



## FREQUENCY OF BREAST FEEDING AMONG WORKING WOMEN OF MULTAN.

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**ABSTRACT... Objectives:** To determine the frequency of exclusive breast feeding among working women of Multan and to identify associations between socio demographic factors and exclusive breast feeding. **Study Design:** Descriptive cross sectional study. **Setting:** Public and private organizations of Multan city. **Period:** From 22-07-2017 to 25-05-2018. **Material & Methods:** The total 227 working women were enrolled by nonprobability purposive sampling technique. Data was collected on a predefined questionnaire. Results pertaining to rates were reported as frequencies and percentages. Post stratification Pearson chi square test was applied to identify significance of associations between socio demographic factors of working women and exclusive breast feeding. **Result:** Mean age of our study cases was  $28.24 \pm 9.01$ . The frequency of exclusive breast feeding was noted as 44.5%. Post stratification Pearson chi square test revealed statistically significant associations between of certain socio demographic factors and exclusive breast feeding. Working women of younger than 30 years of age, urdu speaking ethnicity, banker by profession, living in nuclear family, more than 36 hours of work in a week, more than three children and shorter than two years of inter pregnancy interval were less likely to practice exclusive breast feeding. **Conclusion:** The frequency of exclusive breast feeding was below the rate of exclusive breast feeding in the general population of Pakistan as well as below those recommended by World Health Organization (WHO). Evaluations of national health policy and antenatal counseling sessions are needed to increase the rate of exclusive breast feeding in working women.

**Key words:** Exclusive Breast Feeding, Multan, Pakistan, Working Women, World Health Organization.

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### INTRODUCTION

A child's life from conception till two years of age is especially important for optimal physical, mental, and cognitive growth. However this period is often marked by protein energy and micronutrient deficiencies that interfere with optimal growth.<sup>1</sup> Breast feeding provides an adequate nutrition which is essential for children's growth and development.<sup>2</sup> According to the latest Demographic And Health Survey Pakistan 2017-2018, thirty eight percent (38%) of children are stunted, seventeen percent (17%) are severely stunted, seven percent (7%) are wasted and two percent (2%) are severely wasted while twenty three percent (23%) children are underweight. The median duration of exclusive breast feeding is estimated to be less than one month. Infant and under five child mortality rates are 62 and 74 deaths

per 1,000 live births respectively.<sup>3</sup> Eighty four (84%) of all deaths among children under age 5 in Pakistan take place before a child's first birthday, with 57% occur during the first month of life. At these mortality levels, one in every 14 Pakistani children dies before reaching age one, and one in every 11 do not survive to their fifth birthday.<sup>3</sup> It is further noted by United Nations International Children's Emergency Fund (UNICEF) in 2017 that 22% of neonatal deaths in Pakistan could be prevented by initiating breastfeeding within the first hour of birth, while 16% of infant deaths could be avoided if breastfed from day one.<sup>4</sup> Therefore World Health Organization WHO recommends early initiation of breastfeeding, exclusive breast feeding and complimentary breastfeeding for 2 years<sup>5</sup> all of these can also help to reduce child stunting in Pakistan.<sup>4</sup> World Health Organization

also recommends to maintain the rates at 60% for exclusive breast feeding, 80% for continued breast feeding at one year, and 60% for continued breast feeding at two years of age.<sup>5,6</sup> Meanwhile the latest rate of exclusive breast feeding in the general population of Pakistan was reported as 47.6%.<sup>3</sup>

With an increasing trend of women empowerment the proportion of working women in Pakistan has increased up to 29%<sup>7</sup> however limited data is available regarding the practice of exclusive breast feeding in these working women of Pakistan. To the best of our knowledge no study has been conducted in Multan with this regard. Moreover lifestyle modification and cultural diversity emphasized the need to ascertain the current rate of exclusive breast feeding practiced among working women so that we could compare our rate with the recommended rate of exclusive breast feeding by World Health Organization (WHO) as well as with the rate of exclusive breast feeding in general population of Pakistan. Additionally we also intended to identify associated factors that might affect the practice of exclusive breast feeding among working women. In addition to generate a baseline data base of our local population the result of our research would tell us where we stand with regard to the breast feeding rates in working women and this might prove helpful in improving the national health strategy with regard to breast feeding policies for working women.

## PATIENTS AND METHODS

After approval from the ethical review committee the descriptive, cross-sectional study was conducted at certain public and private organizations of Multan city from 22-07-2017 to 25-05-2018. To collect the data all the major government model schools and colleges situated within the city, National Bank of Pakistan, Habib Bank limited, United Bank Limited, Pakistan post office, district accounts office and Nishtar Hospital Multan were selected. Informed consent and confidentiality were ensured for every participant. Non probability purposive sampling technique was used to collect the sample. The sample size of 227 was calculated by the formula

$(n = z^2 p q / d^2)$  while taking 95% confidence interval, 5% error of margin, z value of 1.96 and p value of 82.<sup>8</sup> Data was collected using interview method by predesigned questionnaire. Working women of age 18 to 45 years with 3 to 24 months postpartum at the time of the interview were included. Working women who did not breast feed, had any co morbidity or with infants having any congenital abnormality were excluded. Working women were defined as healthcare workers including doctors, nurses, paramedical staff, teaching professional including school teacher and college lecturers, general office workers including receptionists and accountants. Breast feeding was defined as an exclusive breast feeding which is a practice of feeding breast milk only, including expressed milk given to infants, excluding water, other liquids, formula milk, and solid foods. Vitamin drops, minerals, oral rehydration solution and medications may be given.<sup>6</sup> Collected data was analyzed by using SPSS version 20. Exclusive breast feeding was taken as a dependent variable whereas socio demographic factors which were age, ethnicity, residential status, educational qualification, family system, family income, nature of job, duration of job, job experience, working hours per week, duration of marriage, number of children, inter pregnancy interval were taken as independent variables. Descriptive statistics of variables were reported as frequencies and percentages. Post stratification Pearson chi square test was used to explore the significance of associations between dependent and independent variables. P value equal to or less than 0.05 was considered as significant.

## RESULTS

Among the total 227(100%) study participants exclusive breast feeding was noted in 101(44.5%) of participants. (Table-I) Calculated mean of age in years was  $28.24 \pm 9.01$  (SD), working hours was  $32.52 \pm 6.87$ , duration of marriage in years was  $4.35 \pm 2.24$  and Inter pregnancy interval in years was  $2.24 \pm 0.52$ . Majority of participants; 182(80.2 %) were aged equal or less than 30 years, 18(7.9%) belonged to rural areas and 209(92.1%) belonged to urban areas while 18(7.9%) had monthly family income up to Rs.50000 while other

209(92.1%) had monthly family income more than Rs.50000. 101(44.5%) were Punjabi, 37(16.3%) were Urdu speaking, 63(27.8%) were Saraikis and 26(11.5%) were Baloch while 137(60.4%) were having their qualification as masters and above. Majority of our study participants; 118(52%) were school teachers, followed by 47(20.7%) were healthcare workers, 36(15.9%) were office workers, 17(7.5%) were lecturers and 9(4%) were bankers. 128(56.4%) reside in a nuclear family, 135(59.5%) had working hours up to 36

hours, and 118(52%) were married for equal/less than 5 years. Off these total 227(100%) study participants, 182(80.2%) had children equal to or less than 3 years, while 119(52.4%) had inter pregnancy interval for more than 2 years and 126(55.5%) had job experience less than 5 years. Statistically significant association (P value  $\leq$  0.05) of exclusive breast feeding was found with maternal age, ethnicity, family income, working hours, decreased inter pregnancy interval and number of children. (Table-II)

Exclusive Breast Feeding	Frequency	Percentage
Yes	101	44.5%
No	126	55.5%
Total	227	100%

Table-I. Frequency of exclusive breast feeding among working women of Multan

Socio Demographic Factors		Exclusive Breast Feeding		P-Value
		Yes	No	
Age	Up to 30 years	74(40.6%)	108(59.3%)	0.029
	More than 30 years	27(60%)	18(40%)	
Residential Status	Rural	9(50%)	9(50%)	0.631
	Urban	92(44%)	117(55.9%)	
Family income	Up to Rs 50,000	18(100%)	0(0%)	0.000
	More than Rs 50,000	83(37.8%)	126(60.2%)	
Ethnicity	Urdu	9(24.3%)	28(75.6%)	0.006
	Punjabi	46(41%)	66(58.9%)	
	Saraiki	37(58.7%)	26(41.2%)	
	Balouch	9(34.6%)	17(65.3%)	
Qualification	Graduate	36(40%)	54(60%)	0.279
	Master and above	65(47.4%)	72(52.5%)	
Nature of job	Health care workers	19(41.1%)	28(59.5%)	0.000
	School teachers	82(69.4%)	36(30.5%)	
	College Lecturer	0(0%)	17(100%)	
	Bankers	0(0%)	09(100%)	
Family System	Nuclear	37(28.9%)	91(71%)	0.000
	Joint	64(64.6%)	35(35.3%)	
Working Hours/Week	Up to 36 hours	82(60.7%)	53(39.2%)	0.000
	More 36 hours	19(20.6%)	73(79.3%)	
Duration of marriage	Up to 5 years	55(46.6%)	63(53.3%)	0.593
	More than 5 years	46(42.2%)	63 (57.7%)	
Number of children	Up to 3	92(50.5%)	90(49.4%)	0.000
	More than 3	9 (20%)	36 (80%)	
Inter pregnancy interval	Up to 2 years	36(33.3%)	72(66.6%)	0.001
	More than 2 years	65(54.6%)	54 (45.3%)	

Table-II. Association of socio demographic factors with exclusive breast feeding in working women.

## DISCUSSION

Our study revealed that the rate of exclusive breast feeding among working women of Multan was 44.5 %. Our estimated rate was close to the rates reported in a study conducted in Karachi city which reported 48.5%<sup>9</sup> and a study conducted in Faisalabad city which reported 41.5%<sup>10</sup> of working women exclusively breast fed their children. Published literature highlighted unavailability of support to working women which might result in discontinuation of breast feeding.<sup>9</sup> Moreover an improved rates of exclusive breast feeding were also observed when expecting women were provided with awareness regarding the benefit of breast feeding in the form of antenatal breast feeding counseling which is not commonly practiced in our region.<sup>11</sup>

Our results were validated by previous researches which stated that socio demographic factors such as nature of job,<sup>10</sup> younger age,<sup>12</sup> ethnicity,<sup>12</sup> family system,<sup>13</sup> working hours,<sup>14</sup> inter pregnancy interval,<sup>15</sup> number of children,<sup>15</sup> and family income<sup>16</sup> were significantly associated with exclusive breast feeding among working women.

We identified the association between breast feeding and age. The rate of exclusive breast feeding was high when mothers were older than 30 years of age. A similar finding was also reported by Asemahagn.<sup>17</sup> as it was observed that experience in better child feeding practices come with increasing age.<sup>12</sup>

Another significant factor found in our result was ethnicity. The influence of ethnicity on exclusive breast feeding could be explained by effect of different cultural beliefs and practices held by various ethnic groups on child health and breastfeeding rates.<sup>12,18</sup>

Additionally a significant association was observed between family type and exclusive breast feeding practice. It was observed that working women living in joint family were more likely to exclusive breast fed their children as they receive timely information about benefits of breast feeding as well as support in domestic chores from their family.<sup>13</sup>

Moreover we found that maternal work for more than 36 hours in a week was associated with the low practice of exclusive breast feeding. Increase work timings of mothers may exhaust them physically so that they cannot maintain breastfeeding schedule after returning from work.<sup>14</sup>

Another significant association reflected from our result was that the women with closely spaced pregnancies and more than three children are less likely to engage in exclusive breast feeding which in fact highlights the less efficient use of exclusive breast feeding as a natural contraception.<sup>15</sup>

## CONCLUSION

Low rate of exclusive breast feeding among working women was noted in Multan. Our reported rate fell below the average rate of exclusive breast feeding in general population of Pakistan which is 47.6% as well as it was below the recommended rate of exclusive breast feeding by World Health Organization which is 60%. We concluded that working women, particularly with age younger than 30 years, belonging to Urdu speaking ethnicity, being a banker, living in a nuclear family, working for more than 36 hours a week, having more than three children and inter pregnancy interval of less than two years were significantly associated with low frequency of exclusive breast feeding in Multan. However residential status, educational qualification and duration of marriage did not seem to affect the practice of exclusive breast feeding.

Breast feeding is the best way to achieve optimum health of both mother and children. However the rate of exclusive breast feeding was observed to be low in working women. Pakistan does not has any health policy or plans neither the government allocates any budget for enhancing the practice of breast feeding practices among working women. There is a dire need to introduce basic amendments and additions within the health policy to support working women in health aspects of their lives. Awareness campaign to every expecting working woman regarding the benefit of breast feeding should be initiated in the form of breast feeding counseling by trained staff

at every antenatal visit.

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## AUTHORSHIP AND CONTRIBUTION DECLARATION

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2	Owais Kareem	Study design, Questionnaire design, data interpretation, drafting.	
3	Asima Asif	Study design, data collection.	