

Mapping a Decade of Breastfeeding Research in Malaysia: Trends, Gaps, and Advocacy Implications

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ABSTRACT

Scaling up breastfeeding at the universal level can help save the lives of up to 823,000 babies as well preventing breast cancer among 20,000 mothers annually. Its benefits are positively linked with improved child development, national productivity and environmental sustainability. On the other hand, despite the huge benefits of breastfeeding to mankind, breastfeeding is still at a low level, and only 44% of babies globally and 47.1% in Malaysia are exclusively breastfed. Support from various stakeholders is needed to promote breastfeeding continuously. This effort has to be supported by data and evidence to ensure advocacy-level transformation. In Malaysia, a lack of data on some important aspects of breastfeeding has been reported in NHMS III (2006) and World Breastfeeding Trends Initiative (WBTi) (2015). Hence this paper aims to highlight the status of breastfeeding-related research conducted in Malaysia and further instigate broader research in the future. The article search was done between 19 and 24 November 2022 using three (3) electronic databases- Scopus, PubMed and Directory of Open Access Journal (DOAJ). Four (4) key phrases were used to search for articles: 'Breastfeeding in Malaysia', 'Baby Friendly Hospital', 'Code of Marketing of Breastmilk Substitutes' and 'Right to Breastfeed'. A total of 48 articles were identified and analyzed based on various themes. This study showed a positive trend in local breastfeeding-related research. However, there are still some domains of breastfeeding advocacy that lack research and evidence.

Keywords-Breastfeeding Advocacy Malaysia, Breastfeeding Research Malaysia, Breastfeeding Policy and Data Gaps

INTRODUCTION

Scaling up breastfeeding to a near-universal level can save the lives of almost 823,000 babies and prevent the deaths of 20,000 mothers from breast cancer every year [1]. However, exclusive breastfeeding practice is still low, with only 44% of infants globally and 47.1% in Malaysia being exclusively breastfed until six months [2]. Driven by the many benefits of breastfeeding, the National Plan of Action for Nutrition of Malaysia III has been introduced with the aim of achieving exclusive breastfeeding (EBF) rate of 70% by 2025 [3].

Support from various stakeholders is needed to improve the country's breastfeeding rate and to achieve the targeted exclusive breastfeeding rate of 70%. In this regard, breastfeeding promotion initiatives should be backed with sufficient evidence and data to lobby for support and transform breastfeeding advocacy in the country. Therefore, it is vital to identify areas that require attention, such as policy evaluations, barriers to breastfeeding, hospital practices, workplace support, community support, promotion of infant formula and other aspects of breastfeeding. The Third National Health and Morbidity Survey (NHMS III) reported that there is no formal evaluation of the impact of programs such as the Baby Friendly Hospital Initiative (BFHI) and the Code of Ethics for the Marketing of Infant Formula Products (Code) conducted in the country [4].

This gap was also highlighted in the World Breastfeeding Trends Initiative (WBTi), where there is a lack of data on breastfeeding ranging from simple rates to breastfeeding problems and case studies [5]. We are dependent on national-level statistics on breastfeeding, which is done every ten years by the Ministry of Health (MOH), and the most recent one is the National Health Morbidity Survey: Maternal and Child Health (NHMS – MCH) which was conducted in 2016 [2]. The 10 years gap between the recent surveys is considered

significant, specifically in the vital aspect of health promotion like breastfeeding [5].

Objective

This paper aims to map and synthesize breastfeeding-related research conducted in Malaysia from 2012 to 2022, with the goal of identifying key focus areas, thematic trends, and gaps in existing literature. As a preliminary scoping review, it provides a foundational overview that can inform future empirical studies, policy directions, and advocacy efforts related to breastfeeding.

LITERATURE REVIEW

While national surveys and policy documents have drawn attention to data limitations on breastfeeding in Malaysia, academic research in this area remains scattered. Most studies tend to concentrate on specific issues such as maternal knowledge [6], hospital interventions [7], or cultural factors [8], often focusing on narrowly defined settings or sample groups.

Although Malaysia has adopted key global initiatives like the Baby Friendly Hospital Initiative (BFHI) and the Code of Ethics, there is still a lack of academic work evaluating how these have been implemented in practice. Similarly, there appears to be limited research that explores advocacy-related strategies, including rights-based promotion, communication efforts, or community engagement.

As far as we could identify, no study has yet attempted to provide a thematic overview of Malaysian breastfeeding research over a sustained period. This review seeks to fill that gap by mapping existing work, identifying where evidence is lacking, and proposing future directions. By doing so, it aims to support more informed breastfeeding advocacy and policy development as Malaysia strengthens its maternal and child health agenda.

METHODOLOGY

This study used a structured literature review to explore breastfeeding-related research in Malaysia over a ten-year period. The goal was to pinpoint publication trends, uncover research themes, and identify areas that need further study to bolster national breastfeeding advocacy strategies.

A systematic search was carried out from 19 to 24 November 2022 using three major databases: Scopus, PubMed, and the Directory of Open Access Journals (DOAJ). We combined four key phrases; “Breastfeeding in Malaysia,” “Baby Friendly Hospital,” “Code of Marketing of Breastmilk Substitutes,” and “Right to Breastfeed”. The choice of these four search terms was guided by their direct relevance to Malaysia’s breastfeeding policy landscape. These terms were selected based on their prominence in key documents such as NHMS III and WBTi reports, as well as their alignment with internationally recognised advocacy frameworks. While it is acknowledged that additional keywords may have increased the number of results, the focus of this review was to foreground areas identified as national advocacy priorities. Future reviews may consider a broader keyword scope to supplement this foundation.

Inclusion Criteria

We only included articles that met the following conditions:

- a. Were published in English
- b. Focused on the Malaysian context
- c. Were published between January 2012 and September 2022
- d. Addressed aspects of breastfeeding practices, promotion, support systems, or relevant policy.

After applying the search filters in each database, we manually screened the articles to ensure they met our inclusion criteria. Duplicates and studies outside our scope were removed, leaving us with 48 articles for analysis.

Data Extraction and Analysis

Data from the final set of articles were extracted and organized using Microsoft® Excel® 2021 MSO (Version 2211). Excel enabled us to create frequency tables, categorize the studies by type (quantitative or qualitative), and track information regarding funding or sponsorship. We derived themes by examining each article's abstract, keywords, and stated objectives. Thematic coding was done manually, which allowed us to group studies into recurring domains such as counselling and support, workplace issues, cultural beliefs, and hospital practices.

While a formal critical appraisal was not undertaken due to time and resource limitations, most of the selected articles were peer-reviewed publications. This lends a reasonable degree of confidence to the scientific integrity of the included studies.

Although more advanced qualitative software could have provided deeper insights, we opted for Excel for this initial mapping exercise, with the intention of identifying overall trends and gaps that can inform future, more detailed studies and policy development.

FINDINGS

A total of 62 articles were retrieved from the three selected databases: Scopus, PubMed, and the Directory of Open Access Journals (DOAJ), based on the four predefined search phrases. As shown in Table 1, the majority of records (n = 60) were found under the phrase "Breastfeeding in Malaysia." Only two articles were identified under the phrase "Right to Breastfeed," while no articles were located using the terms "Baby Friendly Hospital" or "Code of Marketing of Breastmilk Substitutes."

All identified articles were screened manually, and inclusion criteria were applied to ensure relevance to the Malaysian context. Duplicate entries and unrelated studies were excluded. As a result, 48 articles were shortlisted for analysis. Table 2 presents the final breakdown of articles included in this review, grouped by database and search phrase.

TABLE 1 NUMBER OF ARTICLES BY DATABASE AND PHRASES

Database / Phrases	Scopus	PubMed	DOAJ	Total
Breastfeeding in Malaysia	24	23	13	60
Right to Breastfeed	1	1	0	2
Total	25	24	13	62

TABLE 2 NUMBER OF ARTICLES BY DATABASE AND PHRASES (SHORTLISTED)

Database / Phrases	Scopus	PubMed	DOAJ	Scopus PubMed	Scopus DOAJ	PubMed DOAJ	Scopus PubMed DOAJ	Total
Breastfeed ing in Malaysia	19	11	4	3	1	7	1	46

Right to Breastfeed	1	1	0	0	0	0	0	2
Total	20	12	4	3	1	7	1	48

By Themes

The 48 shortlisted articles were analyzed thematically based on their abstracts and keywords. Seven key themes emerged: support and counselling, medical/health/hospital practices, exclusive breastfeeding, cultural beliefs, workplace support, theoretical frameworks, and breastfeeding in emergencies. These themes reflect the scope of current research and offer insight into which domains receive the most attention and which remain underexplored.

TABLE 3 NUMBER OF ARTICLES BY THEMES

No	Themes	No of articles
1	Support / Counselling	13
2	Medical / Health / Hospital Practice	12
3	Exclusive Breastfeeding	11
4	Employment	4
5	Ethnic / Religious practice	4
6	Theory / Research	3
7	Emergency Situation	1

A total of seven themes were identified through manual screening of abstracts and keywords. As presented in Table 3, the most frequently researched area was support and counselling (n = 13; 27%), followed by medical, health, and hospital practices (n = 12; 25%) and exclusive breastfeeding (n = 11; 23%). These three domains reflect central components of breastfeeding advocacy in Malaysia.

In contrast, fewer studies addressed employment-related challenges and ethnic or religious practices, with only four articles each. Research exploring theoretical frameworks was limited (n = 3), while breastfeeding in emergency settings was the least represented, with only one article identified under this theme.

By Year

Table 4 presents the number of breastfeeding-related articles published between 2012 and 2022. A total of 48 articles were published during this period, with the highest number recorded in 2022 (10 articles). The number of publications showed a gradual increase over the years, especially from 2018 onwards. The lowest number of publications was observed in 2013, with only one article. This distribution indicates an overall increase in research interest in breastfeeding topics in recent years.

TABLE 4 NUMBER OF ARTICLES PUBLISHED BY YEAR

Year / Database	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Scopus	1		1	2	2	3	2	1	4	3	1	20
PubMed		1	2	1	2		1	1		1	3	12
DOAJ	1					1					2	4
Scopus, PubMed, DOAJ					1		1		1			3
Scopus, DOAJ						1						1

PubM ed, DOAJ									1	3	3	7
Scopus, PubM ed, DOAJ											1	1
Total	2	1	3	3	5	5	4	2	6	7	10	48

By Type of Research

A manual screening of the methodology sections was conducted to categorise each study by research type. As shown in Table 5, the majority of the studies (36 out of 48, or 75%) used quantitative methods. Qualitative studies accounted for 10 articles (20.8%), while review papers represented only 2 studies (4.1%). This reflects a predominance of quantitative approaches in breastfeeding-related research published in Malaysia over the past decade.

TABLE 5 NUMBER OF ARTICLES PUBLISHED TYPE OF RESEARCH AND FUNDING

Type of research/ Funding	Quantitati ve	Qualitativ e	Review	Total
Funded	18	5	0	23
Not Stated	11	3	1	15
No Financial Support	4	2	1	7
Not Able to Access Funding Information	3	0	0	3
Total	36	10	2	48

By Funding

Funding status was determined through manual review of each article. As presented in Table 5, 23 out of 48 studies (47.9%) reported receiving financial support. Seven articles (14.6%) explicitly stated that no funding was received, while 18 studies (37.5%) did not disclose any information regarding funding status. These figures provide an overview of the funding landscape within the reviewed body of breastfeeding-related research in Malaysia.

DISCUSSION

This section presents a critical discussion of the main findings from this review, linking observed patterns in the literature to the broader context of breastfeeding advocacy in Malaysia. The discussion is organised thematically, drawing on the four key search phrases and the categories that emerged from the analysis, namely, support and counselling, medical and hospital practices, exclusive breastfeeding, and underrepresented areas such as the Code of Ethics and the Baby Friendly Hospital Initiative (BFHI).

By examining these themes in relation to Malaysia's policy frameworks and national breastfeeding targets, this section highlights both the strengths and the limitations of existing research. The aim is to contextualise the findings within current health priorities and to inform future advocacy efforts and evidence-based policy reform.

Overview of The Findings

This review brings together ten years of academic work related to breastfeeding in Malaysia, drawing from

three major databases: Scopus, PubMed, and DOAJ. While the analysis was guided by four targeted search phrases, the majority of articles clustered under the broad term “Breastfeeding in Malaysia,” highlighting a general but growing interest in the subject across different research disciplines.

The themes emerging from these studies point to consistent attention given to areas like counselling and support, hospital practices, and exclusive breastfeeding. In contrast, research into topics such as breastfeeding rights, emergency preparedness, and implementation of international frameworks like the BFHI and the Code of Marketing of Breastmilk Substitutes remained noticeably limited.

Most studies employed quantitative approaches, while qualitative insights were relatively scarce. Funding was reported in just under half of the studies, suggesting some institutional support for breastfeeding research, although not widespread.

Taken together, these patterns reflect both progress and imbalance in Malaysia’s breastfeeding research landscape. They also raise important questions: Which areas are being overlooked? Which policies are being studied in name, but not in depth? The following sections explore these issues in more detail, guided by the four key phrases used in this review

Key phrase ‘Breastfeeding in Malaysia’

The highest number of articles (46) were retrieved using the phrase “Breastfeeding in Malaysia.” As such, the discussion in this section is primarily based on this category. Seven key themes were identified through a review of abstracts and keywords: support and counselling, hospital practices, workplace issues, cultural beliefs, emergencies, theoretical frameworks, and policy-related gaps..

B-1. Support / Counselling:

Among the seven themes identified in this review, support and counselling emerged as the most frequently studied area. Many of these articles explored how various individuals , including partners, family members, communities, and healthcare workers , play a role in helping mothers breastfeed. This kind of support has long been recognised as a cornerstone of successful breastfeeding advocacy [9], especially when mothers are faced with emotional or physical challenges.

Interestingly, recent research reflects a shift in how counselling is delivered. While traditional face-to-face methods are still common, there is a growing use of digital platforms, such as telephone-based support and WhatsApp messaging [10]. These tools offer new ways to reach mothers more easily, yet despite these advancements, there is still a lack of studies that assess how effective mother support groups are, particularly those tied to BFHI-accredited hospitals.

This is an important gap. According to Step 10 of the Ten Steps to Successful Breastfeeding [11], mothers leaving a BFHI facility should be connected to a support group. These groups are meant to provide continued, peer-level support as mothers encounter difficulties [12] . However, in Malaysia, there has been no formal evaluation of how programmes like BFHI or the Code of Ethics for the Marketing of Infant Formula Products are working on the ground [5]. Without such evaluations, it’s hard to know if these efforts are truly making a difference in breastfeeding outcomes.

Since Malaysia adopted BFHI back in 1992 and integrated support groups as part of this framework, future research is urgently needed to find out whether these groups are functioning as intended. Such studies would help validate the country’s advocacy efforts and point the way toward improving support systems for long-term breastfeeding success.

B-2 Medical / Health / Hospital Practice:

A total of 12 articles (25%) were categorised under the theme of medical, health, and hospital practices that influence breastfeeding. This area reflects a growing interest in understanding how maternal health conditions and clinical environments shape breastfeeding outcomes, either by enabling or unintentionally obstructing

them.

Several studies focused on common medical concerns such as maternal diabetes [13] , obesity [14] [15] and caesarean delivery [16] [17]

These studies offer important evidence that challenges the widespread belief that certain medical conditions inherently prevent successful breastfeeding. Such findings are especially valuable for healthcare professionals and advocates seeking to provide informed, evidence-based support to mothers navigating complex health situations.

Maternal mental health, particularly postpartum depression, also emerged as a significant topic. According to [2], 12.7% of mothers showed signs of postnatal depression, with Indian mothers and those working in the private sector reporting the highest rates. This marked the first time postnatal mental health screening was included in a national health survey, underscoring its rising importance in the broader maternal health agenda.

[20] and [21] examined how maternal depression affects breastfeeding attitudes and behaviours. One of them, conducted during the COVID-19 pandemic, found that mothers of premature infants with depressive symptoms were less motivated to breastfeed. These findings emphasise the importance of early mental health screening and timely intervention as part of postnatal care.

Together, these studies point to the need for better integration of medical and psychological support within breastfeeding promotion strategies. By embedding these considerations into policy, training, and clinical guidelines, Malaysia's health system can become more responsive to mothers who face breastfeeding challenges linked to physical or emotional health.

B-3 Exclusive Breastfeeding (EBF):

A total of 11 studies focused on exclusive breastfeeding (EBF), examining factors such as maternal intention, knowledge, beliefs, attitudes, and workplace-related challenges. These findings offer valuable insights into what enables or hinders mothers from exclusively breastfeeding for the recommended six months. With Malaysia's current EBF rate standing at 47.1% [2], and the national goal of reaching 70% by 2025 [3]. Research in this area is both timely and necessary. The growing number of studies, particularly those addressing working mothers, reflects a positive shift towards developing supportive interventions. However, further research is needed to evaluate the effectiveness of these efforts and close the persistent gaps in breastfeeding support systems.

B-4 Employment :

There are 4 studies under the theme of 'employment'. These studies researched workplace support and barriers to breastfeeding upon returning to work. Working has been identified as one of the major factors for early cessation of breastfeeding among Malaysian mothers [2], [4], [20]-[22]. Yet, the country still hasn't been able to develop a national-level measurement or policy for workplace support for breastfeeding. The evidence seems to be enough to prove that working mothers need a breastfeeding-supportive workplace. However, we need someone to put everything together and march for policy-level changes. The most effective way to facilitate breastfeeding at work is by having legislation and education regarding the need of breastfeeding working women, which includes: - time, space to express milk, a place to store breast milk or having nearby creches to feed babies [23]. Perhaps more specified research directly relating to working mothers may help in establishing a breastfeeding-supportive workplace or even a national-level policy for working mothers.

B-5 Ethnic / Religious Practices:

Being in a multi-racial country, different ethnic will have different practices or beliefs related to breastfeeding. Understanding those aspects will help in tailoring customised support for mothers, especially while giving counselling. Four studies were found in this research related to ethnic and religious practices, and it falls just under 2 categories: confinement of Chinese mothers and Muslim mothers. Research related to confinement centres will help in developing a guideline or training to ensure that those centres support breastfeeding. In the

research identified in this study, a comparison was done among mothers staying at confinement centres and at home [24]. It concluded that the EBF at one month and six months are similar, removing the perception that confinement centres cause early cessation of breastfeeding. However, it was discovered that confinement centres discourage the rooming-in of mothers and babies. This study can be a catalyst to instigate more research on this aspect to further identify areas to be improved at confinement centres.

Whereas studies related Muslim mothers were more to wet nursing and induced lactation. This research is vital because, although breastfeeding other people's babies is permissible in Islam, women who become milk mothers need to understand the effects of Shariah law, especially if they have established milk kinship with the infants. The problem among milk mothers is that they might not know its legal repercussion under the Shariah law [25]. Therefore, similar studies need to be done to give a better understanding. Apparently, no studies were found to be directly related to Indian mothers' breastfeeding in the country. Understanding their practices and beliefs is important too. According to [2], the highest prevalence (100%) of breastfeeding was the highest among Indian mothers, but they fell in third place (41.4%) after Malay and Other Bumiputra mothers for the overall prevalence of exclusive breastfeeding [2]. The same survey also indicated that postpartum depression is more common among Indian mothers. This issue really warrants future studies to study and understand the real issues faced by Indian mothers and to provide better support for them.

B-6 Theory / Research:

Three studies are related to the theme of theory and research tools. Theory-based research is crucial in understanding mothers' behaviour or intention about breastfeeding. The study also found 2 other studies that touched on theory; however, they were included in 'support and counselling' [26] and 'exclusive breastfeeding' [26] accordingly because the papers' discussions are more inclined to those two themes. The extended theory of planned behaviour researched among mothers in Kelantan concluded that women's intention to practice exclusive breastfeeding might be increased by improving their perceived behavioural control and attitude [27]. The development of research tools, such as questionnaires in the Malay language [28], will aid in conducting more research in future in a language common to Malaysians. Moreover, research on online breastfeeding courses [29] may contribute to transforming the method of providing support for mothers. However, the number of research is still too low to bring a great impact on breastfeeding advocacy in Malaysia.

B-7 Emergency Situation:

Only one study was identified under this theme, which examined breastfeeding management during the 2014 flood in Kelantan [30]. Interestingly, this study also emerged under the search phrase "Right to Breastfeed," highlighting its intersectional relevance. Although limited in number, the presence of this research signals a growing awareness among breastfeeding advocates of the critical importance of infant feeding during emergencies. In such contexts, breastfeeding remains the safest and most reliable method of infant nutrition, while the uncontrolled distribution of infant formula can pose serious health risks [31]-[32]. Greater attention and research are needed to guide emergency preparedness policies that prioritise breastfeeding support and safeguard infant health during crises.

Key Phrase 'Code of Marketing Breastmilk Substitutes'

The International Code of Marketing of Breastmilk Substitutes was established by WHO and UNICEF in 1981 to curb unethical promotion of breastmilk substitutes and protect breastfeeding [33]. It provides guidelines to control commercial marketing strategies, especially within healthcare settings, that could undermine mothers' confidence and ability to breastfeed.

Malaysia adopted the Code on a voluntary basis and introduced the Code of Ethics for Infant Formula Products in 1995, which was later revised in 2008 and renamed the Code of Ethics for the Marketing of Infant Foods and Related Products [34]. Despite over four decades since the original Code's adoption, this study found no peer-reviewed Malaysian research directly assessing its implementation, compliance, or enforcement.

This finding is consistent with earlier concerns raised in NHMS III 2006 [4], which noted the absence of research on the Code's effectiveness in Malaysia. Although the Ministry of Health continues to monitor violations, as reflected in 2020 reports of 898 complaints, 131 of which were valid and resulted in penalties [36] the Code remains unenforceable under Malaysian law, functioning only as a voluntary guideline.

The lack of robust local research and legal backing leaves room for continued non-compliance. Reports indicate frequent breaches, but without sustained documentation or evaluation, these violations remain difficult to challenge at policy level [5], [36]. Evidence-based research is crucial to support advocacy efforts and justify legislative reform that transforms the Code from a voluntary guideline into binding national law.

While international organisations continue to call for stronger enforcement [37], local advocates face the uphill task of challenging powerful formula companies with significant market influence. To move forward, more empirical studies, both qualitative and policy-based evaluations, are needed to assess the extent of violations and the effectiveness of current enforcement mechanisms.

Key Phrase Baby Friendly Hospital'

The Baby Friend Hospital (BFHI) initiative was launched in 1991 by UNICEF and WHO to comprehend the implementation of the Code by ensuring all maternity facilities free from any form of marketing of breastmilk substitutes [38]. Its purpose is to increase awareness of the critical role that health services play in promoting and promoting breastfeeding and to describe what should be done to assist mothers in breastfeeding [39]. Malaysia has adopted BFHI since 1992, and by 1998, Malaysia was recognised by WHO as the third country in the world to have all government hospitals accredited as BFHI [40]. As of 2020, there are 161 hospitals in Malaysia accredited as BFHI, consisting of 133 hospitals under the Ministry of Health, 3 under the Ministry of Education, 3 under the Ministry of Defence and 22 private hospitals [36]. Even though the implementation of BFHI in Malaysia has received positive feedback, there are insufficient studies or formal evaluations done on its overall effectiveness [4]. Great effort has been taken by the government to bring BFHI into maternal and child health clinics as they provide 90% of the antenatal and postnatal services in the country [40]. Yet, there have been no studies focusing on either at the hospitals or clinics level in the past 30 years. In this regard, data and evidence are needed to further strengthen the implementation of BFHI. This is because even at BFHI hospitals, there were some mothers who were not fully taught how to attach the baby to the breast since there is inadequate training [5]. Furthermore, more research-based evidence will persuade more private hospitals to implement BFHI. It is intriguing why there are only a few private hospitals accredited as BFHI even though the MOH is able to ensure all government hospitals achieve BFHI status within 3 years of its implementation. By 2021 only 22 (12.6%) of 175 private hospitals in Malaysia have been accredited as BFHI [41].

Key Phrase 'Right to Breastfeed'

The search for the phrase 'right to breastfeed' intended to cover policies or initiatives other than BFHI and Code. However, only one study related to the flood in Kelantan in 2014 was found. This study highlighted some valuable learnings that can be taken into consideration during an emergency situation [30]. Four of their concerns were: the impact on infants' nutrition, comfortably for mothers to breastfeed at a shelter, uncontrolled donations of infant formula and misconceptions about the ability of mothers affected by the disaster to produce milk. This can be a good source of information to catalyst a national-level guideline for breastfeeding during a natural disaster. However, just one study is not enough, and more evidence is required to lobby for a policy-level implementation. This search was not able to identify any studies related to women's right to breastfeed, either in the aspect of maternity protection or workplace support entitlement. There are two possibilities for this scenario, either no research has been done on this topic, or the search was not able to identify it.

Data by year shows that the number of publications is on an increasing trend, especially since 2020. This is a positive note for the breastfeeding advocacy of Malaysia, whereby more data will be available to make any changes related to protecting, promoting and supporting breastfeeding. This will further help in increasing research related to aspects that have not been researched in Malaysia to date, such as BFHI and Code of Marketing

The majority of studies conducted are quantitative (75%) in nature, and it is very much related to the topic researched. Wherever applicable, the qualitative method was used, especially when understanding mothers' experiences, opinions or perceptions of breastfeeding. Almost half of the studies were funded, and this is a trend that needs to be encouraged as it shows that breastfeeding matters are getting more attention from various organisations.

However, most of the funding was received from higher institutions, such as universities, via research grants. University Sains Malaysia (USM) has funded 10 studies, followed by the Ministry of Education with 3. The high number of studies funded and published by one particular institution may relate to the researchers' institution's interest and research focus. For example, authors such as Zaharah Sulaiman and Tengku Alina Ismail were able to get six of their studies funded by USM [17], [23], [27], [28], [42]-[43]. Both researchers are affiliated with the School of Medical Sciences of USM, and their profiles clearly indicate that they have a deep interest in matters related to breastfeeding. This shows that academicians with interest in breastfeeding-related matters can be catalysts in transforming breastfeeding advocacy in Malaysia. However, it is to be noted here that there is no research funded by the Ministry of Health, even though breastfeeding, in general, falls under the category of health.

CONCLUSION

As a preliminary study on breastfeeding research conducted in Malaysia, this study identified some information that may lead to future research. Four phrases were used to do the search in three databases, and it identified 48 studies. The seven themes identified show that support and counselling elements are getting attention from researchers. It is great to note that issues such as maternal mental health and religious practices are also given attention. Huge gaps were identified in research related to BFHI and Code. There is yet any research done since the implementation of these two important policies in the country. Perhaps this type of research may need huge funding to conduct. A gap was also identified in the case of postpartum mental health among Indian mothers. Overall, this study shows that breastfeeding-related research in the country is in increasing trend, and this will assist in transforming the country's breastfeeding advocacy in future.

Limitations And Suggestions For Future Research

This is a preliminary study that provides an overview of research related to breastfeeding in Malaysia. It was limited to three databases and only included studies published in English. Furthermore, grey literature such as unpublished reports and local policy briefs were not included in this review, potentially overlooking important advocacy-relevant findings. Inclusion of more databases and studies published in Bahasa Malaysia could uncover a wider body of relevant research. Another limitation is that only four key phrases were used in the search, potentially excluding studies related to milk expression, breastfeeding challenges, workplace support, maternity protection, and other topics closely related to breastfeeding advocacy. Additionally, the review did not include stakeholder perspectives or expert interviews, which may have offered deeper contextual insights.

In terms of analysis, this study relied on Excel and manual screening, which may be subject to human error. Using statistical software such as SPSS or a more structured review tool could improve accuracy. Moreover, data collection for this study was conducted over a brief six-day period (19th–24th November 2022) following acceptance for presentation at the Social Sciences Postgraduate International Seminar (SSPIS) 2022. This time constraint limited the depth of data retrieval and analysis.

Despite these constraints, this review offers timely and valuable insights into breastfeeding research trends in Malaysia and provides a foundational reference point for future advocacy and policy-driven studies. While this paper does not claim to be exhaustive, it has surfaced key areas, such as the implementation of the BFHI and the Code, that warrant deeper exploration.

These findings reveal that while research on breastfeeding in Malaysia is gradually expanding, there remain noticeable gaps in areas closely tied to policy and implementation, such as workplace support for breastfeeding mothers, the practical enforcement of the Code of Marketing of Breastmilk Substitutes, and long-term breastfeeding continuation post-return to work. This disconnection between policy commitments

and research output suggests a need for more interdisciplinary, practice-driven investigations that focus on system-level enablers and barriers. Bridging this gap will be essential for translating national breastfeeding goals into measurable change on the ground.

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REFERENCES

1. Victora, C. G., Bahl, R., Barros, A. J. D., França, G. V. A., Horton, S., Krasevec, J., Murch, S., Sankar, M. J., Walker, N., Rollins, N. C., Allen, K., Dharmage, S., Lodge, C., Peres, K. G., Bhandari, N., Chowdhury, R., Sinha, B., Taneja, S., Giugliani, E., Richter, L. (2016). Breastfeeding in The 21st Century: Epidemiology, Mechanisms and Lifelong Effect. *The Lancet* Vol. 387/ 10017, pp. 475–490). Lancet Publishing Group.
2. Institute for Public Health. (2016). National Health And Morbidity Survey 2016 . Maternal And Child Health Vol 2 : Maternal and Child Health Findings. Ministry of Health Malaysia.
3. Ministry of Health Malaysia. (2016). Annual Report 2016. Ministry of Health Malaysia
4. Fatimah, S., Siti Saadiah, H. N., Tahir, A., Hussain Imam, M. I., & Ahmad Faudzi, Y. (2010). “Breastfeeding in Malaysia: Results of the Third National Health and Morbidity Survey (NHMS III) 2006.” *Malaysian Journal of Nutrition*, 16(2), 195–206.
5. Suleiman, Adlina, & Abdul Moin, Siti Norjinah. (2015). World Breastfeeding Trends Initiative : Assessment Report of Malaysia 2015. www.worldbreastfeedingtrends.org
6. Hashim, S., Ishak, A., & Muhammad, J. (2020). Unsuccessful exclusive breastfeeding and associated factors among the healthcare providers in East Coast, Malaysia. *Korean Journal of Family Medicine*, 41(6), 416–421.
7. <https://doi.org/10.4082/kjfm.19.0060>
8. Tan ML, Foong SC, Ho JJ, Foong WC, Mohd R, Harun Z (2000). Postpartum women's perception of antenatal breastfeeding education: a descriptive survey. *Int Breastfeed J*. 2020 Oct 14;15(1):85. doi: 10.1186/s13006-020-00328-2.
9. Jamil, N. A. (2018). The influence of religious belief and sociocultural on breastfeeding practice: A literature review. *Malaysian Journal of Nursing*, 10(1), 72–77. http://irep.iium.edu.my/64070/1/mjn_akma.pdf
10. World Alliance for Breastfeeding Action ABA. (2008). World Breastfeeding Week 2008. Retrieved from <http://www.babymilkaction.org/shop/publications01>
11. Tahir, N. M., & Al-Sadat, N. (2013). Does telephone lactation counselling improve breastfeeding practices?: A randomised controlled trial. *International Journal of Nursing Studies*, 50(1), 16–25. <https://doi.org/10.1016/J.IJNURSTU.2012.09.006>
12. WHO. (1989a). BFHI1989 Statement. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/272943/9789241513807-eng.pdf>
13. Ingram, J., Rosser, J., & Jackson, D. (2005). Breastfeeding peer supporters and a community support group: Evaluating their effectiveness. *Maternal and Child Nutrition*, 1(2), 111–118. <https://doi.org/10.1111/j.1740-8709.2005.00005>
14. Shuhaimi, F. A., Bariah, S., Hamid, A., & Othman, N. (2022). Comparison of Knowledge, Attitude, and Practices on Breastfeeding Between Women With and Without Gestational Diabetes Mellitus in Malaysia: A Cross-sectional Study. *Malaysian Journal of Medicine and Health Sciences*, 18(SUPP8), 333–339.
15. Johari, N. S., Bariah, S., & Hamid, A. (2021). Breastfeeding Self-efficacy and Infant Feeding Attitudes Among Overweight and Obese Expectant Mothers in Kuala Selangor, Malaysia. *Malaysian Journal of Medicine and Health Sciences*, 17(SUPP3), 2636–9346.

17. Mohd Azmi, S. N. S., & Hamid, S. B. A. (2020). Association of Breastfeeding Self-Efficacy and Maternal Obesity in Kuala Selangor District, Malaysia: A Cross Sectional. *Malaysian Journal of Medicine and Health Sciences*, 16, 77–78.
18. Johar, N., Mohamad, N., Saddki, N., Ismail, T. A. T., & Sulaiman, Z. (2020). “Intention and actual exclusive breastfeeding practices among women admitted for elective cesarean delivery in Kelantan, Malaysia: A prospective cohort study”. *Medical Journal of Malaysia*, 75(3), 274–280.
19. Johar, N., Mohamad, N., Saddki, N., Ismail, T. A. T., & Sulaiman, Z. (2021). “Factors Associated with Early Breastfeeding Initiation among Women Who Underwent Cesarean Delivery at Tertiary Hospitals in Kelantan, Malaysia”. *Korean Journal of Family Medicine*, 42(2), 140–149. <https://doi.org/10.4082/KJFM.19.0178>
20. Mohamad Yusuff, A. S., Tang, L., Binns, C. W., & Lee, A. H. (2016). Breastfeeding and Postnatal Depression: A Prospective Cohort Study in Sabah, Malaysia. *Journal of Human Lactation*, 32(2), 277–281. <https://doi.org/10.1177/0890334415620788>
21. Yahya, N. F. S., Teng, N. I. M. F., Shafiee, N., & Juliana, N. (2021). Association between Breastfeeding Attitudes and Postpartum Depression among Mothers with Premature Infants during COVID-19 Pandemic.” *International Journal of Environmental Research and Public Health* 18(10915), 10915. <https://doi.org/10.3390/IJERPH182010915>
22. 18(10915), 10915. <https://doi.org/10.3390/IJERPH182010915>
23. 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, 2–7. <https://doi.org/10.1186/1746-4358-6-4>
24. Draman, N., Mohamad, N., Yusoff, H. M., & Muhamad, R. (2017). The Decision of Breastfeeding Practices Among Parents Attending Primary Health Care Facilities in Suburban Malaysia. *Journal of Taibah University Medical Sciences* 12(5), 412–417. <https://doi.org/10.1016/J.JTUMED.2017.05.005>
25. Muda, S., Aung, K. T., & Ibrahim, A. F. (2016). Breast Feeding Issue : A Study on Factors Affecting Termination of Breastfeeding among Working Mothers 6(December), 257–263.
26. Musa, M. W., Mardiana, W., Musa, W., & Misnan, N. (2017). Breastfeeding Facilities Policy at Work: Between the Cup and Lip. *J. Appl. Environ. Biol. Sci*, 7(11), 110–114.
27. Foong, S. C., Tan, M. L., Foong, W. C., Ho, J. J., & Rahim, F. F. (2021). Comparing Breastfeeding Experiences Between Mothers Spending The Traditional Chinese Confinement Period in A Confinement Centre and Those Staying At Home: A Cohort Study. *International Breastfeeding Journal*, 16(1), 1–9. <https://doi.org/10.1186/S13006-020-00353-1>
28. Hanin Hamjah, S., Che Abdul Rahim, N., Muhammad Hashim, N., Bahari, N., Mohd Kusrin, Z., Abdul Majid, L., Saidon, R., & Illias, M. Z. (2022). A Quantitative Study on Muslim Milk Mother’s Understanding of The Islamic Concept of Wet Nursing. *PLoS ONE*, 17(5), e0265592. <https://doi.org/10.1371/JOURNAL.PONE.0265592>
29. Mohamad Pilus, F., Ahmad, N., Mohd Zulkefli, N. A., & Mohd Shukri, N. H. (2022). Effect of Face-to-Face and WhatsApp Communication of a Theory-Based Health Education Intervention on Breastfeeding Self-Efficacy (SeBF Intervention): Cluster Randomized Controlled Field Trial. *JMIR MHealth and UHealth*, 10(9), e31996. <https://doi.org/10.2196/31996>
30. Ismail, T. A. T., Muda, W. M. W., & Bakar, M. I. (2014). Intention Of Pregnant Women to Exclusively Breastfeed Their Infants: The Role Of Beliefs In The Theory of Planned Behaviour. *Journal of Child Health Care*, 18(2), 123–132. <https://doi.org/10.1177/1367493512473857>
31. Muzaini, C., Muda, C., Kesihatan, J., Perlis, N., Alina, T., Ismail, T., Jalil, R., Hairon, S., Muda, C. ', Rohana, A. J., Suhaily, M. H., Zaharah, S., & Nazirah, J. (2016). Development and Validation of The Malay Version Knowledge And Attitude Questionnaire On Breastfeeding Among Postpartum Mothers in The Northeast Region of Peninsular Malaysia. <https://www.researchgate.net/publication/316474896>
32. Lee, Y. K., Wattanapisit, A., Ng, C. J., Boey, C. C. M., Ahmad Kamar, A., Choo, Y. M., Hong, J. S. S., Cheah, F. C., Tang, S. F., Poh, B. K., Chongviriyaphan, N., Siwarom, S., Visuthranukul, C., & Koletzko, B. (2022). Tailoring An Online Breastfeeding Course for Southeast Asian Paediatric Trainees- A Qualitative Study of User Experience From Malaysia and Thailand. *BMC Medical Education*, 22(1), 1–10. <https://doi.org/10.1186/S12909-022-03284-Z>
33. Sulaiman, Z., Mohamad, N., Ismail, T. A. T., Johari, N., & Hussain, N. H. N. (2016). Infant Feeding Concerns in Times of Natural Disaster: Lessons Learned from The 2014 Flood in Kelantan, Malaysia. *Asia Pacific Journal of Clinical Nutrition*, 25(3), 625–630. <https://doi.org/10.6133/apjcn.092015.08>

34. Kendall Cox, & Cathy Carothers. (2009). Breastfeeding: A Vital Emergency Response Are You Ready? www.ilca.org.
35. Naylor, A. (2009). Breastfeeding: A Vital Emergency Response - Are You Ready? Retrieved from https://www.worldbreastfeedingweek.net/wbw2009/images/english_2009actionfolder.pdf
36. WHO/UNICEF. (1981). International Code for marketing breastmilk substitutes. Retrieved from <https://iris.who.int/bitstream/handle/10665/254911/WHO-NMH-NHD-17.1-eng.pdf>
37. Ministry of Health Malaysia. (2008). Annual Report Ministry of Health Malaysia 2008. Ministry of Health Malaysia
38. Ministry of Health. (2020). Annual Report Ministry of Health 2020. https://www.moh.gov.my/moh/resources/Penerbitan/Penerbitan%20Utama/ANNUAL%20REPORT/Annual_Report_MOH_2020.pdf
39. UNICEF & WHO. (2019). Global Breastfeeding Scorecard, 2019: Increasing Commitment to Breastfeeding Through Funding and Improved Policies and Programmes. Lancet Publishing Group.
40. World Health Organization. (2020). Marketing of Breast-milk Substitutes: National Implementation of the International Code. Status Report 2020.
41. WHO. (1989b). Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services. Retrieved from <https://iris.who.int/bitstream/handle/10665/39679/9241561300.pdf>
42. Ministry of Health Malaysia. (2016). Annual Report Ministry of Health Malaysia 2016. Retrieved from https://www.moh.gov.my/moh/resources/Penerbitan/Penerbitan%20Utama/ANNUAL%20REPORT/Annual_Report_MoH_2016_compressed.pdf
43. Ministry of Health Malaysia. (2018). Annual Report Ministry of Health Malaysia 2018. Retrieved from <https://www.moh.gov.my/moh/resources/Penerbitan/Penerbitan%20Utama/ANNUAL%20REPORT/ANNUAL%20REPORT%202018.pdf>
44. Bernama. (2021, 17 Sept). MOH Targets 20% Of Private Hospitals Recognised As Baby-Friendly Hospitals By 2025. <https://themalaysianreserve.com/2021/09/17/moh-targets-20-of-private-hospitals-recognised-as-baby-friendly-hospitals-by-2025/>
45. Saddki, N., Mohamad, N., Johar, N., Alina Tengku Ismail, T., & Sulaiman, Z. (2022). Determinants of Non-Exclusive Breastfeeding Practice During The First 6 Months After an Elective Caesarean Birth: A Prospective Cohort Study. *International Breastfeeding Journal*, 17(1), 1–9. <https://doi.org/10.1186/S13006-022-00475-8>
46. Tengku Alina, T. I., Wan Abdul Manan, W. M. Zaharah, S., Rohana, A. J., & Nik Normanieza, N. M. (2012). Perceptions and Practice Of Exclusive Breastfeeding Among Malay Women in Kelantan, Malaysia: A Qualitative Approach. *Malaysian Journal of Nutrition*, 18(1), 15–25