnic boundaries.1 Research evidence has established the important immunological, developmental, nutritional, psychological, environmental, social, and economical benefits of breastfeeding for babies. It protects babies from diarrhea, acute respiratory infections; malnutrition enhance response to vaccinations, boosts their immune systems and reduces neonatal mortality.1 Likewise, many researchers have established the advantages of breastfeeding for mothers as well, which include lactational amenorrhea, more rapid uterine involution, decreased postnatal bleeding; faster weight reduction after delivery of baby, and less chances of ovarian and breast cancer.2 Although majority of the children are breastfed around the world but working mothers face a lot of problems in breastfeeding their children. Barriers at the workplace have been cited as the main reason for delay in breastfeeding by working mothers.<sup>3</sup> Returning to work was often the main reason to the cessation of breastfeeding in working mothers. Many work-related factors such as full-time maternity leave, breastfeeding policies, and lack of breastfeeding rooms, as well as a flexible work schedule in the workplace pose considerable challenges to breastfeeding practices for working mothers at their workplace.4

#### METHODOLOGY

This was a cross-sectional institution-based, descriptive study aiming to determine multiple barriers to breastfeeding practices among female doctors and nurses. Study was conducted on healthcare workers, doctors and nurses working at PIMS and FGH Islamabad, over a period of six months from November 2021 to April 2022. Ethical Approval was taken from Institutional Review Board (IRB) of Health Services Academy, Islamabad. Informed consent was taken from eligible doctor/nurse mothers prior to start of the study. Study population was married female doctors and nurses between ages of 25-45 years who had at least one child less than five years of age. Simple random sampling technique was used in the collection of primary data from selected hospitals. Two third of doctors and nurses were taken from PIMS and one third from FGH Islamabad. The list of female doctors and nurses was taken from medical superintendents of the concerned hospital who are registered under Pakistan Medical Council. The sample size for the study was calculated using the Epi Info version 3. The study population of doctors and nurses of Islamabad and Punjab combined is 163,856. With 40% prevalence of breastfeeding practice

among working mothers, sample size came out to be 360 by using Epi Info. Female doctors and nurses married between ages of 25-45 years, who have babies less than 5 years and initiated breastfeeding before the start of the survey were included in the study. Mothers who have lost their child, advised not to breastfeed due to medical reasons, or have babies with any congenital anomaly or twins babies, were excluded from the studies. Data were analyzed using SPSS software 25. All the data were in categorical format; knowledge of breastfeeding practices, type of breastfeeding facilities, barriers to breastfeeding practices was presented in frequencies and percentages. Descriptive statistics was computed by running frequencies and cross-tabulations on SPSS to obtain percentages and confidence intervals. Chi Square test was applied to all categorical variables.

#### **RESULTS**

Among 360 participants, 40.6% participants were equal to and less than 30 years, 31.9% participants were between the age of 31 to 35 years as shown in Table I. 39.2% participants were MBBS degree holder, of whom 30.3% participants had FCPS/MCPS, 25% of the participants were BSN graduates, 2.5% participants were MSN, 0.6% were BDS. Among the participants 72% were doctors, 28.3% were nurses. Medicine was the department of the majority of the respondents (48.6%) whereas 14% of the respondents belonged to the gynecology department. Working hour of 43% of the respondents were 6 hours while 12 hours for 9% of the respondents. 53.3% of the participants breast feed their child, and 41.7% of the participants had fed their baby with breast milk and formula. Ninety seven percent of the participants had knowledge about the importance of Colostrum.

Among the 360 participants, 57.7% of the participants agreed that it was initiated in less than 2 hours, 27.7% of the respondent said it to be more than 2 hours, and the remaining 14.4% of the participants agreed to have initiated it within 96 hours(less than 1 week) moreover, 9.7% of the participants were breastfeeding at the time of collection of data, 80.3% of the participants had previously breastfed and the remaining 10% of the participants never breastfed. 63.3% of the participants claimed that they had availed the paid maternity leave, 82% of the participants claimed that paid maternity leave was separated from other leave. Out of the 360 participants, 8.3% of the participants stated that policy about breastfeeding was written, 78.1% of the participants told that it was not written. Out of the 360 participants, only 2.2% of the participants claimed that

they had seen the written policy of breastfeeding. Reasons for stopping breastfeeding are illustrated in Figure I.

The statistical analysis revealed that reasons for stopping breastfeeding and respondent age, education, department, and designation were correlated, as listed in Table II. Departments of the respondents identified to be significantly associated with the initiation of breastfeeding, association with other variables (age, education, designation) was insignificant. Flexible break times and private space for breastfeeding were identified to be significantly associated with the duration for breastfeeding.

**Table I: Association between initiation of breastfeeding and Socio-demographic variables** 

Socio- demographic variables	Initiation less than 2 hours	Initiation more than 2 hours	<i>p</i> -value (<0.05)
AGE			
25-30	95(65%)	51(35%)	
31-35	67(59%)	47(41.1%)	0.051
36-40	29(44.5%)	36(55.5%)	
41-45	17(58.6%)	12(41.4%)	
EDUCATION			
MBBS	83(58.9%)	58(41.1%)	
FCPS/MCSP	56(51.9%)	52(48.1%)	
BSN	57(63.3%)	33(36.7%)	0.077
MSN	8(88.9%)	1(11.1%)	
OTHER	6(75.0%)	2(25.0%)	
BDS	0(0%)	2(100.0%)	
DESIGNATION			
House officer	5(62.5%)	3(37.5%)	
Medical officer	59(57.8%)	43(42.2%)	0.173
PGT	50(57.5%)	37(42.5%)	
Consultant	28(46.7%)	32(53.3%)	
Nurse	68(66.7%)	34(33.3%)	

Table II: Association between Duration of breastfeeding and barriers in breastfeeding

Barriers In Breastfeeding	Duration for less than 6 months	Duration for more than 6 months	<i>p</i> -value (<0.05)
Paid maternity leave	than o months	than o months	(<0.03)
Yes	127(63.5%)	75(61.5%)	
No	72(36%)	45(36.9%)	0.571
Not sure	1(.5%)	2(1.6%)	
Written policy			
Yes	15(7.5%)	12(6%)	
No	151(75.5%)	100(50%)	0.114
Not sure	34(17%)	11(5.5%)	
Flexible break time			
Yes	36(18%)	48(24%)	
No	14(7%)	70(35%)	0.000
Not sure	15(7.5%)	5(2.5%)	
Co-worker support	•		
Yes	64(32%)	48(24%)	
No	115(57.5%)	66(33%)	0.347
Not sure	21(10.5%)	9(4.5%)	
Private space			
Yes	10(5%)	24(12%)	
No	176(88%)	97(48.5%)	0.000
Not sure	14(7%)	2(1%)	

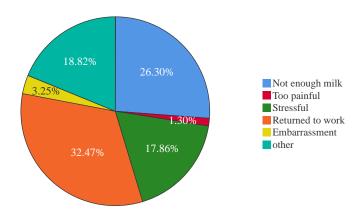


Fig 1: Reasons for stopping breastfeeding among health care workers

# **DISCUSSION**

Despite the numerous health benefits associated with breastfeeding, including improved infant health and reduced risk of maternal diseases, cultural, social, economic and workplace factors often hinder women from exclusively breastfeeding their babies. The results of this study showed that 57% of the healthcare workers began breastfeeding in less than 2 hours of childbirth which is similar with the findings of Mukta et al. while its percentage was 60% for the study conducted by Karnataka et al. 10 In their study, among the respondents 30% claimed to get flexible break times to breastfeed or express breast milk. Mothers rejoining the work were the main reason for stopping breastfeeding which is identical to the findings of the Shah ZN et al that key barrier in breastfeeding is return to work. According to a 2012-13 Pakistan Demographic and Health Survey (PDHS) study, the breastfeeding rate in the first six months of life is 38%, and data show a 2017-18 PDHS was slightly better that is 48%. Breastfeeding by working mothers is also seen as a challenge for women in developed countries. In the United States, 41% of healthcare mothers breastfeed for at least one year.5 A qualitative study conducted in Pakistan, found that barriers at work are a major cause of premature breastfeeding cessation in working mothers<sup>7</sup>, Aroona Sabin et al determined prevalence of exclusive breast feeding (EBF) among working mothers in Pakistan as 41%. Of the respondents 85% claimed that private space for breastfeeding and pumping was not available.

Pakistan is a country with deep-rooted traditional beliefs and practices, where breastfeeding in public is often considered inappropriate or embarrassing. Consequently, working women face societal pressure to refrain from breastfeeding in public spaces, including their workplaces. This cultural barrier discourages

women from breastfeeding and promotes the use of infant formula as an alternative, which is perceived as more convenient and socially acceptable. The findings of the study conducted by Al-Katufi BA, et al.<sup>6</sup> In our study 61% of the respondents breastfed their babies for less than 6 months and main reason for discontinuation of breastfeeding was return to their work. Juggling work demands, long working hours, and a lack of flexible schedules make it difficult for women to find time and privacy to breastfeed or express milk. Consequently, many women opt for formula feeding as a more convenient solution that allows them to fulfill their work obligations. This finding is in contrast with the finding of 41% of US physicians who continued breastfeeding for 1 year after its initiation.<sup>5</sup> To improve breastfeeding rates, it is crucial to create awareness campaigns about the benefits of breastfeeding, provide education and support to women, implement supportive workplace policies including paid maternity leave and lactation facilities, and challenge societal attitudes towards breastfeeding in public. Majority of healthcare workers had availed twelve weeks of paid maternity leave but working environment was not supportive such as flexible break times, private space for breastfeeding and our findings are comparable to the findings of Soomro et al and Mukta et al. 9, 10 The duration of breastfeeding by doctors and nurses of tertiary care hospital of Islamabad was less than six months and this finding was in contrast to the recommendation of twenty-four months breastfeeding of the child by WHO.

# **CONCLUSION**

Many mothers who return to work after 12 weeks of paid maternity leave stop or reduce breastfeeding because they do not have enough break time, flexible work options, onsite facilities, private space for breast feeding during their working hours, no written policy for breastfeeding and support from seniors and co-workers.

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