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Knowledge, Attitude, and Practices on *Exclusive Breastfeeding in the Workplace* of Bicol University Female Personnel

Richard L. Bartolata
Bicol University, College of Nursing, Legazpi City, Philippines
Correspondence: rlbartolata@bicol-u.edu.ph

Abstract

This study is an institutional-based descriptive KAP survey utilizing pretested, structured questionnaires. The results of this survey are deemed helpful to the administrators, policymakers, and managers of Bicol University when planning educational interventions on breastfeeding in the workplace. Of the 300 female Bicol University (BU) personnel of the reproductive age, 35% had a low level of knowledge, 29% had moderate knowledge and only 24% got a high level of knowledge on exclusive breastfeeding in the workplace. The attitude indicators obtained a general weighted mean of 3.96 interpreted as "Agree" which indicates that the respondents had a positive attitude toward exclusive breastfeeding in the workplace. The respondents' most preferred breastfeeding practices in the workplace were *flexible working hours and options* (83%), *scheduling of breastfeeding breaks* (74%), and *receiving a breast milk expression pack, training, and support* (67%). Indeed, there is a need to boost efforts among Bicol University personnel to improve their understanding, desired attitude, and practices towards exclusive breastfeeding (EBF) in the workplace. For the holistic well-being of BU personnel, it is strongly recommended that the proposed evidence-based Exclusive Breastfeeding in the Workplace Promotion Extension Program be firmly supported by BU administrators.

Keywords: *mothers, infants, breast milk, colostrum, promotion*

Introduction

The World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) recommend that infants be fed exclusively breast milk for the first six months of their life. In the Philippines, however, just 34% of infants under the age of six months are exclusively breastfed. Only 34% of children continue breast milk intake until they are two years old, according to UNICEF's 2014 State of the World's Children report. These findings place the country among the top countries with the highest percentage of children who are not exclusively breastfed. The country's recent data on child malnutrition can be ascribed to the low proportion of children who were breastfed as newborns (WHO, 2015).

According to UNICEF, the Philippines is one of 37 countries that has fully implemented the International Code of Marketing of Breast-milk Substitutes through its Milk Code. The International Code maintains there should be no public advertising or promotion of milk formula. Medical authorities are expected to contribute to the country's support of exclusive breastfeeding.

Executive Order No. 51, the local counterpart, was passed in 1986. It formalized the international code and ensures that the country's breastfeeding culture is protected. Even though it has been nearly 29 years since it was completely implemented, surveys show that Filipino mothers still do not fully comprehend the benefits of exclusively feeding their infants breast milk (WHO, 2018).

Breastfeeding provides several benefits for both the infant and the mother, as well as the institution that promotes it. It is a child's initial preventative health intervention after birth. It also strengthens the bond between mother and child. Breast milk is the healthiest baby meal since it provides all of the vital elements that an infant requires. It is nature's initial

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vaccination, allowing the infant to overcome diseases that could be fatal. It contains growth factors that help an infant's organ systems mature faster (Congress of the Philippines Official Gazette, 2010). Reduced hospitalizations and pediatric visits result in hundreds of pesos in savings for families and millions of pesos for the country as a result of breastfeeding's many benefits (Kulich, 2017). Furthermore, breastfeeding could save the country money on foreign funds that would otherwise be spent on milk importation.

For this purpose, the state shall promote and encourage breastfeeding, as well as provide appropriate measures that allow mothers to continue expressing milk and/or breastfeeding their infant or young child. The results of this KAP survey are deemed useful to Bicol University administrators, policymakers, and managers when implementing educational initiatives on breastfeeding in the workplace to promote the female personnel's holistic well-being.

Objectives

The purpose of this study was to assess the knowledge, attitude, and practices of female BU employees in the reproductive age group regarding exclusive breastfeeding in the workplace.

Materials and Methods

This study is an institutional-based descriptive KAP survey utilizing pretested, structured questionnaires. Initially, a formal request was made to the Human Resource Management Office (HRMO) for a list of female employees of reproductive age, stating that the information would be used solely for the Breastfeeding in the Workplace Promotion Program (Data Privacy Act). The aforesaid list was utilized to recruit study participants who met the study's criteria. To safeguard the participants' identities and maintain confidentiality, the 300 female personnel-respondents for KAP on exclusive breastfeeding in the workplace were coded. Following that, the researchers requested permission to conduct the study in a letter to the Bicol University deans, directors, and heads of offices.

The Respondents

Three hundred (300) of the 330 female BU workers (91%) accepted the invitation to participate in the study. The respondents were of reproductive age and ranged in age from 23 to 49 years old. All female faculty and non-teaching personnel from all colleges/units who gave informed consent to participate in the survey were included as respondents. Personnel on official leave, on the other hand, were excluded.

Data Gathering Methods

The study's extensive review of literature and studies served as the foundation for the research instrument. It was extracted from the paper "Breastfeeding knowledge and attitudes in the Caribbean Circle (Velpuri, 2004). The questionnaires were pretested among female employees of reproductive age at a state college in Sorsogon City to ensure that the indicators worked appropriately and that respondents understood them. The study used a 25-item True or False questionnaire to examine the respondents' knowledge about exclusive breastfeeding. The raw score was converted to a rating using the transmutation table and interpreted as very high, high, moderate, low, or very low. Twenty (20) indicators were used to measure the respondents' attitudes toward EVF, and they were also asked to choose their preferred EBF practices from the list of indicators.

Data Analysis Plan

Using a Microsoft Excel spreadsheet, the weighted mean, percentage, and ranking were calculated. To accomplish each objective, the data were collated and presented in tables and text, then interpreted and analyzed at three levels: textual analysis, analysis with implication, and inference. Conclusions were drawn from the findings, and recommendations were made based on the study's conclusions.

Ethical Considerations

Ethical clearance was obtained from the Institutional Review Board of Bicol Regional Training & Teaching Hospital. (IRB-BRTTH) in Legazpi City, Albay. The respondents were informed clearly and in detail about the importance of the study and written consent was obtained. They have the right to refuse and withdraw from participating in the research without any explanation and they have the right to ask any question at any time. In addition, the name of the respondents was not included in the questionnaires to safeguard their identity.

Results and Discussion

Understanding the views and knowledge of stakeholders (faculty, non-teaching, and students) directly involved with targeted school systems is a critical first step before designing and implementing educational interventions and policies that support breastfeeding (Singletary, et. al, 2016). Hence, its objective is to determine the stakeholders' knowledge regarding breastfeeding and attitudes towards breastfeeding education in school as a workplace.

The information reported in this study is quite important because the researchers will provide evidence-based insights to employers and the government, including a recommendation for potential breastfeeding promotion interventions and support in the workplace, and future research.

Table 1 Level of Knowledge on Exclusive Breastfeeding among Female BU Personnel within the Reproductive Age (n=300)

Rating	Verbal Description	f	%
95-100	Very High	8	3
88-94	High	72	24
82-87	Moderate	88	29
75-81	Low	104	35
74 and below	Very Low	28	9
Total		**300**	**100**

One hundred-four or 35% of the respondents obtained a rating between 75-81 described as *low, 88 or 29% of them got a rating of 82-87 or moderate level of knowledge, 72 or 24% of the respondents had a rating between 88-94 which indicates a high knowledge. Twenty-eight of the 300 respondents or 9% received a rating of 74 and below, meaning a very low level of knowledge. However, only 8 or 3% of the 300 respondents showed a very high level (94-100 rating) of knowledge on exclusive breastfeeding in the workplace. This accounts for female faculty in colleges/ campuses that offer Bachelor of Science in Nursing and Doctor of Medicine. The concept of breastfeeding is integrated into maternal and child nursing, pediatrics, and obstetrics. There are also female faculty who are DOH-accredited trainers in breastfeeding by their training.* The finding described above is inconsistent with previous results that lactating mothers from developing countries have good knowledge of exclusive breastfeeding (Oche, Umar, Ahmed, 2011). Also, Chavan, et. al (2017) found that the majority (79 %) of their study subjects had correct knowledge about the initiation of breastfeeding. However, Dallak & Al-Rabeei (2016) established that the overall mother's knowledge was inadequate for 60% of their participants as well as a neutral attitude and a gap between actual and desired breastfeeding practices. They believe it is important to provide accurate prenatal education that focuses on methods and long-term benefits of infant feeding to mothers, families, and health professionals.

Republic Act 10028 calls for the integration of infant and young child feeding (IYCF) topics in all health professional curricula. The Department of Health (DOH) reports this provision has not yet been implemented because the Commission for Higher Education needs to issue a Memorandum Order for colleges and universities to do so. The Department of Health also reports that the existing curricula contain breastfeeding-related topics (World Health Organization (2015). Bicol University offers a Bachelor of Science in Nursing program on the main campus in Legazpi City, a Polangui campus in the third district, a Tabaco campus in the first district of Albay, and a Doctor of Medicine on the main campus. The concept of IYCF and exclusive breastfeeding are integrated into maternal and child nursing and pediatrics and obstetrics that the university offers.

The Department of Health has recommended that the WHO Model Chapter on IYCF *be integrated into the curricula of medical, nursing, and midwifery schools. It is uncertain and unclear how the Model Chapter was incorporated into the curricula. It is also not known if IYCF practices have become part of the minimum competencies required for health professionals. The Department of Health reports that the national licensure examination for health professionals contains questions on breastfeeding-related topics* (World Health Organization, 2015).

Dissemination of breastfeeding knowledge to this population should have a striking impact on child health in the country in the short-to-medium term, as well as in the more distant future since teachers are the best suited to pass on correct attitudes to the mothers of tomorrow (Nabulsi, 2011). The occupational health nurse can facilitate this while the nurse educator's role includes educating employers and employees about the benefits of breastfeeding and ensuring the mother's success (Wyatt, 2002).

According to Gavine, et. al (2017), there is a significant need for research to address breastfeeding education and training needs of multidisciplinary

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Table 2 Breastfeeding Test Items with the Highest Number of Correct and Incorrect Answers (n=300)

Highest Correct Answers	f	%	R	Highest Incorrect Answers	f	%	R
A mother who is breastfeeding cannot have sex because the milk will go bad; therefore, she should stop breastfeeding soon so that sexual relations can resume.	268	89	2	According to World Health Organization (WHO), the optimal duration for breastfeeding an infant is a minimum of twelve months.	132	44	4
Colostrum is yellow because it has been in the breast for too long and has gone bad.	256	85	5	A mother who is ill should not breastfeed.	170	57	2
Breast milk provides adequate water for hydration.	260	87	4	Formula feeding is harmless and hygienic.	152	51	3
Colostrum is dirty and should be discarded.	280	94	1	Babies need water.	232	77	1
Breast milk that accumulates when the mother is separated from her baby should not be given to the baby.	264	88	3	Breastfeeding decreases workforce absence due to decreased infant and maternal illness.	118	39	5

healthcare workers in various situations because there is a shortage of reliable evidence. Yang, et. al (2018) claimed that the timing of mother and child health curriculum components, past breastfeeding experience, gender, cultural customs, and government regulation are all factors that influence breastfeeding knowledge and attitudes. Based on the review, nursing curricula or specialized programs that emphasize the importance of breastfeeding initiation can increase breastfeeding knowledge and attitudes, as well as students' confidence in assisting and guiding breastfeeding mothers.

Low rates of exclusive breastfeeding are due to a lack of understanding among women, their partners, families, healthcare practitioners, and policymakers about the consequences of not exclusively breastfeeding and proper breastfeeding procedures (World Health Organization, 2014). Breastfeeding expertise and mothers' employment level were revealed to be modifiable factors that predicted exclusive breastfeeding (Al Debi, et. al, 2018). According to Basrowi, et. al (2019), knowledge improvement related to breastfeeding benefits and support for working mothers is a top priority, but advocacy to employers, managers, and supervisors in providing breastfeeding facilitation and program support is also important for successful breastfeeding practice among workers. To increase lactation practice, the organization should involve a policymaker and implement a regular promotion campaign aimed at improving education and breastfeeding knowledge among female employees (Basrowi, et. al, 2018).

One of the most important interventions to promote breastfeeding practices among working mothers is the provision of knowledge and assistance about how to manage to breastfeed while working (Johnston & Esposito, 2007), while Lewallen et al. al. (2006) stressed the necessity of improving mothers' breastfeeding knowledge for them to plan and manage to breastfeed while working. If mothers are informed about the numerous health benefits of breastfeeding, they are more likely to do so, but knowing how to do so is essential (Bettinelli, 2012).

Ninety-four percent of the respondents answered correctly to the *breastfeeding test question colostrum is dirty and should be discarded* which is not true. Colostrum is high in gamma globulins, which defend the baby from viral, fungal, and bacterial illnesses while also preparing the digestive tract for subsequent milk. Many mothers in impoverished nations reject colostrum because of cultural beliefs that it is "filthy milk" with no nutritional value or that it brings ill luck to the family (Mukherjee & Das, 2016). Colostrum is the best diet for babies, according to UNICEF and WHO, and should be introduced during the first hour following delivery. It contains proteins, vitamin A, and maternal antibodies that are essential for the sustenance of the infant until lactation is established. Colostrum thus provides natural immunity (the baby's first immunization) against a wide range of diseases.

A mother who is breastfeeding cannot have sex because the milk will go bad; therefore, she should stop breastfeeding soon so that sexual relations can resume. Eighty-nine percent of the respondents consider this a myth. Olds, et. al (2010) revealed that a lactating woman can be a sexual partner while feeding her baby, and she can share her breasts with both the infant and her partner.

Her breasts do not have to stop performing their erotic function just because they are now performing their biological function. There is no reason why her partner should not manually and orally stimulate her breasts while she's nursing her baby.

Eighty-eight percent of the respondents gave a correct answer to *breast milk that accumulates when the mother is separated from her baby should not be given to the baby. The respondents were aware that* human milk is always fresh and cannot spoil in the breast so it is safe for baby's consumption (NJHealth (2018). Regardless of the amount of milk she obtains, a mother who is separated from her infant must pump at least eight times per 24 hours. Because prolactin levels are greater at night, pumping during the night will result in more milk production. Initiating abundant milk production aids in the establishment of long-term breastfeeding (Lauwers & Swisher, 2005). It is typical and common for a mother to notice that one breast produces more milk and lets down more easily than the other. To start milk production and avoid difficulties associated with overfullness, both breasts require regular milk removal (Lauwers & Swisher, 2005).

Eighty-seven percent of the respondents understand that *breast milk provides adequate water for hydration.* Human milk is 87 percent water, which is exactly what the body requires. Breastfed babies do not require more water even in the desert (NJHealth, 2018).

Colostrum is yellow because it has been in the breast for too long and has gone bad is considered by 85% of the respondents as a myth Every woman's milk is distinct, and there are many variations of "normal," according to Taylor (2020). Breast milk color will change quite a little in the early days or weeks following giving birth. Colostrum, for example, is a yellowish pre-milk that appears shortly after the baby is born. However, it does not mean it gets spoiled and has gone bad. Breast milk naturally changes colors in the beginning as a mother's body goes from making colostrum to transitional milk to mature milk. Its hue can also be determined by what the mother eats.

Of the breastfeeding test items with the highest number of incorrect answers, the topmost was *babies need water* where 77% of the respondents did not get the correct answer. Unless medically indicated, WHO (2010) recommends giving newborn newborns no food or drink other than breast milk. Even in hot climates, babies do not need water until they are 6 months old. Breast milk, especially the initial milk that comes with each feed, is more than 80% water. As a result, the mother can breastfeed her baby whenever he/she feels thirsty. This will quench the baby's thirst, protect the newborn from infections, and aid in his or her further growth. Breastfeeding provides all of the water a newborn requires while also giving "safe water" and keeping the baby safe from diarrhea. Giving water to the baby may cause him or her to take less breastmilk or to quit breastfeeding too soon, resulting in malnutrition. In addition, the mother will produce less milk in the future. When a baby is exclusively breastfed, he or she receives just breast milk and no other food or drink, including water, except for oral rehydration solution, drops, vitamins, minerals, or medicinal syrups (WHO, 2014).

A mother who is ill should not breastfeed was ranked second on the list of breastfeeding questions with the most incorrect answers, with 57 percent of respondents answering incorrectly. People are most contagious before they even realize they have a cold or flu, according to Dundon & Harris (2020). As a result, a woman has already exposed her baby to any microorganisms she is harboring 12 to 24 hours before showing any symptoms. Fortunately, in four to five days, the mother produces antibodies against the cause of her illness, which she passes on to her infant through breast milk. Because most viruses have a five to seven-day incubation period, the mother transmits the antibody protection to her baby before he/she gets sick. They teach women that they can nurse their children while they are sick with a cold or the flu as long as they are physically able. The only time a sick woman should not breastfeed is if she is too sick to do so or is taking a medicine that is harmful to the baby (Dundon & Harris, 2020).

Formula feeding is harmless and hygienic came in third among the breastfeeding test items with the most incorrect answers from 51 percent of respondents. All means of infant feeding, including breastfeeding and the use of manufactured infant formulas, are associated with risks, according to Gibble and Hausman (2012). Health authorities, on the other hand, do not advocate against the use of formula or breastfeeding; instead, they provide guidelines for managing the risk. Even where breastfeeding initiation rates are high, such as in Australia, the United Kingdom, and Italy, the vast majority of newborns receive infant formula throughout their first year of life. However, there are risks linked with formula feeding (Gibble & Hausman, 2012). They also found that infant formula can be contaminated with pathogens such as Enterobacter sakazakii, Salmonella spp., Pantoea agglomerans, Escherichia vulneris, Hafnia alvei, Klebsiella spp., Citrobacter spp., Enterobacter cloacae, Bacillus cereus, Clostridium spp., Staphylococcus aureus, and Listeria monocytogenes. It could also be contaminated with

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chemicals or other compounds that are dangerous to children. In China, the melamine contamination of infant formula caused hundreds of thousands of children to become sick and many infants died in 2008. Deficiencies and toxicities in infant formula ingredients have also been reported. A protein and vitamin C-deficient formula was recalled in the United States. In Israel, thiamine-deficient newborn formula resulted in brain damage and deaths. Furthermore, poor cleanliness in the manufacture of infant formula, improper bottle cleaning, and insufficient newborn formula storage have all been recorded as issues with formula feeding. During the manufacturing procedure, infant formula made from powder might become contaminated with pathogenic microorganisms (Gibble & Hausman, 2012).

With regards to this breastfeeding question *according to World Health Organization (WHO), the optimal duration for breastfeeding an infant is a minimum of twelve months,* 44% of the respondents got it incorrectly. The feeding of infants and young children is an important aspect of improving child survival and promoting healthy growth and development. The first two years of a child's life are critical, as good nutrition during this time reduces morbidity and mortality, lowers the risk of chronic disease, and promotes general development. As a result, WHO (2020) recommends starting breastfeeding within one hour of birth, breastfeeding exclusively for the first six months of life (minimum optimal duration of breastfeeding), and introducing nutritionally adequate and safe complementary (solid) foods at six months, with breastfeeding continuing for at least two years (WHO, 2020).

Regarding *breastfeeding decreasing workforce absence due to decreased infant and maternal illness, 39% of the takers gave an incorrect answer. Cohen, et. al (1995) found that in the breastfeeding group 74% of illness episodes did not cause maternal absenteeism, compared with 57% in the formula-feeding group. Their study shows that women who breastfeed their babies are less likely to be absent from work because of baby-related illnesses and less likely to have long absences when they do miss work compared with women who feed their young with infant formula. Preliminary evidence supports the assertion that activities such as corporate lactation programs can influence infant health by promoting and supporting breastfeeding continuation. This study also suggests that corporate lactation programs can partially offset their expense by reducing maternal absenteeism and health care costs (Cohen, et. al, 1995).*

Attitude toward Exclusive Breastfeeding in the Workplace among Female BU Personnel

Of the twenty indicators designed to measure the level of attitude of female personnel within the reproductive age toward exclusive breastfeeding in the workplace, 11 of 14 affirmative statements obtained an "Agree" response and only 3 got a "Neutral" rating while 6 of 6 negative attitude indicators had a "Disagree" answer. The affirmative attitude indicator that obtained the highest weighted mean of 4.45 was *employers should provide private areas at work in which women can breastfeed their babies or express their breast milk. Lactation rooms with a dedicated space increased the willingness of mothers to continue to breastfeed (Tsai, 2013). Moreover, women were twice as likely to breastfeed when there was a private space for lactation, and pump breaks resulted in women being twice as likely to breastfeed (Tsai, 2013).* Furthermore, the law requires that the station must not be located in the toilet. It stresses that employees should never be asked to express milk or breastfeed in a restroom.

Another attitude indicator with a weighted mean of 4.38 interpreted as "Agree" was *employers should support women who want to breastfeed or express breast milk at work*. Among the reasons women feel unsupported at work include no dedicated place to pump, nowhere to wash pumping attachments, and nowhere to store expressed milk, no time to pump, and harassment, discrimination, or retaliation from supervisors or co-workers (Journey, 2020). Hence, employers should enhance the lives of their breastfeeding employees both at work and at home by providing workplace breastfeeding support, especially by providing time for expressing human milk in the workplace (Jantzer et al, 2018). Additional hygiene measures should be taken into consideration during a pandemic (COVID-19) when employers need to provide guidance and training on occupational safety, health measures, and hygiene practices (Unicef, 2022). These factors are key to potentially helping mothers to have a positive attitude toward breastfeeding. Tsai (2013) added that employers' attitudes about breastfeeding-friendly support indicated that employers would be willing to help women who wished to breastfeed or express milk in the workplace. As a result, organizational and managerial assistance are important aspects of workplace lactation support, which may have a favorable impact on job satisfaction, exclusive breastfeeding rates, and duration among female healthcare workers. This convergence of important outcomes for the business and/or academic communities, as well as public health practitioners,

Table 3 Attitude toward Exclusive Breastfeeding in the Workplace (n=300)

INDICATORS	WM	AD
Women who want to breastfeed their infants should not work outside the home. (-)	3.61	Disagree
Female bosses are more supportive of breastfeeding or expressing breast milk in the workplace than are male bosses. (+)	3.17	Neutral
Women who breastfeed their infants should be allowed longer maternity leaves than women who do not breastfeed their infants. (+)	3.03	Neutral
It is acceptable for women to breastfeed their infants or express their breast milk during working hours. (+)	4.07	Agree
Breastfeeding or expressing breast milk in the workplace will interfere with work productivity. (-)	4.30	Disagree
The public image of an institution will be negative if women employees are allowed to breastfeed or express breast milk at work. (-)	4.38	Disagree
Women who breastfeed or express breast milk at work should be provided with additional break to do so. (+)	3.91	Agree
Employers should provide private areas at work in which women can breastfeed their babies or express their breast milk. (+)	4.45	Agree
Women will return to work sooner after giving birth if they are allowed to breastfeed their babies or express breast milk at work. (+)	3.13	Neutral
Women should not breastfeed or express breast milk at work because it would be embarrassing to coworkers. (-)	3.97	Disagree
Women should not breastfeed or express breast milk at work because it is unattractive. (-)	4.07	Disagree
A woman who breastfeeds or expresses breast milk at work should not be paid for the time spent breastfeeding or expressing breast milk. (-)	4.33	Disagree
Employers should support women who want to breastfeed or express breast milk at work. (+)	4.38	Agree
Absenteeism will decrease in women who are allowed to breastfeed or express breast milk at work. (+)	3.61	Agree
Allowing women to breastfeed or express breast milk in the workplace will increase the incidence of other women doing so at work. (+)	3.57	Agree
Female employees will be more loyal to a company that allows breastfeeding or expressing breast milk in the workplace. (+)	3.97	Agree
Women have the right to breastfeed or express breast milk in the workplace. (+)	4.23	Agree
Employers must encourage and support breastfeeding or expressing breast milk in the workplace. (+)	4.30	Agree
It is important that coworkers must support breastfeeding or expressing breast milk in the workplace. (+)	4.33	Agree
It is a must for businesses to have a formal policy that allows breastfeeding or expressing breast milk in the work place. (+)	4.41	Agree
GWM	**3.96**	**Agree**

4.50 – 5.00	*Strongly Agree with the affirmative statement* *Strongly Disagree with the negative statement*
3.50 – 4.49	*Agree with the affirmative statement* *Disagree with the negative statement*
2.50 – 3.49	*Neither agree nor disagree with the statement*
1.50 – 2.49	*Disagree with the affirmative statement* *Agree with the negative statement*
1.00 – 1.49	*Strongly disagree with the affirmative statement* *Strongly agree with the negative statement*

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reveals an opportunity for collaboration to improve workplace and breastfeeding outcomes (Scott, et al., 2018).

It is a must for businesses to have a formal policy that allows breastfeeding or expressing breast milk in the workplace obtained a weighted mean of 4.41 interpreted as "Agree". It implies that the respondents show a positive attitude toward establishing and implementing breastfeeding policies in the workplace. Steurer (2017) speculated that employer attitude may also play a role in the willingness of the employee to avail themselves of the workplace policy. Formal policies, according to Anderson, et. al (2015), can establish guidelines and expectations for workplace breastfeeding support. So that this arrangement is protected, promoted, and supported, there should be a written policy in the workplace and all workers, women, and men, married or unmarried, receive the information that this benefit is being offered, as well as why it is important to have (ILO, n.d.).

One more affirmative attitude indicator garnering a weighted mean of 4.33 interpreted as "Agree" was *co-workers must support breastfeeding or expressing breast milk in the workplace. Mothers who continue breastfeeding after returning to work need the support of their co-workers and supervisors (CDC, n.d.).* Discouragement and criticism from co-workers were reported as the largest barriers to workplace sustainment of breastfeeding (Steurer, 2017). An example of unsupportive coworkers is when an employee complains about her coworkers giving her extra work when she returned from maternity leave to make up for what they had to accomplish while she was gone (Journey, 2020). Research showed that most co-workers support company health benefit programs that include lactation support. Occasionally, however, some co-workers might view these services as unfair, particularly if they perceive that they will be required to cover the breastfeeding mother's tasks or shifts. According to Basrowi, et al. (2018), mothers who worry about co-worker resistance sometimes discontinue breastfeeding earlier than planned or hesitate to request lactation support from their supervisors. Every worker should support their colleagues to breastfeed as it is proven to increase lactation practice among working mothers (Basrowi, et al., 2018).

Moreover, *employers must encourage and support breastfeeding or expressing breast milk in the workplace* had a weighted mean of 4.30 or "Agree". Encouragement and support to use breast pumping breaks from working mothers' employers can significantly affect their intention to continue breastfeeding after returning to work. Hence, managers' attitudes and support influence female employees' perception of workplace breastfeeding support (Tsai, 2013). Besides, employers have a responsibility to ensure safety for women in the workplace free from environmental hazards and discrimination based on pregnancy, breastfeeding, or family status (Unicef, 2022).

The following are negative attitude indicators to which the respondents answered "Disagree": *the public image of an institution will be negative if women employees are allowed to breastfeed or express breast milk at work (4.38). It implies that the respondents do not believe that breastfeeding in the workplace will tarnish the company's reputation.* On the contrary, the workplace support of breastfeeding and the implementation of lactation programs, in particular, can contribute to a positive corporate image (McSwiggan, 2010). Breastfeeding promotion in the workplace improves the corporate image of businesses, showing that they care about the health and well-being of working women and their families (Unicef, 2022). Marinelli, et. al (2013) confirmed that a corporate environment designed to enable and encourage continued breastfeeding does not engender negative attitudes in other employees and the public.

The respondents also responded "Disagree" to the statement that a woman who breastfeeds or expresses breast milk at work should not be paid for the time spent breastfeeding or expressing breast milk (4.33). RA 10028 provides that breastfeeding women are entitled to an additional break called lactation periods. These break intervals will include the time it takes to get to and from their workplace to the company's lactation station. The law mandates that these are considered compensated hours. Specifically, provision of time, lactation periods are break intervals in addition to the regular time-off for meals including the time it takes a worker to get to and from the workplace lactation station shall be counted as compensable hours worked. It shall not be less than a total of 40 minutes for every 8-hour working period could be 2-3 breastmilk expressions lasting 15-30 minutes each within a workday (ILO, n.d.).

Likewise, the respondents disagreed with the statement that *breastfeeding or expressing breast milk in the workplace will interfere with work productivity* (4.30). It implies that mothers are aware of the economic benefits of exclusive breastfeeding which reduces the number of leave requests for both mother and child to attend doctor's appointments, as well as the amount

of sick leave, and maternity-related absenteeism (which can result in 30–70 percent fewer absences), and employee turnover rates, saving the company money by eliminating the need to hire and train new employees (Unicef, 2022).

Moreover, the respondents answered "Disagree" with the statement that *women should not breastfeed or express breast milk at work because it is unattractive (4.07).* Awkwardness, body image concerns, stigma, fear, and lack of confidence, according to Murray (2021), can all lead to negative sentiments regarding breastfeeding. Concerns about displaying their breasts can make mothers feel uneasy as well. When the thoughts of breastfeeding cause humiliation, discomfort, or shame, a mother is more likely to opt against it. Also, some people view breasts as sexual objects and may find it difficult to overcome this. But there are many ways to help breastfeeding feel more private, such as using cloth coverings or nursing only at a designated lactation station.

Furthermore, the respondents were not in favor of the statement that *women should not breastfeed or express breast milk at work because it would be embarrassing to co-workers (3.97). It means that most women do not find it humiliating to express milk inside the lactation cubicle in the workplace. Hence, employers should provide a place, other than a bathroom, that is shielded from view and free from intrusion from coworkers and the public, which may be used by an employee to express breast milk.* In contrast, the findings of Desmond & Meaney (2016) illustrate that mothers with the desire to continue to breastfeed after their return to work did so with some difficulty. Many women concealed their breastfeeding status after returning to work due to embarrassment. Cultural and societal barriers are difficult for mothers to overcome.

In addition, the respondents contradicted the statement that *women who want to breastfeed their infants should not work outside the home (3.61).* Murtagh & Moulton (2011) identified the economic benefits of breastfeeding outside the home, namely higher employee productivity and lower absenteeism, increased employment retention by working mothers who breastfeed, family cost savings by avoiding the purchase of infant formula, and decreased health care costs.

Overall, the attitude indicators obtained a general weighted mean of 3.96 interpreted as "Agree" which means that the respondents had a positive attitude toward exclusive breastfeeding in the workplace. This finding is consistent with previous studies conducted in other parts of the world. Dallak, et. al (2016) found that the majority (86.1%) of mothers in Sana'a City, Yemen had a positive attitude toward breastfeeding. Buss (2019) had similar findings that mothers in Sarawak, Malaysia had positive attitudes toward breastfeeding. Osibogun (2018) also found that the 200 respondents had a good knowledge of exclusive breastfeeding and more than 180 (90%) respondents had a positive attitude towards exclusive breastfeeding. Gebrekidan (2021) interviewed 20 mothers from 10 organizations and found that their colleagues had more positive attitudes towards breastfeeding than their managers.

Exclusive Breastfeeding Practices in the Workplace among Female BU Personnel

Basrowi, et.al. (2019) found that there were numerous influencing factors including the support of adequate lactation facilities and programs in the workplace that potentially improve lactation practices among women workers. The World Health Organization

Table 4 Exclusive Breastfeeding Practices in the Workplace (n = 300)

INDICATORS	Yes		No	
	f	%	*f*	%
Placing her baby in day care.	104	35	196	65
Having the caregiver bring the baby to the workplace.	152	51	148	49
Receiving a breast milk expression pack, training and support.	200	67	100	33
Requesting to be assigned to work proximal to home to minimize time lost and associated stress.	196	65	104	35
Flexible working hours and options.	250	83	50	17
Freeze on performance targets (postpone or decreased) while she is breastfeeding with no loss of average income.	124	41	176	59
Scheduling of breastfeeding breaks.	222	74	78	26

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has encouraged the promotion of appropriate feeding practices for infants and young children by supporting breastfeeding mothers. Also, through the promotion of a baby-friendly campaign, the ten steps to successful breastfeeding have been proposed to protect, promote, and support breastfeeding (Hirani & Karmaliani, 2013). This indicates that the presence or absence of workplace interventions can impact the breastfeeding practices of working mothers and these interventions could be viewed as mother and baby-friendly initiatives in workplace settings.

The following are the most preferred exclusive breastfeeding practices among the female personnel-respondents of the study. Flexible working hours and options (83%) topped the list followed by scheduling of breastfeeding breaks (74%) while 67% of the respondents claimed to receive *a breast milk expression pack, training and support is also one of their preferred practices.*

Although not required by law, the BU administrators help arrange for a flexible return to work option that will allow the mother to adjust to the new routine. This is expected to boost her morale as a worker and help her to be more productive as she transitions. The supervisors may help her arrange for a work schedule that accommodates her lactation periods.

Breastfeeding support can be provided in the workplace through simple methods that are practical, safe, and cost-effective. In terms of breastfeeding facilities, the employer must provide not only a specialized milk expression room near the workplace that is large enough to comfortably accommodate many users, but also a sink, soap, water, and paper towels in the milk expression room (Lauwers & Swisher, 2016). In addition, employers must provide collection kits and extra multi-user electric pumps as well as a small refrigerator in the milk expression room. However, Chen, et. al (2006) observed that even if the company provided a lactation room and an hour break for breast milk pumping, workers found it challenging, and travel time between the job site and the lactation room might take up to 10–15 minutes. This could explain why a considerable number of workers continue to refuse to breastfeed during working hours, and why 50% of workers prefer to pump in the toilet or bathroom rather than in the lactation room, according to their findings.

Sixty-five percent of them expressed that *requesting to be assigned to work proximal to home to minimize time lost and associated stress could also help and so is having the caregiver bring the baby to the workplace (51%). Meanwhile, putting her baby in daycare is not one of their preferred practices, nor is postponing or reducing performance targets while she is breastfeeding with no loss of average income. Having the infant at or near the office may be the ideal accommodation for a breastfeeding working mother. Some organizations make it easier for women to bring their babies to work and care for them while they work. This can include on-site child care that allows mothers to partially attend to their infants while working* (Marinelli, et. al, 2013). Working from home, working flexible hours, and other negotiations with the employer are all more flexible options for maintaining both productivity and breastfeeding.

It is sometimes more efficient for mothers to feed their infants directly. If the employer has onsite childcare, the caregiver (nanny) may bring the baby to the mother throughout the workday, or the employee is allowed to bring her infant to work for the first few months, this can work well.

However, 65% of the personnel respondents did not prefer *placing their baby in daycare probably because the university does not provide onsite childcare for quick and easy direct access to the baby during breaks. Similar limitations were identified by* Steurer (2017) which include a lack of child-care centers and places for milk expression or storage. However, the university allows the mother to bring the baby to work during the first few months. Bettinelli (2012) suggests keeping the baby with the mother while she works, allowing the mother to go to the baby to breastfeed during the workday, telecommuting, offering flexible work schedules, maintaining part-time work schedules, and using on-site or nearby child care centers as possible strategies for working mothers. According to a review of the global literature, the most effective workplace interventions for promoting breastfeeding practices among employed mothers are: educating working mothers about the management of breastfeeding with employment; increasing employers' awareness about the benefits of breastfeeding accommodations at work; and arranging physical facilities for lactating mothers (including privacy, childcare facilities, breast pumps, and breast milk storage facilities) (Hirani & Karmaliani, 2013).

Conclusions and Recommendations

There is a need to increase efforts in enhancing the knowledge and developing the desired attitude and practices on exclusive breastfeeding in the workplace among BU female personnel.

It is hereby recommended that BU personnel of the colleges of Medicine and Nursing (Main, Tabaco, and Polangui campuses) must offer prenatal classes and postpartum lactation counseling. Likewise, BU personnel who work in the areas of maternal and child health clinics (BU clinics) should give appropriate information about exclusive breastfeeding (EBF) in the workplace. Most importantly, university-based exclusive breastfeeding (EBF) education and support programs must be put up to raise EBF awareness and address the myths identified by the study. Moreover, the BU administrators must support the proposed evidence-based *Exclusive Breastfeeding in the Workplace Promotion Extension Program of Bicol University for BU personnel's holistic well-being. Furthermore, they should establish a breastfeeding-friendly work environment through the implementation of policies and programs that align with guidelines set forth by RA 10028.*

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References

Abdulsalam Mohammed Dallak A.M., Nabil Ahmed Al-Rabeei N.A., Yassein Ahmed

Aljahmi Y.A. (2016). Breastfeeding Knowledge, Attitude, and Practices among

Mothers Attending Health Centers in Sana'a City. ARC Journal of Public Health and Community Medicine. Volume 1, Issue 2, 2016, PP 9-17

Anderson, J., Kuehl, R. A., Drury, S. A. M., Tschetter, L., Schwaegerl, M., Hildreth, M., Lamp, J. (2015). *Policies Aren't Enough. Journal of Human Lactation, 31(2), 260–266.* doi:10.1177/0890334415570059

Al-Binali, A.M. (2012). *Breastfeeding knowledge, attitude, and practice among school teachers in Abha female educational district, southwestern Saudi Arabia*. Int

Breastfeed J 7, 10 (2012). https://doi.org/10.1186/1746-4358-7-10

Al-Binali A.M. (2012). Knowledge, attitude, and practice of Breast-Feeding among female health care workers in tertiary care hospitals. The Medical Journal of Cairo University. 2012, 80 (1): 159-164.

Al Detbi, M.I., Al Noman S., Al Ali A., Darwish E., Al Fahim M., Rajah J. (2018). Knowledge, attitudes, and practices of breastfeeding among women visiting primary healthcare clinics on the island of Abu Dhabi, United Arab Emirates. *International Breastfeeding Journal* volume 13, Article number: 26 (2018)

Arlotti J.P., Cottrell B.H., Lee S.H., Curtin J.J. (1998). Breastfeeding among low-income women with and without peer support. Journal of Community Health Nursing 1998;15(3):163—78.

Basrowi R.W., Sastroasmoro S., Sulistomo A.W., Bardosono S., Hendarto A., Soemarko D.., Sungkar A., Khoe L.C., Vandelplas Y. (2018). Challenges and Supports of Breastfeeding at Workplace in Indonesia. Pediatr Gastroenterol Hepatol Nutr. 2018 Oct; 21(4): 248–256. PMID: 30345237. DOI: 10.5223/pghn.2018.21.4.248

Basrowi R.W., Sulistomo A.W., Adi N.P., Widyahening I.S. & Vandenplas Y. (2019). Breastfeeding Knowledge, Attitude, and Practice among White-Collar and Blue-Collar Workers in Indonesia. J Korean Med Sci. 2019 Nov 25; 34(45): e284. PMID: 31760710. doi: 10.3346/jkms.2019.34.e284

Bettinelli, M. E. (2012). *Breastfeeding policies and breastfeeding support programs in the mother's workplace. The Journal of Maternal-Fetal & Neonatal Medicine, 25(sup4), 73–74.* doi:10.3109/14767058.2012.715033

Bridges, C. B., Frank, D. I., & Curtin, J. (1997). *Employer Attitudes Toward Breastfeeding in the Workplace. Journal of Human Lactation, 13(3), 215–219.* doi:10.1177/089033449701300310

Brown C.A., Poag S., Kasprzycki C. (2001). Exploring Large Employers and Small Employers' Knowledge,

BU R&D Journal, Vol. 25, December 2022
ISSN (Print): 0016-4139 | ISSN (Online): 2719-082X
journal.bicol-u.edu.ph

Attitudes, and Practices on Breastfeeding Support in the Workplace. J Hum Lact. 2001 Feb;17(1):39-46 PMID: 11847850. DOI: 10.1177/089033440101700108

Buss, I.M. (2019). *Knowledge, Attitudes, and Behaviors Toward Exclusive Breastfeeding Amongst Mothers in Sarawak, Malaysia: A Qualitative Study*. International Medical Journal Malaysia Volume 18 Number 1 (2019)

Chavan S., Jadhao A., Narlwar U., Ughade S. & Adikane H. (2017). *Cross-sectional* study of knowledge and practices regarding breastfeeding amongst mothers belonging to tribal community in Melghat area, Amravati, Maharashtra, India. DOI: http://dx.doi.org/10.18203/2320-6012.ijrms20170649

Chen Y.C., Wu Y.C., Chie W.C. (2006). Effects of Work-Related Factors on the Breastfeeding Behavior of Working Mothers in a Taiwanese Semiconductor Manufacturer: A Cross-Sectional Survey. BMC Public Health. 2006 Jun 21;6:160. PMCID: PMC1538587. doi:10.1186/1471-2458-6-160.

Cohen R., et.al (1995). Comparison of maternal absenteeism and infant illness rates among breast-feeding and formula-feeding women in two corporations. Am J Health Promot. Nov-Dec 1995;10(2):148-53. DOI: 10.4278/0890-1171-10.2.148.

CONGRESS OF THE PHILIPPINES (2010). Republic Act No. 10028. Expanded Breastfeeding Promotion Act of 2009. Manila, Philippines. Congress of the Philippines Official Gazette (2010). Republic Act No. 10028. https://www.officialgazette.gov.ph/2010/03/16/republic-act-no-10028/

Dallak A.M., Al-Rabeei N.A., Aljahmi Y.A. (2016). Breastfeeding Knowledge, Attitude, and Practices among Mothers Attending Health Centers in Sana'a City. ARC Journal of Public Health and Community Medicine. Volume 1, Issue 2, 2016, PP 9-17

Desmond D. & Meaney S. (2016). A qualitative study investigating the barriers to returning to work for breastfeeding mothers in Ireland. PMID: 27293472. Int Breastfeed J. 2016; 11: 16. DOI: 10.1186/s13006-016-0075-8

Dixon G. (1992). Colostrum avoidance and early infant feeding in Asian societies. *Asia Pacific J Clin Nutr (1992) 1, 225-229.* http://apjcn.nhri.org.tw/SERVER/APJCN/1/4/225.htm

Dundon C. & Harris N.(2020). Is It Safe to Breastfeed When You're Sick? https://www.parents.com/baby/breastfeeding/problems/is-it-safe-to-breastfeed—when-you're-sick

Gavine, et. al (2017) identified a lack of good evidence on breastfeeding education and training for healthcare staff. There is therefore a critical need for research to address breastfeeding education and training needs of multidisciplinary healthcare staff in different contexts.

Gebrekidan K. et al. (2021). Attitudes and experiences of employed women when combining exclusive breastfeeding and work: A qualitative study among office workers in Northern Ethiopia. Matern Child Nutr. 2021 Oct; 17(4): e13190. DOI: 10.1111/mcn.13190

Gribble K.D., Hausman B.L. (2012). Milk sharing and formula feeding: Infant feeding risks in comparative perspective? Australas Med J. 2012; 5(5): 275–283. PMID: 22848324. DOI: 10.4066/AMJ.2012.1222

Hirani, S. A. A., & Karmaliani, R. (2013). Evidence-based *workplace interventions to promote breastfeeding practices among Pakistani working mothers. Women and Birth, 26(1), 10–16.* doi:10.1016/j.wombi.2011.12.005

Hirani S.A., Premji S.S. (2009). Mother's employment and breastfeeding continuation: global and Pakistani perspectives from the literature. Neonatal Pediatric and Child Health Nursing 2009;12(2): 18—24

International Labor Organization (n.d.). Workplace provisions of the Expanded Breastfeeding Promotion Act of 2009 (RA 10028). https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-manila/documents/publication/wcms_515114.pdf

Johnston M.L., Esposito N. (2007). Barriers and facilitators for breastfeeding among working women in the United States. Journal of Obstetric Gynecologic and Neonatal Nursing 2007;36(1):9—20

Kim T.R., Ross J.A., and Smith D.P. (1969). KOREA: Trends in Four National KAP Surveys, 1964-67. Studies in Family Planning Vol. 1, No. 43 (Jun. 1969), pp. 6-11 (6 pages) Published By: Population Council. DOI: 10.2307/1965090. https://www.jstor.org/stable/1965090

Kulich E. (2017). Breastfeeding versus Formula Feeding. https://www.pregnancycorner.com/giving-birth/labor-delivery/breastfeeding-vs- formula-feeding.html

Lauwers J., Swisher A. (2005). Counseling the Nursing Mother, A Lactation Consultant's Guide Fourth Edition. ISBN-13:978-0-7637-2680-5. Jones and Bartlett Publishers, Sudbury, Massachusetts, USA.

Lauwers J. & Swisher A. (2016). Counseling the Nursing Mother A Lactation Consultant's Guide. Sixth Edition. Copyright 2016 by Jones & Bartlett

Legesse M., Demena M., Mesfin F., Haile D. (2015). Factors Associated with Colostrum Avoidance Among Mothers of Children Aged less than 24 Months in Raya Kobo district, North-eastern Ethiopia: Community-based

Cross-sectional Study. J Trop Pediatr. 2015 Oct; 61(5): 357–363. PMID: 26141533. DOI: 10.1093/tropej/fmv039

Lewallen L.P., Dick M.J., Flower J., Powell W., Zickefoose K.T., Wall Y.G., et al. (2006) Breastfeeding support and early cessation. Journal of Obstetric Gynecologic and Neonatal Nursing 2006;35(2): 166—72.

Marinelli, K. A., Moren, K., & Taylor J.S. (2013). Breastfeeding Support for Mothers in Workplace Employment or Educational Settings: Summary Statement. Breastfeeding Medicine, 8(1), 137–142. doi:10.1089/bfm.2013.999

McSwiggan G. (2010). Companies and Workplace Mothers Alike Benefit from Breastfeeding Policies. https://www.uschamberfoundation.org/blog/post/companies-and-workplace-mothers-alike-benefit-breastfeeding-policies/31040

Morse J.M. & Bottorff J.L. (1989). Intending to Breastfeed and Work. https://doi.org/10.1111/j.1552-6909.1989.tb00501.x

Mukherjee K. & Das K. (2016). Colostrum Feeding Practices Worldwide: A Review. International Journal of Current Research Vo. 8, Issue, 01, pp.25796-25799, January 2016

Murray, D. (2021). Why Some Women Decide Not to Breastfeed. https://www.verywellfamily.com/why-some-women-decide-not-to-breastfeed-431902

Murtagh L. & Moulton A.D. (2011). Working Mothers, Breastfeeding, and the Law. PMID: 21164100. Am J Public Health. 2011 February; 101(2): 217–223. DOI: 10.2105/AJPH.2009.185280

Nabulsi N. (2011). Why are breastfeeding rates low in Lebanon? a qualitative study. BMC Pediatr. 2011, 11: 75-10.1186/1471-2431-11-75.

NJ Health (2018). Myths and Facts About Breastfeeding. https://nj.gov/health/fhs/wic/breastfeedingmyth.shtml

Ocampo-Guirindola M.L., Valdeabella-Maniego ML.M., Gaya KF. M. (2018). Utilization of Lactation Station and Lactation Breaks and Its Association With the Duration of Breastfeeding Among Filipino Mothers With Children Aged 0-23 Months. Philippine Journal of Science 147 (2): 317-325, June 2018 ISSN 0031 – 7683

Oche M.O., Umar A.S., Ahmed H (2011). Knowledge and practice of exclusive breastfeeding in Kware, Nigeria. Afr Health Sci. 2011 Sep; 11(3):518-23.

Olds S.W., Marks L., Eiger M.S. (2010). The Complete Book of Breastfeeding. ISBN: 978-0-7611-5113-5. Workman Publishing Company Inc. 225 Varick Street NY 10014-4381

Osibogun O., et al. (2018). Knowledge, attitude, and support for exclusive breastfeeding among bankers in Mainland Local Government in Lagos State, Nigeria. International Breastfeeding Journal volume 13, Article number 38 (2018)

Sarwar T. (2002). Infant feeding practices of Pakistani mothers in England and Pakistan. Journal of Human Nutrition & Dietetics 2002;15(6):419—28.

Scott V.C., Taylor Y.J., Basquin C., & Venkitsubramanian K. (2018). Impact of Key Workplace Breastfeeding Support Characteristics on Job Satisfaction, Breastfeeding Duration, and Exclusive Breastfeeding Among Health Care Employees. BREASTFEEDING MEDICINE Volume XX, Number XX, 2019 [a] Mary Ann Liebert, Inc. DOI: 10.1089/bfm.2018.0202

Singletary N., Chetwynd E., Goodell L.S., & Fogleman A. (2016). Stakeholder views of breastfeeding education in schools: a systematic mixed studies review of the literature. International Breastfeeding Journal volume 12, Article number: 14 (2016)

Steurer, L. M. (2017). Maternity Leave Length and Workplace Policies' Impact on the Sustainment of Breastfeeding: Global Perspectives. Public Health Nursing, 34(3), 286–294. doi:10.1111/phn.12321

Taylor M. (2020). Can Breast Milk Change Colors? https://www.whattoexpect.com/first-year/breastfeeding/breast-milk-color/

Tsai, S.Y. (2013). Impact of a Breastfeeding-Friendly Workplace on an Employed Mother's Intention to Continue Breastfeeding After Returning to Work. Breastfeeding Medicine, 8(2), 210–216. doi:10.1089/bfm.2012.0119

Tsai S.Y. (2013). Influence of Partner Support on an Employed Mother's Intention to Breastfeed After Returning to Work. Breastfeed Med. 2014 May;9(4):222-30. PMCID: PMC4025622 doi: 10.1089/bfm.2013.0127.

Velpuri J. (2004). Breastfeeding knowledge and attitudes in the Caribbean Circle. Published Dissertation: Doctor of Philosophy in Human Nutrition, Foods and Exercise https://vtechworks.lib.vt.edu/bitstream/handle/10919/29073/Dissertation.pdf?sequence=1&isAllowed=y

Weber D., Janson A., Nolan M., Wen L.M., Rissel C. (2011). Female employees' perceptions of organizational support for breastfeeding at work: findings from an Australian health service workplace. *International Breastfeeding Journal* volume 6, Article number: 19 (2011)

WHO (2010). Breastfeeding is key to saving children's lives. http://www.who.int/mediacentre/news/notes/2010/breastfeeding_20100730/en/

BU R&D Journal, Vol. 25, December 2022
ISSN (Print): 0016-4139 | ISSN (Online): 2719-082X
journal.bicol-u.edu.ph

WHO (2014). Q&A: Why can't we give water to a breastfeeding baby before the 6 months, even when it is hot? https://www.who.int/news-room/q-a-detail/why-can-t- we-give-water-to-a-breastfeeding-baby-before-the-6-months-even-when-it-is-hot

WHO (2015). Breastfeeding in the Philippines, A Critical Review, 2013. WHO Library Cataloguing-in-Publication Data. ISBN 978 92 9061 727 3 (NLM Classification: WS 125)

WHO (2018). Marketing of breast-milk substitutes: national implementation of the international code, status report 2018. ISBN 978-92-4-156559-2.

WHO (2020). Infant and young child feeding. https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding

Wyatt S.N. (2002). Challenges of the Working Breastfeeding Mother Workplace Solutions. AAOHN Journal February 2002, VOL. 50, NO.2. https://journals.sagepub.com/doi/pdf/10.1177/216507990205000204

Yang S.F., et. al (2018). Breastfeeding knowledge and attitudes of health professional students: a systematic review. *International Breastfeeding Journal* volume 13, Article number: 8 (2018)

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