DO WE PRACTICE WHAT WE PREACH? EXPERIENCE OF WORKING DOCTOR MOTHERS REGARDING ORGANIZATION SUPPORT FOR BREASTFEEDING AT WORKPLACE

Zeeshan Noor Shaikh, Jamil Ahmed Soomro, Wardah Ahmed, Suhail Raza Shaikh, Shahmeen Nazar, Amir Ali Samnani

ABSTRACT

OBJECTIVE: To assess breastfeeding support provided to urban working doctor mothers at their workplace.

METHODS: This cross-sectional study was carried out among four tertiary level urban hospitals of Pakistan, between January-June 2017. Through random sampling, 215 working female doctors who were breastfeeding (3-24 months) were included. Data was collected using structured questionnaire based upon “World Alliance for Breastfeeding in Action” guidelines. The data was analyzed using SPSS software version 24. Breastfeeding facilities at workplaces were taken as outcome variables.

RESULTS: Among non-physical facilities, 89% of the doctor mothers received at least 03 months fully paid maternity-leave, 15% received enough breastfeeding breaks, and almost 12% of the mothers were offered flexible-job and information with regards to breastfeeding support options at workplace (hospitals). Regarding physical facilities, breastfeeding corner and onsite nursery for childcare was accessible to 5% and 2.3% of doctor mothers. However, none of the hospitals supported mothers with refrigerator for storing mother’s milk and breast milk pump. Additionally, statistically significant difference (<0.001) was observed by type of employer (government or private) breastfeeding breaks, lactation corner, and fully paid maternity leave.

CONCLUSION: Enabling and supportive environment to working doctor mothers for breastfeeding at workplaces was missing in majority of the healthcare facilities. Female doctors having positive practical experience with solutions can be instrumental for their patients (working mother) in preventing early weaning.

KEY WORDS: Breastfeeding Facilities (MeSH); Working Mothers (MeSH); Physician Mothers (MeSH); Workplace Breastfeeding Support (MeSH)

INTRODUCTION

The promotion of breastfeeding is a major global health concern. It is widely reported that the breastfed children are healthier and have fewer sicknesses than non-breastfed children.1,2 In resource-poor countries the breastfeeding is a dream product, a window of opportunity that almost every mother and family could afford, yet circumstances often seem to conspire against the practice.3 Globally 159 million children are undernourished and half of all these children under five live in Asia and one third live in African countries.4

Exclusive breastfeeding for first six months of life of an infant is associated with four times reduced risk of death attributable to diarrhea and acute respiratory infection in comparison to a child who is not breastfed. Furthermore, it effect on individual's development, their future education, labor productivity (earning potential) and ultimately effect on country's GDP.5

According to recent Pakistan nutritional survey, the prevalence of malnutrition in kids under 5 years of age is very high, 40.2% are stunted and 17.7% suffer from wasting.6 Currently Pakistan faces second highest infant mortality in Asia after Afghanistan7,8 Various studies have shown, drop in the percentage of infant mortality by breastfeeding up to recommended period.9,10 Within limited resources, in a developing country like Pakistan, the breastfeeding is a window of hope. The Pakistan demographic and health survey revealed the proportion of exclusive breastfeeding among infants under age of six months is approximately 38%, furthermore, the survey has revealed linkages between working status of women and subsequent partial or complete discontinuation of breastfeeding.11

It is assumed that medical-counsels or bodies and hospitals would serve as a role model regarding provision of support to successfully combine breastfeeding with work; however, reality is challenging the assumption. A study accomplished in an academic
The current study design based on the guidelines of Global Alliance forBreastfeeding (WABA) in action\textsuperscript{15} aims to understand the status ofbreastfeeding support provided at workplace to female doctors in urbansettings of Pakistan.

**METHODS**

This was a cross sectional survey approved by Ethical Review Committee (ERC) of Dow University of Health Sciences, Karachi, Pakistan. Informed written consent was taken from the participants before the start of the interview. The sample size was calculated ($n=209$) with Open Epi.\textsuperscript{17} The sample size was increased to $n=228$ (57 respondents from each of four hospital) and we were able to collect data from 215 female doctors. The study was done over a period of six months from January 2017 to June 2017 at four major tertiary care Hospitals of an urban city. Registration of healthcare facility with Pakistan Medical and Dental Council (PMDC) was considered for studying breastfeeding services provided to female doctors. Equal number of female doctors were taken from all hospitals using simple random sampling, the list of female doctors was taken from medical superintendent of the concerned hospital. The urban city represents virtually every social class and ethnic group in Pakistan. The two third of the females in urban areas of Pakistan works in schools and hospitals. However, due to limited time and resources we only considered medics (female doctors) who works in tertiary care hospitals. The structured questionnaire was designed using World Alliance for breastfeeding Action guidelines.\textsuperscript{15} Questionnaire was piloted on six respondents (female doctors) from non-study setting area. Changes were made according to the context in the style and language of the questionnaire to make it comprehensible for the respondents. The questionnaire includes two parts. First section consisted of information regarding socio-demographic characteristics of the workplaces such as type of organization (Private or Government), name of the organization and locality. The project focused on assessment of lactation support provided by employer, therefore, to avoid expected ethical issues, the identifiable information with regards to working mother such as respondent’s name, address, and other personnel information were not included. The second part of the questionnaire enquired information regarding the provision of breastfeeding support such as breastfeeding corner, breastfeeding breaks, jobsite crèche (nursery), place

**TABLE I: BREASTFEEDING FACILITIES PROVIDED AT HEALTHCARE FACILITIES**

| Type of Breastfeeding Facilities (support) | Mothers (n = 215) |
|------------------------------------------|-------------------|
|                                          | YES N (%) | NO N (%) |
| Non-Physical facilities                  |           |           |
| At least 03 months full paid maternity leave | 192 (89.3%) | 23 (10.7%) |
| Lighter job (task adjustment)            | 26 (12.1%) | 189 (87.9%) |
| Flexible time (breastfeeding breaks)     | 33 (15.3%) | 182 (84.65%) |
| Employer provided information regarding breastfeeding options | 25 (11.6%) | 190 (88.4%) |
| Physical facilities                      |           |           |
| Separate room or corner for breastfeeding | 11 (5.12%) | 204 (94.88%) |
| Jobsite crèche (nursery for childcare)   | 5 (2.3%)  | 210 (97.7%) |
| Breast milk pump                         | 0         | 215 (100%) |
| Refrigerator identified for storing breast milk | 0         | 215 (100%) |

**TABLE II: BREASTFEEDING FACILITIES COMPARISON BETWEEN PRIVATE AND GOVERNMENT HOSPITALS**

| Workplace Breastfeeding Facilities | Government (n = 109) | Private (n = 106) | Total (n = 215) | p-value |
|------------------------------------|----------------------|-------------------|----------------|---------|
| Flexible time (Breastfeeding breaks) | Yes | 25 (23%) | 8 (7.5%) | 33 (15.3%) | .001 |
| Separate room or corner for breastfeeding | Yes | 9 (8.3%) | 2 (1.9%) | 11 (5.1%) | .003 |
| Separate refrigerator to store breast milk | Yes | 0 | 0 | 1 | - |
| Breast milk pump | Yes | 0 | 0 | 0 | - |
| Jobsite crèche (nursery for childcare) | Yes | 4 (3.7%) | 1 (0.9%) | 5 (2.3%) | .193 |
| Fully paid maternity leave | Yes | 109 (100%) | 83 (78.3%) | 192 (89%) | .0001 |
| Task adjustment (lighter job) | Yes | 18 (16.5%) | 8 (7.5%) | 26 (12%) | .34 |
| Information regarding breastfeeding options | Yes | 16 (14.7%) | 9 (8.5%) | 25 (11.6%) | .114 |
The data was collected from 04 Tertiary care Hospitals of an urban city of Pakistan. The sites included were Baqai Medical University Hospital (n=50), Al Tibri Medical College Hospital (n=56), Civil Hospital Karachi (CHK) (n=53) and Lyari General Hospital (n=56), Karachi, Pakistan. The questionnaire was completed by 215 mothers. The types of organizations were almost equal; private (n=106) compared to government (n=109) sites.

All the departments in two workplaces (Baqai Medical University Hospital and Al-Tibri Medical College Hospital) were within one building, hence, task adjustment option to bring mother close to her home was not practicable. However, Civil Hospital Karachi (CHK) and Lyari General Hospital were relocating few mothers to their allied institutes. Overall, task and shift adjustment to ease workload of breastfeeding mothers was observed in 12% of workplaces. Among other non-physical breastfeeding facilities, the fully paid three months maternity leave as per national guidelines was offered to most female doctors. Non-physical breastfeeding facilities include a private and clean place to breastfeed their baby, onsite childcare nursery, breast milk pump and refrigerator for storing breast milk.

In order to see the difference in public and private sector hospitals with regards to breastfeeding facilities, the descriptive analysis showed statistically significant difference in available breastfeeding facilities to mother working in government vs private such as: almost one out of three mothers working in government vs in private said that they were provided regular breaks for breastfeeding of at least one hour in a shift of 6-8 hours. Similarly, higher number of mothers in government hospitals reported availing breastfeeding corner (separate room) compared to the mothers working in private sector hospitals (Government vs Private; 8.3% vs 1.9% p = 0.003) as evident from the p-value. Furthermore, fully paid three months maternity leave was extended to all participating female doctors in government hospitals.
women working in government sector, which was not the case in private sector.

Provision/ availability of nursery for childcare, tasks adjustment and information provision were statistically insignificant and had no influence on breastfeeding practices. Ironically, none of the hospitals provided refrigerator (for breast milk storage) and break milk pump.

In order to know the female doctors personal experience on breastfeeding support at work, semi structured questionnaire was given to working doctor mothers to define possible areas of supporting breastfeeding practices when it comes to work. Two third of women respondents believe that onsite nursery room (for childcare) was highly central to accomplish breastfeeding responsibility at fifty per cent of participants argued adequate paid maternity leave and breastfeeding corner are central in initiating and sustaining breastfeeding at work. Others claimed family support (37%) and sufficient breastfeeding breaks (27%) as important factors regarding breastfeeding at workplaces. Fewer women also emphasized employer’s support for breastfeeding in workplaces.

Figure 2 illustrates the comparisons of mothers’ understanding of lactation support in private and government sectors. There is not major difference of opinion except in case of flexibility of time for breastfeeding. Private sector employees emphasized more on time breaks as compared to government employees. This is understandable considering the difference of work environment of private and government sector.

**DISCUSSION**

Assessment of breastfeeding facilities offered to working mother doctors was done in the study. We established that the workplaces (hospitals) were mostly not supported by the employers with regards to breastfeeding support in the light of international labour by-laws and a world alliance for breastfeeding action guidelines. A substantial difference was observed between government vs private hospitals in the areas of breastfeeding breaks, breastfeeding corner, paid maternity leave.

Our findings showed, 15.3% of the respondents claimed to get sufficient breaks to breastfeed baby or express breast milk for later use. Our results were almost similar to the study in Hong Kong (11%). Another study had reported the global rate of exclusive breastfeeding among infants was around 9% better in countries that assured frequent breastfeeding breaks (fully paid) during work and vice versa. Hirani and colleagues, also instituted that the flexible job allow working women to sustain breastfeeding for longer duration while employed. In an Australian based study, researchers discovered that 16% of organizations were providing paid breastfeeding breaks. It has been widely reported that flexibility in working time offered to physician mothers for breastfeeding is critical to maintain breastfeeding at work. Offering breastfeeding breaks to mothers for lactation would reduce the job stress. Though, our results were not consistent with many of similar kind of studies in the west, because of the onsite lactation programs, breastfeeding policies, and other support provided to women through knowledge, schooling and support in those states. Pakistan had not been able to develop any policy regarding allocating flexible time for breastfeeding breaks at worksite. The ILO 2014 report stated that, 136 out of 183 (71%) countries globally had a policy for offering mothers with sufficient breaks to lactate their baby at-least up to six months.

Accessibility to a separate room, refrigerator, breast milk pump allowing women worker to retain confidence and motivate them to run-through breastfeeding. Among physical facilities, the study reported that less than 5% workplaces have allocated breastfeeding corner for working mothers, while only 2% hospitals have earmarked a space (nursery) for day-care. The results are overlapping with earlier studies and inconsistent with the studies by Bai YK, et al. which reported 80%. The big difference is possibly due to the existence of programs, guidelines and information provided to the working females, through appropriate consultants in those settings, which is not there in our study population. Our Study sheds further light that 89% of the women were offered fully paid maternity leave for minimum three months, virtually similar to the researches done in other settings (93%). Inadequate maternity leaves either force mothers to give away their work, resulting in significant financial damage in their income in the most productive period of their life, or compel them to start work too early, leading to adverse effects on both mother and baby health. Almost 12% of the female doctors in our study had stated to get information from their head of department or medical superintendent about breastfeeding options (possibilities) while resuming work. Our study findings are somehow similar to the study by Weber D, et al. A significant difference (<.001) was reported between public and private hospitals with regards to fully paid maternity leave, breastfeeding breaks, and allocation of corner for breastfeeding, resembles with the studies undertaken by Dodgson JE, et al. and Weber D, et al. Physicin mothers working in the public hospitals in Pakistan, likely to have better breastfeeding backing compared to the private sector hospitals, possibly due to the following reasons. The public hospitals are state owned; therefore, they are more likely to follow national guidelines on maternity protection. Secondly, the private hospitals see breastfeeding as women personnel issue. Thirdly, supporting breastfeeding cost money and resources which private hospital owner see as wastage of their money and resources, contrary to this government employer feels nothing going from their pocket, since the overall authority (financial, hiring etc.) is government. Lastly, the government sector is more likely to implement policies with regards to breastfeeding at work, compared to private hospitals. Stand by to the needs and wants of physician mothers is best accomplished as soon as administrative structure exist with clear-cut guidelines to address breastfeeding related issues. Without these policy guidelines, the employer will not be ready to support breastfeeding practices at work. The mother’s perception was also evaluated in our study using initially open-ended questionnaire, which was structured later based on common responses, to know how mothers perceives breastfeeding support at work.
The commonly reported breastfeeding facilities by mothers in our research were: onsite crèche or nursery for child care (62%), sufficient maternity leave (47%), breastfeeding corner (separate room) for maintaining privacy at work (46%), proper support from employer, adequate breastfeeding breaks to breastfeed or express milk for later use, family support and family income etc., which are extensively described in earlier studies.12,27

The minor factors stated by Physician mothers that help instituting breastfeeding at work in our study were task adjustment, family income, and family support. Similar to the studies by Hirani et al and different from the studies by Dodgson JE, et al. and Weber D, et al. who described family income and support as the main decisive factor effecting breastfeeding at work.4,8,11 The variation could possibly due to priority of mothers, diverse study population and methodological issues.

STRENGTHS AND LIMITATIONS

This is a first kind of its study in Pakistan that focused the Physician mothers of urban tertiary care hospitals only, with a large random sample. We only consider working mothers (doctors), who have their baby’s age below 2 years at the time of interview and had started breastfeeding in order to avoid recall bias. The mix methods would have been used to get deeper understanding of the mother perceptive of workplace breastfeeding facilities. Since we only considered urban region of Pakistan whereas, the study findings cannot be generalized to female physicians working in rural areas of Pakistan. We only chose tertiary hospitals registered with PMDC [currently renamed as “Pakistan Medical Commission (PMC)] however, small hospital & health clinics were not taken into the account, may have influenced the external and internal validity of our study.

CONCLUSION

Generally, a common working woman relates to working doctor mother when it comes to breastfeeding in workplaces. When working doctor mothers face difficult and inadequate support at workplace for breastfeeding, then, how will they practice what they are preaching. Our study findings indicated that most of the workplaces (hospitals) were deprived of the facilities in the light of WABA to support physician mothers to be able to combine breastfeeding with job. Breastfeeding support at workplaces such as provision of refrigerator for breast milk storage, tasks and location adjustment, breastfeeding corner, flexibility of time and breastfeeding breaks play crucial role in continuation of breastfeeding in workplaces. An enabling and supportive environment may be provided to working mother doctors to give them confidence, credibility and strength to practice and preach breastfeeding.

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AUTHORS’ CONTRIBUTIONS

Following authors have made substantial contributions to the manuscript as under:

ZNS: Study design, analysis and interpretation of data, drafting the manuscript, approval of the final version to be published

JAS & WA: Acquisition of data, critical revision, approval of the final version to be published

SRS & SN: Acquisition, analysis and interpretation of data, drafting the manuscript, approval of the final version to be published

AAS: Acquisition of data, critical revision, approval of the final version to be published

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

CONFLICT OF INTEREST

Authors declared no conflict of interest

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DATA SHARING STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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KMUJ web address: www.kmuj.kmu.edu.pk
Email address: kmuj@kmu.edu.pk

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