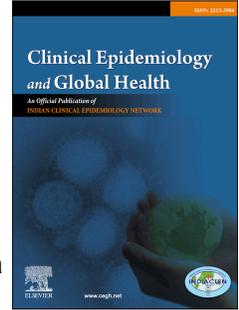


# Journal Pre-proof

What support is needed prior to the designation as baby-friendly hospital?

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## What support is needed prior to the designation as baby-friendly Hospital?

### (Original Article)

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Running title: Working mothers' barriers to exclusive breastfeeding

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## Abstract

**Introduction:** Breastfeeding rates remain low in Jordan. Exploring facilitators and barriers contributing to women's difficulties in juggling exclusive breastfeeding (EBF  $\leq 6$  months) and work to achieve positive outcomes, is critical.

**Aim:** To assess EBF rate and challenges faced by mothers after returning to work at a hospital setting prior to its designation as a Baby Friendly Hospital. **Methods:** face to face cross-sectional study using validated questionnaire was conducted over a one-month period on all 75 working mothers at our institute who had a new baby aged 6 to 48 months before the study date. **Results:** The EBF initiating rate was 56%. The perceived identified barriers include a lack of flexibility in the work schedule for breast feeding/milk expression, a lack of pumping space, dissatisfaction with maternity leave, and concerns about support from supervisors and co-workers' employers. The adherence to EBF among mothers who had co-worker support, self-confidence of EBF, and environmental support at the workplace differed significantly from those who did not have these conditions ( $p < 0.05$ ).

**Conclusion:** Despite putting confidence in EBF and family/partner support, the mother's return to work was a significant impediment to EBF continuation.

Mothers' adherence to exclusively nursing their infants increased if they had environmental support at work and co-worker employee support.

**Keyword:** breastfeeding; women's health; workplace

**Declaration of Interest statement:** Alle authors have declared that they have no potential conflicts of interest related to the research, authorship, and/or publication of this article

Journal Pre-proof

<p>'What is already known about this topic?</p>	<ul style="list-style-type: none"><li>• Returning to work is to blame for early EBF cessation due to a variety of challenges.</li><li>• Rigid hospital policies and practices can have a negative impact on breast feeding .</li><li>• women who do work and breastfeed often lack support.</li></ul>
<p>'What does this article add?</p>	<ul style="list-style-type: none"><li>• Identify obstacles that will help stakeholders involved in promoting baby friendly hospital designation by providing specific evidence-based supportive workplace needs that will improve EBF outcomes.</li></ul>

## Introduction

Exclusive breastfeeding (EBF) is the practice of feeding the infant breast milk only for the first 6 months of life without any other type of food or drink, not even water(1). It is considered complete nutrition for infants in the first 6 months of their lives, which can prevent life-threatening infections at this period. It has been estimated that 90% of deaths among children aged below five years due to respiratory tract infections, diarrhea diseases and neonatal sepsis could be prevented through practicing EBF(2). In addition, EBF has a long-term effect on infants' health by decreasing risks of asthma, diabetes mellitus type -1, leukemia and food allergies(3, 4).

Regarding mothers' health, EBF decreases postpartum depression, delays mothers' fertility span, and decreases the risk of breast cancer (5). Breastfeeding has a positive impact on the family, society and economy, including decreasing the annual health care costs and supplemental nutritional programs; it also plays a major role in decreasing employees' absenteeism and affecting the families' income (6).

Early initiation of BF is defined as putting new-born to the breast within the first hour of life. The World Health Organization (WHO) recommends initiating BF with immediate skin to skin contact between the mother and her new-born after birth and allowing the mother to stay with the new-born during the first 24 hours of life(7). There was a decline in early initiation of BF from 37.2% in 2007 to 18.6 in 2012 according to UNICEF Global database on early initiation of BF (7). Sadly, a similar decline was reported in EBF rate in Jordan in the first 6 months from 38% in 1995 to 26.7% in 2002, 22.7% in 2012 and 25.4 % in 2019 (8, 9).

Breastfeeding while working is a difficult issue. Initiation, exclusivity, and continuation of EBF in working places can be facilitated by different factors including direct supervisor manager and co-worker's employees support (10). It is also facilitated by improving access to EBF information and strengthening EBF counselling efforts(11, 12). Nevertheless, the presence of comprehensive training and monitoring programs for health workers regarding different EBF issues(2), nature of work, employee awareness of their company's breastfeeding-friendly policies(13), and previous EBF experience have a positive effect on mothers' EBF knowledge, attitudes, and self-efficacy(14).

Returning to work is responsible for early EBF cessation(10, 15) and decreasing mothers adherence to EBF practices due to lack of time to express milk(14)and the absence of a private dedicated place for BF g and pumping(16). Early EBF cessation is also affected by long working hours, type of profession, family income, lack of proper knowledge and training about EBF, absence of supportive EBF organization busy work schedule, and stressful working conditions(14, 17). In addition, postpartum mothers who have maternal leave of less than or equal to 6 months had low BF initiation rates and have ceased EBF earlier(18). Rigid hospital policies and practices, such as a short and non-negotiable period of maternity leave, inflexible shift patterns, and lack of childcare provision can affect EBF negatively(19). Therefore, we conducted this study to determine the prevalence of EBF among working mothers who gave birth to a new infant aged 6 to 48 months at the tertiary care teaching University Hospital.

Furthermore, the study evaluated working mothers' confidence in continuing EBF after returning to work, as well as workplace difficulties that affected working mothers' adherence to EBF. This research helps to close one of the WHO-required research gaps by assisting various stakeholders involved in promoting, protecting, and supporting

maternal EBF efforts by providing evidence-based supportive work environment needs that will improve EBF outcomes.

### *Methods*

This cross-sectional study was conducted at Jordan University Hospital, a tertiary care teaching hospital located in Amman, Jordan, prior to the facility being designated as a baby-friendly facility. The hospital lacked breastfeeding support services such as training, rooms or space for pumping and storing breast milk at the time of the study, and not all women had access to their infants during work hours.

It was designated as a baby-friendly facility in June 2019. (six months after the current study was completed). According to the National Labour Law in Jordan, Maternity Leave and Maternity Protection Laws. Women workers are entitled to maternity leave with full pay for ten weeks including periods of rest before and after birth, Leave after delivery shall be no less than six weeks long (20). In this hospital, all female employees are entitled to this maternity leave period except female physicians in training, who are entitled to two weeks only.

All maternal employees in this hospital are entitled to 70 days of maternity leave, with the exception of the physician in training, who is entitled to two weeks. These mothers were chosen because they had not been exposed to any of the policies put in place at the hospital as it prepared to become a Baby Friendly Hospital. Participants were recruited by contacting the Hospital's Department of Human Resources. All employee mothers (n=75) who had given birth to a new child between the ages of 6 and 48 months prior to data collection were contacted and interviewed .

### *Data collection*

The Employee Perceptions of Breastfeeding Support Questionnaire (EPBS-Q) in English was adopted (21, 22) and slightly modified by five academics through face validation to fit our culture, piloted on 15 non-study participants, and retested for reliability with Cronbach's alpha of 0.79. The researchers conducted direct face-to-face interviews to collect data.

### *Study Instrument*

The Employee Perceptions of Breastfeeding Support Questionnaire consisted of closed-ended questions covering the following topics (items 1–4):

Mother demographics and characteristics (n=16)

1. Exclusive Breastfeeding rate at 2 and 6 months
2. Workplace environment characteristics and maternity leave infrastructure (dedicated breastfeeding space, availability of electric pumps) and nature of paid leave after Resources that support (n=10) They are as follows:
  - a. Gender of manager/direct supervisor and Co-worker's employees. (n=2)
  - b. Flexibility of time after returning to work: weekly hours, full time, part time. (n=2)
  - c. Infrastructure support : the availability of electric pumps, flexible time options for pumping and/or breastfeeding, and the availability of a pumping location for breastmilk. (n=3)
  - d. Maternity leave : Nature and Payment of Leave After Delivery, Satisfaction with Maternity Leave Length. (n=3)
3. Breast feeding practices, resources of getting information and lactation support after they return to work. (n=13)

- a. Breast feeding practices: The ability to pump or EBF at work, the ability to pump as frequently as needed, flexible time options for EBF / pumping, and women believing that there is a written policy supporting pumping milk at work. (n=4 )
  - b. Source of getting lactation support and information. (n=6)
  - c. Source of personal support to continue EBF : source of family a supportive person to continue EBF and New-born care provider when mother at work (n=2)
  - d. Had extended the maternity. (n=1)
4. Perceived maternal confidence and environmental factors at workplace to continue EBF after returning to work using Likert scale. the Degree of assessment included 8 items with a scale of 0-5 points (1=never, and 5=always). A value  $\geq 2.5$  was considered good

#### *Data analysis*

Once the data was collected , it was managed and analyzed using IBM SPSS Statistics version 24 software (SPSS Inc. Chicago, IL, USA). the demographics and the characteristics of working mothers were determined using descriptive statistics. The Likert scale was created for variables that use the Likert type to calculate mean scores. The data then were analyzed to calculate statistical significance of each variable by using Mann-Whitney U Test and Kruskal-Wallis Fisher's. The Fisher's exact tests were applied at frequencies of less than five. The threshold for statistical significance was set at p value  $< 0.05$ .

#### *Ethical considerations*

The participants were informed that the answers to the questions will be completely private and will only be used for the sake of research only. They were asked to fill consent form before starting the interview. The whole process, confidentiality and preservation of data were explained to the participants before they gave their consent. The study was approved and funded by the Deanship of Scientific Research at the University of Jordan (reference grant number (1120/2019/19) and had ethical approval by the Institutional Review Board of Jordan University Hospital (reference number (67/2019/1438)).

## **Results**

### ***Participant's characteristics***

The ages of the participants (n= 75) ranged from 21 to 45 years, with a mean age of 32 years (SD=4.92). The majority of participants (n=57, 76.7%) had a bachelor's degree or higher, were married to postgraduate educated husbands (n=62, 82.7 %), lived in Jordan's middle region (93.3 %), lived with their families (96 %), and had a family monthly income of more than 850 dollars (n=53, 70.7 %). The majority of participants (n=65; 86.7 %) worked in health care (resident doctors, nurses, pharmacists, laboratory technicians, nutritionists, and others). Seventeen of the participants were primiparous (22.6 %). Slightly less than half (48%) had a caesarean birth, and the majority (84%) gave birth to a term infant ( $\geq 37$  weeks of gestation), with a male to female ratio of 1.1:1. The average length of maternity leave taken by participants was 66.6 days (SD = 14.28).

Slightly more than half of working mothers initiate BF in the first hour ( 56%), Furthermore, the EBF rate at discharge was nearly complete (97.3 %). Surprisingly, at two months, this rate had dropped to 34.7%, while at six months, it had dropped even

further to 16 % (n=12). However, among those who had previously breastfed, more than half (n=35, 59.3 percent) reported EBF for more than or equal to 6 months. Half of them (n=42; 56%) reported starting BF within the first hour of birth. In general, 98.7% of the mothers believed that EBF is a healthy way to feed infants. Table 1 shows the demographic characteristics and EBF practices of participants.

Table (1) Demographic characteristics and breastfeeding practices of participants. (N=75)

	Variable	n (%)
<b>1</b>	<b>Mother's education</b>	
	Less than Bachelor	18(24%)
	Bachelor or more	57(76%)
<b>2</b>	<b>Father's education</b>	
	Less than Bachelor	36(48%)
	Bachelor or more	39(52%)
<b>3</b>	<b>The nature of maternal work</b>	
	Non- health provider	10 (12.3%)
	Health Provider	65(86.7%)
<b>4</b>	<b>Monthly Income USD</b>	
	<u>&lt;850</u>	22(29.3%)
	<u>&gt;850</u>	53(70.7%)
<b>5</b>	<b>Working years</b>	
	≤ 5 years	19 (25.3%)
	6-10 years	27(36.0%)
	> 10 years	29(38.7%)
<b>6</b>	<b>Mother lives with</b>	
	Husband and Kids	72 (96.%)
	Single headed household	3 (4.0%)

<b>7</b>	<b>Total number of children</b>	
	1	17 (22.6%)
	2	29 (38.6%)
	3	16 (21.3%)
	≥4	13 (17.3%)
<b>8</b>	<b>Mode of delivery</b>	
	Caesarean birth	36 (48%)
	Vaginal birth	39 (52%)
<b>9</b>	<b>Gestational age at birth</b>	
	< 37 weeks	12 (16%)
	≥37 weeks or more	63 (84%)
<b>10</b>	<b>sex of current new-born</b>	
	Male	39 (52%)
	Female	36 (48%)
<b>11</b>	<b>First hour breastfeeding (initiation)</b>	
	Yes	42 (56%)
	No	33 (44%)
<b>12</b>	<b>Breastfeeding at hospital discharge</b>	
	Yes	73 (97.3%)
	No	2 (2.7%)
<b>13</b>	<b>Previous experience of ever breastfeeding for those who have more than one child (n=59)</b>	
	Yes	52 (88.1%)
	No	7 (11.9%)
<b>14</b>	<b>Previous experience of EBF for more than 6 months (n=59)</b>	
	Yes	35 (59.3%)
	No	24 (40.7%)
<b>15</b>	<b>Exclusive breastfeeding for the current infant at any time</b>	
	Yes	29 (38.7%)
	No	46 (61.3%)

### 3.2 Characteristics of the workplace environment 75 participants

Table 2 shows work place characteristics for the EBF mothers. Direct work supervisors' managers were mostly females (n=49, 65.3%) and most of the reported co-worker's employees were also females (40%). Regarding satisfaction with maternity

leave duration about 72% of the working mothers were not satisfied with the duration of maternity leave.

Table (2): Characteristics of the workplace environment (N=75)

Variable	n (%)
<b>Gender of manger/Direct supervisor and Co-worker's employees'</b>	
<b>1 Gender of manger/Direct supervisor</b>	
Male	26 (34.7)
Female	49 (65.3%)
<b>2 Gender Co-worker's employees'</b>	
Mostly male	12 (16%)
Mostly female	30 (40%)
Equally distributed	33 (44%)
<b>Flexibility of time after returning to work</b>	
<b>3 Weekly working hours after returning to work</b>	
30 – 39 hours/ week	6 (8%)
≥40 hours/ week	69 (92%)
<b>4 Type of work after returning from maternity leave</b>	
Part time –same workplace	4 (5.3%)
Full time - same workplace	71 94.7%)
<b>Infrastructure support:</b>	
<b>5 Availability of electric breast pump at working site*</b>	5 (6.7%)

6	<b>Availability of pumping Place for breastmilk during work (environmental support)</b>	24 (32%)
7	<b>Availability of flexible time options for Pumping and /or Breastfeeding place in work</b>	51 (68%)
	Did not pump	14 (18.7%)
	Pump in Locked room and used space when not occupied	6 (8%)
	Bathroom	4 (5.3%)
	Pump in Dedicated space	
8	<b>Nature of leave after delivery</b>	
	Maternity leave	69 (92%)
	Sick leave	6 (8%)
9	<b>Paid Maternity leave</b>	69 (92%)
10	<b>Satisfaction about length of maternity leave</b>	
	Strongly dis-satisfied	34 (45.3%)
	Dis-satisfied	20 (26.7%)
	Somewhat satisfied	12 (16%)
	satisfied	8 (10.7%)
	Strongly satisfied	1 (1.3%)

*Resources to help mothers stick to the EBF after they return to work.*

As shown in table 3, About one quarter of the working mothers did not have any sort of EBF supportive person. Regarding where infants stay during mothers' working hours, only 14.7% had sent their infants to a day-care Centre at the workplace.

Regarding educational information sources, social media ranked as the highest among resources utilized for knowledge about EBF (n=47. 62.7%).

In terms of structured educational counselling on BF, less than half of participants (n=32,42%) reported having no formal counselling about BF, while only 28% reported (n=21) have received BF counselling and support from the nursing staff at the hospital once their infant was born(. As far as EBF work support is concerned, majority of working mothers (68%) did not pump during working. Just5.3% of nursing mothers had access to a dedicated breast pumping location. Most of the participants (n=46, 61.4%) however, indicated that a total of 60 minutes or more should be given as a break in total to allow for breastfeeding /pumping during the official working hours .

Table (3) Breast feeding practices, resources of getting information and lactation support after they return to work (N=75)

Variable	n (%)
<b>Breast feeding practices</b>	
Women were able to pump or BF at work	24(32%)
Women were able to pump as frequent as they needed	8(10.6%)
Women can have flexible time options for EBF / pumping	3(4%)
Women thought that there is a written policy supporting pumping milk at work	7(9.3%)
<b>Source of getting lactation support information</b>	
Through Social network source for getting source of information and support (Facebook, What`s App, etc..)	47(62.7%)
Through Search engines for getting source of information and support( google searching engine ,etc. )	36(48%)
Through visiting appointment to Mother/baby clinic at work	33(44%)

Through routine check-ups by GP, family doctor or pediatrician	23(30.7%)
Through seeking advice from lactation consultant (out of their work place)	23(30.7%)
Through Breastfeeding support group at work site	11(14.7%)
<b>Supportive person to continue EBF</b>	
Mother	26 (34.7%)
Husband	23 (30.7%)
Other family members	8 (10.6%)
No support	18(24%)
<b>New-born care provider when mother at work</b>	
Family member	37 (49.3%)
Daycare outside workplace	15 (20%)
Daycare in the workplace	11 (14.7%)
Daily home. Caregiver/friend	12 (16%)
Had extended the maternity-leave beyond paid maternity leave (n=69)	17 (24.6%)

### ***Factors affecting breastfeeding***

Table 4 shows the mean scores of factors affecting EBF using Likert scale with a range of 1 to 5, where (1) represents Never and (5) represents Always. Most mothers were supported by their families (mean 3.84; SD=0.86), and confident about their ability to successfully breastfeed (mean 4.05 ; SD= .83). However, they think that workplace does not support them to breastfeed during work (Mean 1.94; SD= 1), where as shown in table 4 below, the mean score for Flexibility and adequacy of breastfeeding/pumping breaks was 2.02 (SD = .82), and the mean score for support by direct supervisor manager during work was 1.79 (SD=1.03).

Table (4): Perceived maternal confidence and Environmental factors at workplace to continue EBF after returning to work (N=75) .

Factor	Mean score (SD)
1.Mothers' confidence in maintaining successful breastfeeding after going back to work	4.05 (0.83)
2.Getting support and influence from family to continue EBF while mother at work	3.84 (.86)
3.Availability of other employee co-worker's support for breastfeeding during work	2.48 (1.03)
4.Availability of physical space For Pumping of Breastmilk and environmental support	2.12 (0.83)
5.Flexibility and adequacy of breastfeeding/pumping break in work	2.02 (0.82)
6.Workplace support for breastfeeding during work	1.94 (1.00)
7.Direct supervisor manger support for breastfeeding during work	1.79 (1.03)
8.Direct supervisor support manager for getting education and consultation about breastfeeding at work	1.78 (1.15)

5=always, 4= most often,3=occasional, 2=rarely, 1=never

When examined further, maternal, work place, and environmental support variables that would statistically affect EBF adherence, showed that mother's confidence about her ability to successfully breastfeed, co-worker's employees support, and environmental support at work place have a positive effect on the mother's decision to exclusively breastfeed (p less than 0.038, 0.001, 0.041) respectively (see table 5).

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Table 5: Factors influencing EBF adherence following a return to work

Variable	P value
Mother's education!	0.232
Previous EBF experience #	0.403
First hour BF (initiation) !	0.187
Mode of delivery !	0.166
Mother's confidence about ability to successfully continue to breastfeed ♦	0.038
Antenatal and postnatal BF education by healthcare provider ♦	0.822
Antenatal and postnatal information to facilitate EBF given by the supervisor manger ♦	0.255
Family support ♦	0.519
New-born care provider #	0.186
Work place EBF support ♦	0.640
Co-worker employee EBF support ♦	0.001
Supervisor manger support to facilitate pumping and EBF during work ♦	0.222
Environmental support in providing place for EBF (availability of space and equipment) ♦	0.041
Quality of EBF breaktime ♦	0.086

! Chi-square

# Chi-square (Fischer's Exact Test)

♦ Mann-Whitney U Test and Kruskal-Wallis Test

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On the other hand, maternal education, previous EBF experience, BF initiation, mode of delivery, ante-natal and post-natal education by health-care provider, family support, sex of new born, workplace support, and quality of BF break didn't have any significant relationship with adherence to EBF.

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## Discussion

To the best of our knowledge, this is Jordan's first study as an example of upper middle income country to report EBF rates at 6 months as well as EBF challenges among health and non-health care working mothers in a hospital setting using validated questionnaire . There is a paucity of empirical regional and international research on the prevalence and barriers to EBF among working lactating mothers. According to the current study's findings, while working mothers' awareness of EBF is nearly complete (98.7 %), exclusive BF practice at six months was low (16 %). This is lower than the Jordanian Demographic Health Survey 2017-2018, which found only 25.4 % of mothers at the population level continued EBF for six months (9). The Healthy People 2020 initiative report states that the goal is for 60.6% of mothers to continue EBF for 6 months(23), which is far from the intended goal. This study describes additional barriers that prevented lactating working mothers from continuing to breastfeed exclusively. Of these reported barriers, short maternity leave that was a driving factor in early weaning BF infants in the current study and other studies, such as African American women in the Detroit area of the United States and female employees of the Sydney South West Area Health Service who return to work(24, 25). This study found that the presence of co-worker and direct supervisor manager support was associated with significantly higher EBF rates (P 0.05). These findings were consistent with the findings of another study, which found that managers can influence EBF decisions by controlling BF policies or informally supporting or discouraging working mothers(26). Possible hindrances to the sustained practice of EBF among working mothers, as indicated by this study, included lack of BF facilities and short or lack of official break time. In other

words, the demand to perform official duties is difficult with the obligation to breastfeed at the same time.

According to research that studied and evaluated the legislation of 193 United Nations member nations for information on BF breaks and maternity leave guarantees, working moms have not attained their full EBF and health potential because they are not permitted to breastfeed at work (27).

According to this study, adherence to EBF differed significantly when there was environmental support versus when there was none ( $p=0.041$ ), implying that it is critical to implement breastfeeding-friendly policies at work to ensure that lactating mothers have access to private, clean spaces to express their breast milk via pumping(28). In the current study, the majority of nursing mothers (66.7%) did not pump at all, and those who did (8%) pumped their breast milk in the toilet room. The importance of early initiation of BF is well recognized (28). In the current study, around half (56 %) the participants-initiated BF within the first hour of delivery.

According to the Jordan Population and Family Health Survey, 2017-2018, 67 % of the new-borns to mothers with a secondary level of education were breastfed in their first hour of life, compared to 80 % of mothers with no education (29). In this context, the findings revealed that, despite the fact that all moms had a higher education level, a surprising 56 % of them commenced breastfeeding their infants within the first hour. This decreased rate of first-hour BF initiation in comparison to the overall educated population is most likely related to our respondents' high C-section rates (48 %).

Possible explanation: caesarean birth is connected with postoperative care routines that might delay or disrupt contact between the mother and her new-born in the postpartum period, especially in a non-baby friendly environment. According to a study conducted

in Northern Jordan, women (both employed and unemployed) with mothers who had more children and were experienced in EBF were more likely to exclusively breastfeed (30). This contradicts our study's findings, which found no significant difference between previous EBF experience and multi-party with continuing EBF. One possible explanation is that all of the participants in this study were working mothers, and factors related to work had a greater impact on the rate of EBF than previous experience.

Approximately 42% of our respondents never discussed EBF or provided educational materials to them during their pregnancy. Furthermore, approximately one-third of them (28%) received BF education at the hospital during the postpartum period. The lack of a BF education program during the prenatal, natal, and postnatal periods may explain why some lactating mothers rely on informal resources, which may be inaccurate and untrustworthy. In this regard, it was observed in Jordan that moms who commenced BF before discharge were more likely to be employed, have a normal vaginal birth, and have had antenatal or post-birth BF education(31).

In agreement with a prior recent study(32), social networking sites were the most commonly used resource in this context (62.7%), followed by online resources (48 %)

This study report that mothers who were confident in their ability to successfully breastfeed had significantly higher adherence to EBF at 6 months ( $p= 0.038$ ). This result is congruent with a study that was conducted on working mothers in Dengkil Health Clinic in Selangor, Malaysia, that found that mothers' beliefs and self-efficacy are important to determine practice of EBF in the work place(33) .

### **Strengths and limitations**

The study's strength is its contribution to a better understanding of the influences of EBF among working mothers, as well as the barriers that prevent them from

continuing to breastfeed. The current study's findings provided critical information that will assist stakeholders, policymakers, and health care professionals in developing and implementing programs to improve EBF outcomes. Despite its contributions, this study has some significant limitations that should be considered when interpreting the findings. To begin, the sample consisted of 75 working mothers. Because participants were chosen in one health institute, generalizability is limited. Second, because of their work commitments, some participants may have been bored by our questionnaire's 54 questions. We may also consider recall bias because we asked mothers to recall events that occurred within the last six - 48 months. The response in the mothers will differ widely due to difficulty in recollecting facts and different environmental situation in the mothers of older children.

### **Implication for practice**

This study disclosed a variety of modifiable variables that can affect EBF rates among working mothers. The rate of EBF can be increased in communities through laws and policies. There is a desperate need to improve managers' and co-workers' employee support as he or she facilitates a better environment, infrastructure, and educational programs, as well as providing maternity leave extension and part-time employment for the first year after giving birth. Furthermore, Collaboration among various stakeholders, including Health Services, the Ministry of Health, the Department of Employment and Labour Relations, and all heads of professional organizations/institutions, may result in breastfeeding-friendly policies and EBF - sensitive work environments and infrastructures that promote BF outcomes.

### **Conclusion and recommendations**

While nearly all mothers are aware of and confident in their ability to continue EBF with the support of their family, partner and co-workers many report EBF cessation when they return to work due to workplace barriers that are beyond their control. This was offset by unsatisfied needs at their workplace, which hampered their EBF practice. These prerequisites include a lack of work site, infrastructure, and environmental support, as well as insufficient maternity leave and full-time employment status upon their return. Further steps for creating BF friendly supportive worksites are needed to enhance EBF -related attitudes at the workplace. This can be achieved by engaging hospital managers, co-worker's employees, prenatal and postnatal educators and social network sites through creating trustable BF groups. Future research is recommended to help to develop guidelines and policies that embrace EBF promotion programs at the national level.

**Conflicts of interest:** All authors have declared that they have no potential conflicts of interest related to the research, authorship, and/or publication of this article.

#### **Availability of data and materials**

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

#### **Ethics Approval and Informed Consent**

The study protocol was approved by the Institutional Review Board at Jordan University Hospital (Ref: 67/2019/1438) and dean ship of scientific research (Ref: 1120/2019/19). The relevant procedures were carried in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) as well as with the principles of Good Clinical Practice issued by the Declaration of Helsinki (2004; Tokyo) and its later amendments. Beth Olson from the

University of Wisconsin-Madison provided us with the validated Research tool for our team, which we modified slightly to fit our culture .

**Participants Consent Form:** Informed consent was obtained from all the participants before inclusion in the study.

**Declaration of participants consent:** The authors certify that they have obtained all appropriate **participants** consent forms

### **Authors' Contributions**

Eman F. Badran , Reema Safadi, , and Raeda Al-Qutob and Du'a Al-Maharma conceived designed and supervised the project.

Aseel Qutaishat, Deema Masarweh, Yazeed Bani Hamad, Ahmad Khamees, and Asmaa Shabsough shared in Acquisition of data and participated in planning the research tool, and collecting the data.

Reema Safadi, Du'a Al-Maharma, and Raeda Al-Qutob, reviewed the research tools and final manuscript.

Basheer Khamees participated in statistical design and statistical analysis.

Aseel Qutaishat , Deema Masarweh and Ahmad Khamees contributed to the interpretation of the results with supervision from Prof Basheer Khamees and. Du'a Al-Maharma.

Eman Badran, Aseel Qutaishat, Deema Masarweh, Yazeed Bani Hamad, Ahmad Khamees, and Asma Shabsough took the lead in Drafting the manuscript.

Revising the manuscript critically for important intellectual content : Eman F. Badran , Reema Safadi, , and Raeda Al-Qutob

All authors provided critical feedback, participated in the research and analysis, and approved the final manuscript.

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### **Acknowledgment**

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Cover letter  
[28<sup>th</sup> March 2022

**Dear Editor-in-Chief**

Professor Shally Awasthi

We, the authors, are grateful for the reviewers' time and efforts in helping to strengthen the manuscript.

Attached is the revised manuscript. in addition to particular responses (point by point )

I wish to submit an original article for publication in “*Clinical Epidemiology and Global Health* (CEGH) ”, titled

“

**What support is needed prior to the designation as baby-friendly Hospital?**

**. (Original Article).”**

The previous title was (changed as reviewer 2 request)

**Obtaining advice prior to the Baby Friendly Hospital designation by Investigating the factors that contribute to women's difficulty juggling breastfeeding and work.**

**(Original Article)**

The paper was coauthored by Reema Safadi, Raeda Al Qutob, Dua'Al-Maharma Aseel A.

Qutaishat, Deema F. Masarweh, Yazeed A. Bani-Hamad, Ahmad B. Khamees. Asma R.

Shabsough, Basheer Khamees. This study aimed to identify to assess the rate and challenges that affect EBF among mothers working at a teaching university hospital before it was accredited as a Baby Friendly Hospital to facilitate a base for future studies.

This study helps to fill one of the research gaps as required by WHO where collaboration of various stakeholders involved in promoting, protecting, and supporting maternal breastfeeding efforts and contribute to the provision of a supportive work environment is called for. Our findings

demonstrated The BF initiating rate was 56%, but it fell after returning to work and the rate was 16% at 6 months. The perceived identified barriers include a lack of flexibility in the work schedule for breast feeding/milk expression, a lack of pumping space, dissatisfaction with maternity leave, and concerns about support from supervisors and employers. The adherence to EBF among mothers who had co-worker support, self-confidence of EBF, and environmental support at the workplace differed significantly from those who did not have these conditions

The current study results provided important data that help stakeholders, policymakers and health care professionals to formulate and implement programs that encourage working mothers at their own institutions to exclusively breastfeed their babies. Moreover we believe that our study helps to fill one of the research gaps as required by WHO where collaboration of various stakeholders involved in promoting, protecting, and supporting maternal breastfeeding efforts and contribute to the provision of a supportive work environment is called for.

This manuscript has not been published or presented elsewhere in part or in entirety and is not under consideration by another journal. All study participants provided informed consent, and the study design was approved by the appropriate ethics review board. We have read and understood your journal's policies, and we believe that neither the manuscript nor the study violates any of these. There are no conflicts of interest to declare.

Thank you for your consideration. I look forward to hearing from you.

Sincerely,  
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