

Evaluating the Scope of Breastfeeding Awareness and Application within the Kuantan Community

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Abstract:

Introduction: Breastfeeding plays a pivotal role in safeguarding the well-being of both maternal figures and neonates, effectively diminishing the prevalence of infant fatalities. Creating awareness, education, policy adjustments, and community backing are key factors in advocating for and supporting breastfeeding.

Objectives: The primary aim of this study is to elevate awareness about breastfeeding in the Kuantan population, fostering an informed and supportive environment for maternal and infant health. Additionally, it seeks to contribute insights for policy-making and community interventions in this regard.

Methodology: This cross-sectional study, conducted in Kuantan, scrutinized breastfeeding practices and beliefs among females aged 18 or older proficient in Malay, English, or Tamil. Among the 100 participants, information was collected via a thorough questionnaire and rigorously examined utilizing both quantitative and qualitative approaches. Research strictly followed ethical guidelines, ensuring consent, confidentiality, and anonymity.

Results: Breast milk preferred by 92%, aligns with WHO guidelines. Promotion: 68% encountered breastfeeding ads, mainly via electronic media. Formula ads seen by 53.5%, primarily through electronic media. 86% witnessed public breastfeeding, mostly in malls (36.8%) and hospitals (31%). 82% found it acceptable. Majority have workplace support, like lactation breaks (56.1%) and designated spaces (66.7%). In total, 91.1% endorse measures for breastfeeding support in workplaces.

Discussion: The study shows high awareness (92%) of breastfeeding benefits. 54% support breastfeeding for 24+ months. 92% find public breastfeeding acceptable. Support for working mothers is vital. Use bilingual questionnaires for accessibility. Expand study area for broader insights. Simplify questionnaire for clarity. Further cross-regional study in Malaysia is necessary to explore cultural nuances, monitor long-term health effects, and evaluate policy impacts on breastfeeding for informed policy-making.



Conclusion: This study emphasizes the crucial role of breastfeeding for the health of both mothers and infants, following WHO recommendations. It stresses the ongoing need for awareness, education, and policy improvements in promoting breastfeeding in Kuantan, while also highlighting the importance of workplace support and suggesting practical strategies like bilingual surveys and broader research areas for better understanding and accessibility.

Keywords: Breastfeeding, Maternal and Infant Health, Awareness, Workplace Support, Public Breastfeeding Acceptance, Breastfeeding Promotion



1. Introduction:

1.1 Background and Significance

While breastfeeding is the optimal source of infant nutrition, in some situations where it may not be viable or appropriate, the use of infant formula as an alternative is considered (Martin et al., 2016). Additionally, the design of formula milk packaging, encompassing both visual and written components, has been shown to positively influence the purchasing choices of breastfeeding women (Salem, 2019). Moreover, breastfeeding and infant formula have transformed into marketable products, with breast milk promoted as a remedy for diverse concerns, while formula milk companies employ marketing tactics to allure customers (Fentiman, 2010). This promotional approach, however, has raised concerns about its impact, as it has been observed to be widespread and influential, exploiting parental concerns and eroding their confidence in breastfeeding (The Lancet Global Health, 2022).

Breastfeeding consciousness represents a crucial and pertinent subject matter, as it significantly impacts the well-being and overall quality of life for both maternal figures and offspring. Research findings have demonstrated that breastfeeding bears a plethora of advantages, such as the mitigation of infant mortality and morbidity rates, enhancement of nutritional conditions, and the encouragement of optimal pregnancy intervals (Vamegh et al., 2019). There is, however, a pressing necessity to enhance the level of consciousness among mothers, healthcare practitioners, and the overall populace regarding the significance of the act of breastfeeding (Alimoradi et al., 2014).

Educational initiatives targeting healthcare professionals, expectant mothers, and women in labor, alongside modifications to hospital protocols and widespread media exposure, have the potential to exert a substantial influence on the promotion of breastfeeding. Furthermore, the provision of assistance to employed mothers, safeguarding their rights to breastfeed, and engaging in communal endeavours are fundamental in stimulating and perpetuating the adoption of breastfeeding practices. As a whole, the acquisition of knowledge regarding breastfeeding holds immense significance in enhancing the well-being of both mothers and infants, necessitating efforts to augment educational endeavors and public consciousness surrounding this matter (Camp, 2014; Grossman et al., 2009).



Understanding the concept of breastfeeding is crucial for achieving positive outcomes. Studies suggest that novice mothers typically demonstrate a solid understanding of various breastfeeding methodologies. Nonetheless, there is a requirement to enhance comprehension regarding breastfeeding, especially among mothers with limited educational backgrounds and those who have only experienced motherhood once (Kharouba et al., 2023).

Breastfeeding holds utmost significance in the domain of maternal and child health within the United States. To understand the correlation between breastfeeding outcomes and state policies, it necessitates interdisciplinary efforts to integrate data from various sources (Chen et al., 2021). Experts unanimously concur regarding the crucial significance of breastfeeding in enhancing the immediate and enduring welfare of infants, irrespective of their economic status, regardless of whether they reside in prosperous or financially disadvantaged environments. (Garnier et al., 2018). Scaling up breastfeeding initiatives holds the potential to avert a considerable number of maternal and child fatalities (Greiner, 2014).

The controversy surrounding public breastfeeding arises from differing societal norms and beliefs, with some advocating for strict limitations and others emphasizing a woman's choice within defined parameters. This discussion underscores the need to establish clear guidelines, including discretion and appropriate venues, while also recognizing the importance of normalizing public breastfeeding to promote its widespread acceptance and reduce health disparities (Mathews, 2019; Nyaloko et al., 2020; Sheehan et al., 2019).

Workplace interventions globally promote breastfeeding among working mothers, providing designated spaces, co-worker support, breast pumps, and remote work flexibility. (Vilar-Compte et al., 2021). The 2011 Breastfeeding Promotion Act mandates reasonable breaks and space for working lactating mothers to breastfeed or pump at the workplace (Gettas & Morales, 2013). Additionally, workplace breastfeeding is well-received, with no adverse effects on colleagues from accommodations (Suyes et al., 2008). Moreover, mothers' favorable perceptions of workplace breastfeeding support contribute to increased initiation and duration (Burks, 2015). Effective workplace breastfeeding initiatives encompass raising awareness, fostering cultural shifts, obtaining support from managers and colleagues, and ensuring sufficient time, space, and facilities (Litwan et al., 2021). These combined efforts serve to create an environment conducive to breastfeeding in the workplace.



Malaysia has accorded primacy to the significance of breastfeeding and nourishment for infants. This dedication culminated in the inception of the National Breastfeeding Policy in 1993, which underwent revision in 2005 to harmonize with the World Health Assembly Resolution 54.2 (2001). This resolution ratified the indispensability of exclusive breastfeeding for the initial half-year of an infant's existence as an essential public health measure, succeeded by sustained breastfeeding for two years or longer, accompanied by appropriate, ample, and secure supplementary sustenance. (Tan, 2011).

Multiple factors have been recognized as significant in the commencement and length of exclusive breastfeeding, primarily originating from the demographic characteristics of breastfeeding mothers, encompassing their age range, educational achievements, maternal and family income. Furthermore, the influence of advertising and promotional endeavours related to breastfeeding, personal opinions on public breastfeeding, workplace circumstances, and the degree to which employers implement measures to endorse breastfeeding employees are crucial in shaping breastfeeding behaviours (Tan, 2011).

Additionally, we have taken note that the growing involvement of females in the employment sector is frequently mentioned as a factor that contributes to the comparatively lower rates of nursing. Nevertheless, this connection should not be unexpected, since several factors play a role in the accomplishment of nursing for employed mothers. An environment in the workplace that is supportive is undoubtedly of great importance in this context, and it is clear that nursing may present specific difficulties for women in the workforce (Amin et al., 2011).

1.2 Objectives of the Study

The objectives of this study are as follows:

1.2.1 To Provide Insight for Effective Program Planning and Implementation

The survey results will function as a significant asset for the advancement, implementation, and evaluation of breastfeeding projects, thereby assisting in the improvement of maternal and infant well-being.



1.2.2 To Assess Breastfeeding Awareness and Practices in the Kuantan Population

This study seeks to quantify and comprehend the level of awareness and actual implementation of breastfeeding practices among the residents of Kuantan.

1.2.3 To Disseminate Knowledge on the Benefits of Breastfeeding

One of the primary aims is to educate the community of Kuantan about the manifold advantages associated with breastfeeding for both infants and mothers, thereby fostering a culture of informed decision-making.

1.2.4 To Assess Public Perceptions and Experiences of Breastfeeding in Public Spaces and Workplaces

This inquiry endeavours to clarify the perspectives and encounters of the overall population in Kuantan in relation to breastfeeding in public spaces and workplaces. Moreover, it strives to collect perceptions on the practicability and desirability of executing measures to establish environments that support and encourage breastfeeding in these specific contexts.

1.2.5 To Evaluate Public Response to Infant and Young Child Feeding Advertisements

This study endeavours to scrutinize the impact and reception of advertisements and promotional activities related to formula milk for infants and young children. It also aims to assess the effectiveness of campaigns promoting breastfeeding within the community.

By pursuing these objectives, this study aspires to contribute substantively to the discourse on breastfeeding awareness and practices in Kuantan, providing a foundation for informed policy-making and community interventions.

1.3 Rationale for Kuantan as the Study Locale

This study endeavours to promote breastfeeding within the community of Kuantan. Prior research on this subject within Kuantan and Widad University College (WUC) is notably scarce. The study seeks to address this gap and support educators in their advocacy for breastfeeding. Despite extensive endeavours by various organizations, a deficiency in awareness regarding the expression and storage of breast milk persists, as evidenced by a study in Kelantan, Malaysia (Ismail et al., 2012)



The development of a culturally sensitive questionnaire holds paramount importance in evaluating breastfeeding knowledge comprehensively. This instrument, borrowed from a previous study, is tailored to align with the specific objectives and demographics of this research (Tengku Ismail & Sulaiman, 2010). This study contributes to the limited body of research on breastfeeding awareness in Malaysia.

1.4 Major issues and sub problems

Multiple factors can influence the process of nursing an infant, resulting in a convergence of physiological and psychological barriers. These barriers may include issues like cracked nipples, the perception of inadequate lactation, discomfort, and fatigue, often occurring within the initial month after childbirth (Gianni Lorella Maria et al., 2019). Perceptual cognition by the mother regarding inadequate lactation, infantile inability to prosper, inflammation of the mammary glands, and the resumption of occupational duties are correlated with an increased likelihood of not exclusively breastfeeding the child after three months (Nuzzi et al., 2021). The excessive abundance of milk, referred to as hyperlactation, can also present as a challenge, provoking unfavourable symptoms for both the maternal figure and the new-born (Smillie et al., 2005). Proper administration, adept counselling abilities, proactive guidance, and continual assistance play a pivotal role in fostering favourable results in the act of breastfeeding. Uninterrupted, personalized expert assistance for breastfeeding holds significant value in attaining successful outcomes.

2. METHODOLOGY

2.1 Study Design

This research utilized a cross-sectional survey approach to explore different facets concerning breastfeeding practices and beliefs within the Kuantan population.

2.2 Participants

This study included females aged 18 years or older living in residential areas of Kuantan. The broad inclusion criteria were intentionally chosen to ensure a diverse and representative sample. No additional specific criteria were imposed during participant recruitment. It should be noted that proficiency in Malay, English, and Tamil was required for participation in this survey.



2.3 Sample Size

A sum total of 100 women expressed their interest in participating, completed the questionnaire, and were subsequently incorporated into the conclusive analysis.

2.4 Data Collection Procedure

The data collection involved a well-structured questionnaire. This questionnaire was divided into specific sections, each addressing important factors such as knowledge about breastfeeding, exposure to and perspectives on promoting breastfeeding, experiences and opinions regarding advertising for infant and young child formula, experiences and viewpoints on breastfeeding in public spaces and workplaces, attitudes towards implementing breastfeeding-friendly measures in these environments, and demographic information of the respondents. The survey employed various methods, including traditional interviews, lunchtime discussions, and group sessions that took place in randomly selected households. Furthermore, phone interviews were conducted with individuals randomly selected from the social circles of Kuantan residents. The study was clearly explained to the participants, then their consent was obtained. The questionnaire was made easily understandable for all participants by trained young researchers who were proficient in both English and the local language.

2.4 Data Analysis

The survey's quantitative data were analysed with descriptive statistics. Categorical variables were used to calculate percentages and frequencies, giving an overview of participants' responses. Qualitative data from open-ended questions were thematically analysed for deeper insights.

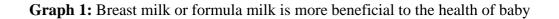
2.5 Ethical Considerations

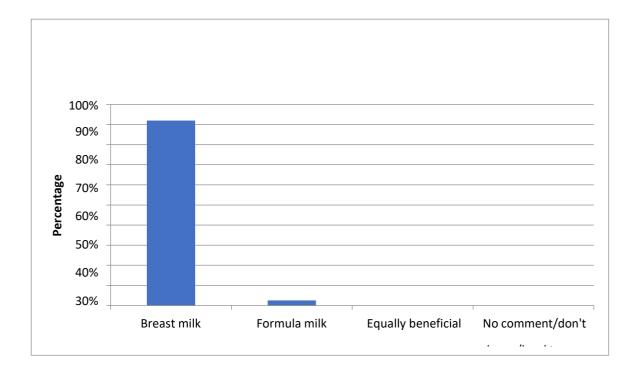
All participants consented and confidentiality was upheld. Participants were assured of anonymity and research use.



3. ANALYSIS AND RESULT

3.1 Knowledge on breastfeeding



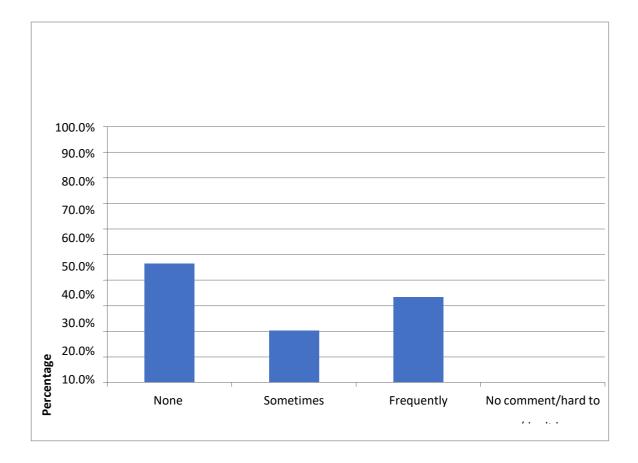


Breast milk is widely recognized as more beneficial for a baby's health. Specifically, 92% of respondents acknowledge its superiority, while 8% believe both formula and breast milk hold equal benefits. The World Health Organization recommends exclusive breastfeeding for the first 6 months, a guideline acknowledged by 90% of respondents. Additionally, 54% agree that breastfeeding should extend for 24 months or more after introducing solid food.



3.2 Advertisement and promotion on breastfeeding

Graph 2: Frequency of encountering promotional messages about breastfeeding or infant and young child feeding from department ofhealth in the past 3 months

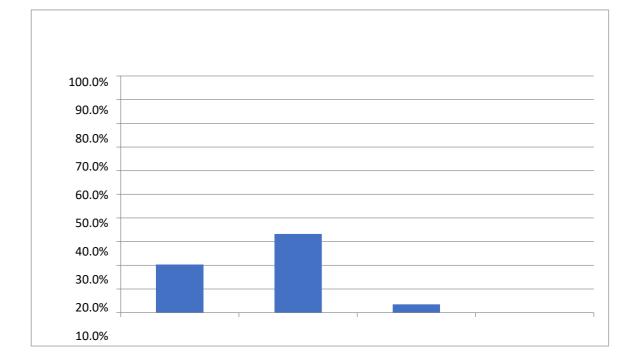


Over the past three months, 68% of respondents have come across promotional messages related to breastfeeding and infant/young child feeding, often through channels affiliated with the Department of Health. Among those who encountered these messages, the highest proportion (23.2%) observed them through electronic media like television and radio. Following closely, 21.7% encountered such messages through posters or leaflets in places like clinics and hospitals, while 20.3% reported encountering them in medical institutions or through medical staff. When asked about the key promotional message they recalled, 74.6% mentioned "breastfeeding benefits the health of mothers and babies," while 16.9% emphasized that "breastfeeding enhances motherbaby bonding." Additionally, 8.5% noted other reasons for these messages.



3.3 Advertisement and promotion of formula milk

Graph 3: Frequency of the respondent that encountered any promotional messages about infant and young child formula milk

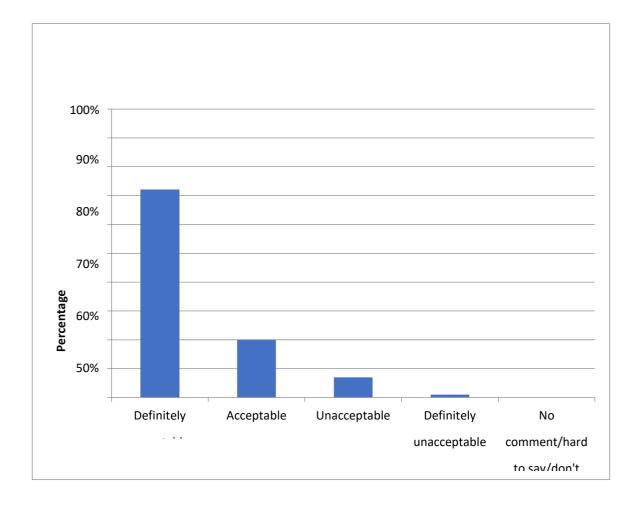


Within the last three months, 53.5% of the respondents have come across promotional messages regarding formula milk for infants and young children. The majority of them (63.5%) encountered these messages through electronic media such as television and radio. Among those who encountered these messages, 7.5% believed the messages were focused solely on promoting infant formula (for babies from birth to 6 months old), while 17% thought they were promoting follow-up formula (for babies older than 6 months). Additionally, 50.9% perceived that the messages were promoting both infant and follow-up formula.



3.4 Breastfeeding in public place

Graph 4: Acceptance of the respondents if a woman breastfeeds her baby near them





Experience of encountering breastfeeding mothers in public places

In the preceding three months, 86% of respondents have come across mother's breastfeeding in public spaces. This commonly occurred in places like shopping malls (36.8%), waiting areas of hospitals or clinics (31.0%), and restaurants (13.8%). Furthermore, 97% of respondents noted instances of babies being bottle-fed in public places during the same period.

Acceptance of women breastfeeding near the respondents in public places

A significant majority, 82% of the respondents, affirmed that having women breastfeed nearby in public places was either definitively acceptable (72%) or acceptable (20%). The prevailing reason given for this perspective was that "breastfeeding is a natural act" (42.2%). Others noted that "mothers and babies have the right to breastfeed / be breastfed" (25.6%), that breastfeeding mothers do not cause disturbance to anyone (18.9%), and that breastfeeding brings health benefits to both mothers and babies (12.2%).

Nonetheless, 8% of the respondents indicated that having women breastfeed nearby in public places was either definitively unacceptable (1%) or unacceptable (7%). The primary rationale cited was that "mothers should breastfeed in a designated baby care room or other appropriate places" (55.6%), followed by the sentiment that "it makes me / other people feel embarrassed" (22.2%).

Agreement on implementing breastfeeding friendly measures in public venue

Of the respondents, 88% were in favor of implementing these breastfeeding-friendly measures in public venues, with 68% strongly agreeing and 20% in agreement. Conversely, 7% either strongly disagreed (1%) or disagreed (7%).

The primary justification for their agreement was the belief that "mothers/babies have the right to breastfeed/being breastfed" (23.6%). Others concurred with the notion that "breastfeeding is a natural act" (21.3%) and that "breastfeeding mothers do not disturb anyone" (15.7%).

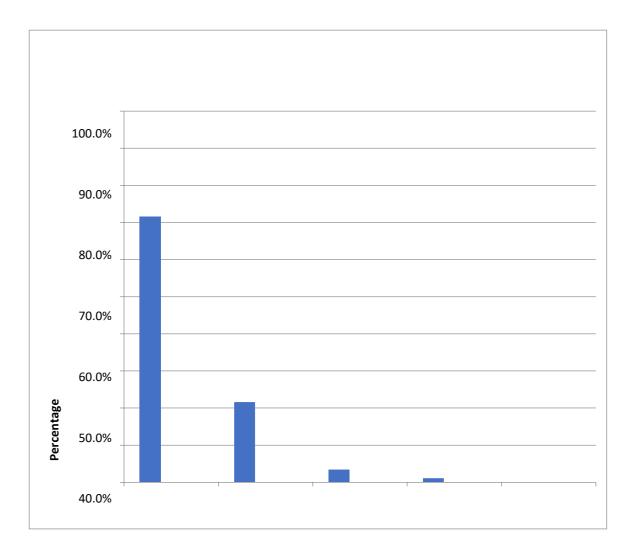
Among those who expressed disagreement, the predominant reason was the belief that "mothers should breastfeed in a designated baby care room or other appropriate places" (71.4%), while a minority (28.6%) considered breastfeeding in public places to be indecent.



3.5 Breastfeeding in workplace

Graph 4: Acceptance of the respondents if colleague express breast milk during working

hours





Implementation of breastfeeding friendly measures in workplace

Of the 56 employed individuals, the majority reported that their employers had implemented various measures to support breastfeeding in the workplace. These measures encompassed provisions such as lactation breaks, allowing mothers to express milk during their working hours (56.1%), providing a designated space for milk expression (66.7%), and offering facilities for storing expressed milk (69.4%).

Among the 32 employed individuals who noted that lactation breaks were permitted during their working hours, over half (54.1%) indicated that there was no specified limit on the number of breaks allowed per day. A portion of them (27%) mentioned having a set break time, while a smaller percentage (18.9%) were unsure about the exact number of lactation breaks permitted.

Of the 24 employed individuals who reported having access to a designated space for milk expression, the majority (58.8%) stated that this space was fixed. These spaces included specific lactation rooms (33.3%), public baby care rooms near the workplace (8.3%), and storage rooms (8.3%).

Acceptance of expressing breast milk in workplace

The results indicated that a significant majority of employed individuals (93.2%) affirmed that it was either definitely acceptable (71.6%) or acceptable (21.6%) for their colleagues to express breast milk during working hours. In contrast, a minority (4.5%) expressed that it was either definitely unacceptable (1.1%) or unacceptable (3.4%).

Among the 82 employed individuals who found milk expression in the workplace acceptable, common reasons included the belief that "breastfeeding is a natural act" (27.2%) and the assurance that "breastfeeding mothers do not disrupt others" (21.0%). On the contrary, among the 4 employed individuals who did not support milk expression in the workplace, the primary reason cited was that it affected the individual's work (66.7%).



Agreement on implementing breastfeeding friendly measures in workplace

The overwhelming majority of respondents (91.1%) expressed strong agreement (78.9%) or agreement (12.2%) regarding the implementation of these measures in the workplace. Frequently cited reasons included the belief that "these measures support working mothers in sustaining breastfeeding after returning from maternity leave" (22.2%), the assertion that "employers should acknowledge the needs of working mothers for breastfeeding" (14.8%), and the observation that "working mothers who express milk do not disrupt others" (13.6%).

A small percentage (3.3%) of the respondents held a dissenting view (5.3%). The commonly mentioned reasons for disagreement were the belief that "personal matters should not be attended to during working hours" (33.3%) and the perception that "expressing breast milk in the workplace makes others feel uncomfortable" (33.3%).



4. DISCUSSION

In the domain of breastfeeding knowledge, an overwhelming majority (92%) of participants acknowledge the superior health advantages of breast milk for infants, with merely 8% perceiving both breast milk and formula as equally advantageous. This substantial awareness among mothers in Kuantan aligns with the recommendations of the World Health Organization (WHO) that advocate for exclusive breastfeeding during the initial six months of an infant's life. Nonetheless, a minor fraction (9%) maintain the belief that exclusive breastfeeding ought to be restricted to a duration shorter than six months, possibly due to perceived difficulties. Providing crucial information to these mothers about the potential health risks linked to introducing complementary foods before six months of age is paramount. During this period, the gastrointestinal tract of infants may not be fully matured, necessitating caution (Tan, 2011).

The survey's findings on breastfeeding duration reveal that a majority of participants (54%) endorse the World Health Organization's recommendation of continuing breastfeeding for 24 months or beyond once solid foods are introduced. Nonetheless, 29% lean towards a shorter duration of 12 months or less, potentially due to work-related obligations. Offering substantial support to employed mothers in their breastfeeding endeavours is crucial, as breast milk plays a vital role in bolstering the infant's immune system (Amin et al., 2011).

It has been found that mothers often receive knowledge about breastfeeding from family and friends, which can sometimes lead to the introduction of wrong and untrusted information (Hawasawi et al., 2022). Furthermore, it is worth noting that the cognitive understanding and emotional well-being of breastfeeding mothers hold substantial sway over the lactation process. Mothers with lower educational levels and elevated anxiety may find themselves facing more significant hurdles in their breastfeeding journey. This underscores the importance of providing targeted support and resources to address these potential challenges effectively (Syakira et al., 2022). The use of informational booklets has proven to be an effective means of enhancing mothers' understanding of breastfeeding (Nag et al., 2021). In general, ensuring that breastfeeding mothers receive precise and trustworthy information is crucial for bolstering their knowledge and facilitating successful breastfeeding practices.

In terms of promotional messages, a noteworthy proportion of respondents have been exposed to both breastfeeding and formula milk advertisements through electronic media, indicating its



effectiveness as a platform for dissemination. This underscores the potential for intensified efforts in promoting the benefits of breastfeeding through this channel.

With regards to breastfeeding in public spaces, an overwhelming majority (92%) of participants express acceptance, and in many cases, commendation, for women breastfeeding in close proximity. This favourable sentiment stems from the understanding that breastfeeding is an innate and vital facet of motherhood. It is imperative to honour varied viewpoints on this issue, recognizing that some individuals may uphold differing perspectives concerning breastfeeding in public locales.

The discourse on breastfeeding in public spaces encompasses a range of perspectives, reflecting diverse beliefs and societal norms regarding its propriety. Some contend that public breastfeeding should be altogether avoided, while others advocate for a woman's autonomy in the matter, albeit with specified guidelines and expectations. These expectations encompass maintaining discretion and modesty, selecting appropriate venues for feeding, and minimizing potential discomfort for onlookers. The contentious nature and potential discomfort associated with public breastfeeding can prompt women to opt for cover-ups or resort to expressing milk. Nonetheless, it remains imperative to enhance the visibility of breastfeeding as a means to encourage its initiation and prolonged practice, thereby mitigating disparities in healthcare. Normalizing and destigmatizing public breastfeeding is essential, affording mothers the freedom to nourish their infants whenever the need arises. (Mathews, 2019; Nyaloko et al., 2020; Sheehan et al., 2019).

The research additionally underscores the difficulties encountered by employed mothers, especially in environments like shopping centres or smaller enterprises, where organizing lactation breaks can pose logistical hurdles due to staffing constraints. It is imperative to make concerted endeavours to guarantee that lactation breaks are easily accessible to every employed mother, irrespective of the scale or type of their workplace.

Workplace interventions are pivotal in supporting breastfeeding among working mothers worldwide. These include designated spaces, co-worker support, provision of breast pumps, and flexible work arrangements (Vilar-Compte et al., 2021). The Breastfeeding Promotion Act of 2011 mandates breaks and suitable spaces for breastfeeding or pumping (Gettas & Morales, 2013). Attitudes towards workplace breastfeeding are generally positive, with no negative impact on colleagues (Suyes et al., 2008). Adapting workplace accommodations positively influences breastfeeding initiation and duration (Burks, 2015). Effective interventions involve awareness, cultural shifts, support from managers and co-workers, and provision of time and facilities



(Litwan et al., 2021). Hence, this research imparts valuable understandings into the awareness and implementation of breastfeeding in Kuantan. It underscores the significance of focused educational campaigns and supportive policies, with a specific emphasis on aiding working mothers, to foster and maintain breastfeeding practices (Amin et al., 2011; Tan, 2011).

Individual beliefs and experiences hold greater sway over public breastfeeding attitudes than demographic factors. Negative cultural and societal perspectives can hinder public breastfeeding. Providing convenient facilities for on-demand breastfeeding is vital. Overcoming negative attitudes is pivotal for positive change. Fostering social acceptance supports extended breastfeeding and infant well-being (Olejnik et al., 2022).

This study is limited to residential areas in Kuantan. The questionnaires focused on key elements for gathering data on breastfeeding awareness and practices among the population. However, there were challenges. Firstly, the sample size was small (100 participants), making it hard to generalize findings. Language barriers required translation assistance, especially for those with lower education levels and less exposure to English. The complex questionnaire posed difficulties for some participants, who requested simplification. Some respondents were uncooperative, potentially affecting the results' reliability.

To improve future research, bilingual questionnaires is recommend to accommodate language differences. Widening the study area and participant pool can reduce error margins. Comparing outcomes across different racial groups can provide a clearer understanding. Addressing participants' concerns about questionnaire complexity is crucial. The design and information provided in the questionnaire need careful consideration. However, these improvements won't be meaningful if participants still struggle with understanding the questions.

Further research is needed to explore breastfeeding challenges in diverse groups. Evaluating interventions in public spaces and workplaces is crucial. Comparative studies in different Malaysian regions can reveal cultural influences. Long-term health outcomes from breastfeeding warrant investigation. Analysing policy impacts on breastfeeding can inform evidence-based policies.

5. CONCLUSION

In summary, this manuscript emphasizes the critical importance of breastfeeding for both mothers and babies, aligning with global recommendations and Malaysia's National Breastfeeding Policy. The study shows that the Kuantan population is highly aware of the benefits of breastfeeding,



with 92% recognizing its superiority. The results underscore the importance of ongoing promotion and support of breastfeeding, particularly in public spaces and workplaces. The study also suggests practical strategies such as using bilingual questionnaires and expanding the study areas for more comprehensive insights. Simplifying the questionnaire is also recommended for better clarity and accessibility. In general, this study offers valuable insights for advancing maternal and infant health through advocating for and making policies on breastfeeding.

References

- Alimoradi, F., Javadi, M., Barikani, A., Kalantari, N., & Ahmadi, M. (2014). An overview of importance of breastfeeding. *Journal of Comprehensive Pediatrics*, 5(2), 1–5. https://doi.org/10.17795/compreped-14028
- Amin, R. M., Said, Z. M., Sutan, R., Shah, S. A., Darus, A., & Shamsuddin, K. (2011). Work related determinants of breastfeeding discontinuation among employed mothers in Malaysia. *International Breastfeeding Journal*, 6(1), 4. https://doi.org/10.1186/1746-4358-6-4
- Burks, K. M. R. (2015). Mothers 'Perceptions of Workplace Breastfeeding Support.
- Camp, L. (2014). The Effects of Prenatal Education and Hospital Intervention on Breastfeeding Initiation.
- Chen, C., Xue, H., & Zhang, Q. (2021). Data on breastfeeding and state policies in the United States. *Data in Brief*, *37*, 1–6. https://doi.org/10.1016/j.dib.2021.107210
- Fentiman, L. C. (2010). *M Arketing M Others ' M Ilk*: *T He and the N Ew M Arkets for B Reast M Ilk and I Nfant F Ormula* □. 1–53.
- Garnier, R., Bento, A. I., Rohani, P., Omer, S. B., & Bansal, S. (2018). *Feeding the disparities : the geography and trends of breastfeeding in the United States*. 1–13.
- Gettas, M., & Morales, A. (2013). Breastfeeding in the Workplace. *ICAN: Infant, Child, & Adolescent Nutrition*, 5(4), 197–199. https://doi.org/10.1177/1941406413496270
- Gianni Lorella Maria, Bettinelli Enrica Maria, Manfra Priscilla, Soreentino Gabriele, Bezzee Elena, Plevani Laura, Cavallaro Giacomo, Raffaeli Ganny, Crippa Letizia Beatrice, Colombo Lorenzo, Morniroli Daniela, Liotto Nadia, Roggero Paola, Villamor Eduardo, Marchisio Paola, & Mosca Fabio. (2019). Breastfeeding Difficulties and Risk for Early



Breastfeeding Cessation. Nutrients, 11(2266), 1-10. http://doi.org/10.3390/nu11102266

- Greiner, T. (2014). Exclusive breastfeeding: measurement and indicators. *International Breastfeeding Journal*, 9(1), 1–6. https://doi.org/10.1186/1746-4358-9-18
- Grossman, X., Chaudhuri, J., Feldman-Winter, L., Abrams, J., Newton, K. N., Philipp, B. L., & Merewood, A. (2009). Hospital education in lactation practices (Project HELP): Does clinician education affect breastfeeding initiation and exclusivity in the hospital? *Birth*, *36*(1), 54–59. https://doi.org/10.1111/j.1523-536X.2008.00295.x
- Hawasawi, A., Alhojaili, N., Ahmed, H., & Bha, A. (2022). Assessed Breastfeeding Knowledge, Attitude, and Practice and Identified Associated Factors. 1–29.
- Ismail, T. A. T., Sulaiman, Z., Jalil, R., Muda, W. M. W., & Man, N. N. N. (2012). Breast milk expression among formally employed women in urban and rural Malaysia: A qualitative study. *International Breastfeeding Journal*, 7(1), 1. https://doi.org/10.1186/1746-4358-7-11
- Kharouba, J., Mansour, S., Ratson, T., Naishlos, S., Weissman, G., & Blumer, S. (2023). *Knowledge of Breastfeeding Mothers Regarding Caries Prevention in Toddlers.*
- Litwan, K., Tran, V., Nyhan, K., & Pérez-Escamilla, R. (2021). How do breastfeeding workplace interventions work?: a realist review. *International Journal for Equity in Health*, 20(1), 1– 25. https://doi.org/10.1186/s12939-021-01490-7
- Martin, C. R., Ling, P. R., & Blackburn, G. L. (2016). Review of infant feeding: Key features of breast milk and infant formula. *Nutrients*, 8(5). https://doi.org/10.3390/nu8050279
- Mathews, V. (2019). Reconfiguring the breastfeeding body in urban public spaces. *Social and Cultural Geography*, 20(9), 1266–1284. https://doi.org/10.1080/14649365.2018.1433867
- Nag, A., Chaturvedi, A., & Kumari, R. (2021). Effectiveness of an information booklet on knowledge regarding breastfeeding among mothers of under two-years children. 8(8), 1387–1395.
- Nuzzi, G., Di Cicco, M. E., & Peroni, D. G. (2021). Breastfeeding and allergic diseases: What's new? *Children*, 8(5). https://doi.org/10.3390/children8050330



- Nyaloko, M., Lubbe, W., & Minnie, K. (2020). Perceptions of Mothers and Community Members Regarding Breastfeeding in Public Spaces in Alexandra, Gauteng Province, South Africa. *The Open Public Health Journal*, 13(1), 582–594. https://doi.org/10.2174/1874944502013010582
- Olejnik, A., Adamczewska, A., & Kossakowska, K. (2022). Factors affecting attitude towards breastfeeding in public: a cross-sectional web-based study on Polish women. *Journal of Public Health (Germany)*, 30(1), 263–272. https://doi.org/10.1007/s10389-020-01320-0
- Salem, M. Z. (2019). Effects of formula milk packaging design on breastfeeding Palestinian women's purchasing decisions. *Ethiopian Journal of Health Development*, 33(1), 1–3.
- Sheehan, A., Gribble, K., & Schmied, V. (2019). It's okay to breastfeed in public but... International Breastfeeding Journal, 14(1), 1–11. https://doi.org/10.1186/s13006-019-0216y
- Smillie, C. M., Campbell, S. H., & Iwinski, S. (2005). Hyperlactation: How left-brained "rules" for breastfeeding can wreak havoc wth a natural process. *Newborn and Infant Nursing Reviews*, 5(1 SPEC. ISS.), 49–58. https://doi.org/10.1053/j.nainr.2005.02.007
- Suyes, K., Abrahams, S. W., & Labbok, M. H. (2008). Breastfeeding in the workplace: Other employees' attitudes towards services for lactating mothers. *International Breastfeeding Journal*, 3, 1–5. https://doi.org/10.1186/1746-4358-3-25
- Syakira, W., Kristiyanti, R., & Chabibah, N. (2022). THE EFFECT OF KNOWLEDGE AND ANXIETY ON BREASTFEEDING DURING THE CORONA PANDEMIC. 9(September), 167–171.
- Tan, K. L. (2011). Factors associated with exclusive breastfeeding among infants under six months of age in peninsular malaysia. *International Breastfeeding Journal*, 6(1), 2. https://doi.org/10.1186/1746-4358-6-2
- Tengku Ismail, T. A., & Sulaiman, Z. (2010). Reliability and validity of a malay-version questionnaire assessing knowledge of breastfeeding. *Malaysian Journal of Medical Sciences*, 17(3), 32–39.
- The Lancet Global Health. (2022). Tackling marketing of formula milk: process matters. *The Lancet Global Health*, *10*(4), e448. https://doi.org/10.1016/S2214-109X(22)00094-8



- Vamegh, M. H., Karkout, R. A., Shihan, H. A., & Kaouas, M. C. (2019). Attitude and awareness on importance of breastfeeding among childbearing women in a rapidly developing country. *International Journal of Research in Medical Sciences*, 7(6), 2328. https://doi.org/10.18203/2320-6012.ijrms20192522
- Vilar-Compte, M., Hernández-Cordero, S., Ancira-Moreno, M., Burrola-Méndez, S., Ferre-Eguiluz, I., Omaña, I., & Pérez Navarro, C. (2021). Breastfeeding at the workplace: a systematic review of interventions to improve workplace environments to facilitate breastfeeding among working women. *International Journal for Equity in Health*, 20(1). https://doi.org/10.1186/s12939-021-01432-3