Universal Journal of Public Health 12(2): 228-239, 2024 http://www.hrpub.org
DOI: 10.13189/ujph.2024.120206

Experiences and Barriers Related to Breastfeeding among Nigeria Immigrant Mothers Living in Kuala Lumpur Malaysia - A Qualitative Study

Bolarinwa Balikis Omoyemi[1], Ong Swee Leong[2], Khatijah Lim Abdullah[3], Intan Suhana Munira Binti Mat Azmi[4], Soh Kim Lam[5], Soh Kim Geok[6], Zakariyah Ummulkhair Omolabake[7]

[1]Faculty of Medicine, Universiti Sultan Zainal Abidin, Malaysia
[2]School of Nursing, Faculty of Medicine, Universiti Sultan Zainal Abidin, Malaysia
[3]Department of Nursing, Faculty of Medical and Life Sciences, Sunway University, Malaysia
[4]Department of Community Medicine, Faculty of Medicine, Medical Campus, Universiti Sultan Zainal Abidin, Malaysia
[5]Department of Nursing and Rehabilitation, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Malaysia
[6]Department of Sports Studies, Faculty of Education, Universiti Putra Malaysia, Malaysia
[7]Knowledge International University (KIU), Riyadh, Saudi Arabic

Received December 20, 2023; Revised February 19, 2024; Accepted March 19, 2024

Cite This Paper in the Following Citation Styles

***(a):** [1] Bolarinwa Balikis Omoyemi, Ong Swee Leong, Khatijah Lim Abdullah, Intan Suhana Munira Binti Mat Azmi, Soh Kim Lam, Soh Kim Geok, Zakariyah Ummulkhair Omolabake , "Experiences and Barriers Related to Breastfeeding among Nigeria Immigrant Mothers Living in Kuala Lumpur Malaysia - A Qualitative Study," Universal Journal of Public Health, Vol. 12, No. 2, pp. 228 - 239, 2024. DOI: 10.13189/ujph.2024.120206.*

***(b):** Bolarinwa Balikis Omoyemi, Ong Swee Leong, Khatijah Lim Abdullah, Intan Suhana Munira Binti Mat Azmi, Soh Kim Lam, Soh Kim Geok, Zakariyah Ummulkhair Omolabake (2024). Experiences and Barriers Related to Breastfeeding among Nigeria Immigrant Mothers Living in Kuala Lumpur Malaysia - A Qualitative Study. Universal Journal of Public Health, 12(2), 228 - 239. DOI: 10.13189/ujph.2024.120206.*

Copyright©2024 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

Abstract **Background:** Breastfeeding plays a crucial role in promoting optimal health and development for infants. However, immigrant populations often encounter unique challenges that can hinder successful breastfeeding practices, such as language barriers, lack of social support, and unfamiliarity with healthcare systems. Despite this pressing issue, limited research has been conducted on the specific experiences and barriers faced by immigrant mothers in Malaysia, particularly those originating from Nigeria. **Objectives:** In this research, we conducted a qualitative study to explore the experiences and barriers related to breastfeeding among Nigerian immigrant mothers residing in Kuala Lumpur, Malaysia. **Methods:** A descriptive qualitative approach was used to explore the in-depth experiences of mothers using semi-structured interview guide through purposive sampling. Face to face interview was conducted at the home of the participant (n=12). The interview was recorded, transcribed, and analyzed using induced content analysis. **Results:** Our study sample comprised 12 mothers aged between 17 and 45 years. Thematic analysis of the interviews revealed 2 primary themes: breastfeeding practices and barriers to breastfeeding. Within these themes, we identified 11 sub-themes, encompassing aspects such as importance of breastfeeding initiation, duration, exclusivity, socio-economic factors, language barriers, lack of support, limited knowledge, postpartum stress, feelings of embarrassment, and misconceptions. **Conclusions:** Our findings underscore the significant impact of breastfeeding barriers on the practices of Nigerian immigrant mothers in Malaysia. We recommend that healthcare professionals and relevant stakeholders extend support to this population, including the provision of affordable and accessible healthcare services, as well as the availability of trained interpreters to overcome language barriers. These insights can guide the development of targeted interventions aimed at improving breastfeeding rates and fostering the overall well-being of immigrant mothers and their infants.

Keywords Barriers, Breastfeeding, Immigrant,

Mothers, Nigeria, Practices, Qualitative

1. Background

Breastfeeding is critical for infant health and development, and the World Health Organization recommends exclusive breastfeeding for the first six months of life, followed by the introduction of nutritious complementary foods and continued breastfeeding up to two years or beyond [1]. Despite this recommendation, exclusive breastfeeding rates in Malaysia remain below the target of 50%, with only around 40% of infants being breastfed exclusively for the first six months [2].

Immigrant populations may face additional challenges in achieving successful breastfeeding due to factors such as migration stress, isolation and lack of social support [3]. Research has shown that migration stress, anxiety of birthing in a new environment coupled with a lack of social support can all contribute to mental health issues among immigrants [4], [5]. The process of migration itself can be incredibly stressful, as individuals leave behind familiar surroundings, cultural norms, and social networks. These challenges may be further compounded by language barriers and cultural differences, which hinder immigrants' access to healthcare services and can exacerbate existing mental health conditions [6], [7].

Although, there are few studies that highlighted the challenges faced by immigrant population (male and female) in Malaysia in relation to health, however majority of these studies were conducted among refugees, asylum seekers and foreign workers, the barriers related to infant feeding practices were not within the scopes of these studies [8], [9]. The study conducted by Obilaonu & Mohammad 2017 among Nigeria immigrant population in Malaysia only investigated the financial well-being of the population [10]. Another study conducted by Adullahi Umar 2014, among Nigeria students (male and female) also highlighted financial challenge, social & cultural adjustment, separation from family as well as stigmatization as part of challenges faced by Nigeria immigrant population [11]. However, the challenging aspect of breastfeeding practices and how it can affect the whole process of immigrant mother's infant feeding experiences is yet to be investigated.

Despite the significance of these challenges, there is a gap in research on this specific population and their breastfeeding experiences in the Malaysia context. Nigeria is one of the largest source countries for international students in Malaysia, with approximately 4.6 thousand students enrolled in 2020 [12]. Nigerian immigrant mothers migrate to Malaysia for various reasons such as education or accompanying their spouses. However, Nigerian immigrant mothers often face unique difficulties due to factors such as their population size, limited support networks, and inadequate knowledge surrounding breastfeeding. As such, investigating the experiences and barriers faced by this vulnerable population is of utmost importance. This study was part of the larger study, effectiveness of breastfeeding education intervention program in improving breastfeeding knowledge, beliefs, infant feeding practices and maternal stress among Nigerian immigrant mothers living in Kuala Lumpur Malaysia. Thus, our study aimed to explore the breastfeeding experiences and barriers related to breastfeeding among Nigerian immigrant mothers living in Kuala Lumpur, Malaysia. We conducted a qualitative study that identified the breastfeeding practices and barriers faced by this specific population, with the objective of planning and implementing targeted and effective interventions and support systems for this population. By understanding the distinct challenges faced by immigrant mothers in Malaysia context, healthcare providers and various stakeholders can strive to enhance breastfeeding rates and ultimately improve the infants' health outcomes within this vulnerable population.

2. Method

In-depth face-to-face semi-structured interviews were conducted to gain insight into the experiences of Nigerian mothers residing in Kuala Lumpur Malaysia. The one-on-one interview took place between March 2023 and April 2023. The purpose of the study as well as confidentiality were explained to the participants and informed consent that clearly explained participant's voluntary participation and their legal right was obtained from each participant before the commencement of the interview. This qualitative study was carried out following the Consolidated Criteria for Reporting Qualitative Research (COREQ) that covers the reporting of qualitative studies using interviews and was developed to ensure explicit and comprehensive reporting of qualitative research [13].

Participants

The study participants were recruited through purposive sampling on a voluntary basis via Nigeria student WhatsApp groups, the African market situated at Chowkit Kuala-Lumpur and Muslim Friday prayer gathering. Eligible participants were women within the reproductive age range of 17 to 45 years, who had given birth to at least one child in Malaysia. Additionally, their child needed to be between six months to five years old and they needed to be residing in Kuala Lumpur during the study period. Women whose children were less than six months or above five years, whose children had feeding difficulties (such as cleft palate) and who were not residing in Kuala Lumpur at the time of the study were exempted. Personal meetings were conducted to establish a rapport with potential participants and ensure familiarity. All mothers who met

the inclusion criteria and expressed willingness to participate were invited through WhatsApp message, telephone calls or one-on-one meeting. Initially, 35 Nigerian mothers agreed to participate in the study while 28 met the inclusion criteria. Two (2) mothers declined to participate while five (5) cited busy schedules or no time to participate. Another three (3) mothers travelled back to their home country. A total number of 18 participants were later recruited, however, the interview ceased at the 12th participant when the data collected demonstrated recurring themes and after collaborative agreement among researchers affirming data saturation [14], [15]. Face to face interviews were conducted once for all the participants except for two participants due to sound interference during recording of the interviews. The second interview was then conducted for these two participants for clarification. Ultimately, the number of participants' interview reached twelve (12) based on saturation point. The interview duration was within 25 to 55 minutes.

Setting and Data Collection

Interviews were conducted at the home of the mothers in order to ensure privacy and maintain a comfortable environment [16]. Socio demographic data was obtained, and interview was stopped once the saturation point was reached on the twelfth participant. The saturation point was determined when the participants repeated the same answer to the research question. The interviews were conducted by the author, BBO, a female doctoral student. The interview was conducted in both English and Yoruba (the participant's mother language) and the author received intensive training in qualitative research. The second author - OSL - is a registered midwifery and neonatal nurse with research experience in lactation and patient care and the third author KLA- is also a registered midwifery and qualitative research expert. OSL and KLA provided guidance to BBO in development, analysis, and implementation of the study. The interview lasted between 25 to 55 minutes and participant's permission was obtained to audio- record the interview. Field note was utilized for the purpose of verification, memos, body gestures and observations. The audio record was transcribed immediately to capture all the body gestures and salient points. The interview transcript was given to the participant for confirmation before coding. A semi-structured interview guide consisting of open-ended questions developed by the research panels (authors BBO, OSL, KLA, ISM, SKL and SKG) who had training and experience in qualitative research and reviewed by some Nigeria immigrant mothers who gave birth in Malaysia but did not participate in the study was utilized to guide the interview, refer to Table 1 for the open-ended questions used to guide this study.

Table 1. Interview guide

Interview guide
How many children did you deliver here?
How often did you attend antenatal checkup?
Have you ever skipped antenatal checkup? If yes, what were the reasons for skipping antenatal class?
Are the breastfeeding materials available at the clinic accessible?
Was the information provided by healthcare professional during antenatal checkup understandable & helpful?
How was your labour experience/s?
When did you initiate breastfeeding your baby after delivery?
How long did you breastfeed your child or intend to breastfeed?
What do you understand by exclusive breastfeeding?
What are the advantages of breastfeeding?
Do you think breast milk alone should be given to baby for the first six months of life
In your opinion, why are water, juice, herbal drink, and pap (corn puddy) given to baby before six months.
Did you feel that you received necessary information needed about breastfeeding?
What difficulties did you experience during breastfeeding and how did you solve them?
Did you have any difficulties with healthcare professional in resolving your doubt/concern?
In your opinion, what are the barriers that discourage you or other women to maintain breastfeeding for longer duration?
Can you breastfeed your child in public? If not, can you explain why you cannot breastfeed in a public
Did you express breastmilk for your child?
How do you store expressed breastmilk?
What family do you have here?
Who provided support for you?
What role does healthcare professional play in your breastfeeding and infant nurturing experiences?
How did you feel about your breastfeeding experience?
Did anyone discourage breastfeeding?
What support would you have appreciated?
Is there anything else you like us to know?

Note: Sources: Self developed

Data Analysis

The recorded interviews were analysed using an inductive content analysis, which involves a process of abstraction to minimize and group the data so that researchers could answer the study questions using concepts, categories or themes [17]. The interviews were transcribed verbatim in English, while interviews conducted in Yoruba language were transcribed in Yoruba. The emerged themes and sub-themes were generated and later translated into English. The translation was compared and discussed with another translator to ensure accuracy. Thematic analysis was carried out by BBO and ZUO following the recommended guidelines of Braun & Clarke [18]. The thematic analysis was performed by listening and re-listening carefully to the recorded interviews, the audio recording was then transcribed verbatim by typing directly into the computer. The authors then familiarized themselves with the transcript by carefully reading them to generate initial code, phrases or sentences that fitted a particular code and was labelled using a hierarchy structure for interpretation. The emerging themes were identified, then the identified themes were carefully reviewed and emerged sub-themes and relationships among categories were used to describe the phenomenon being studied upon agreement and discussion between BBO and ZOU. The second and third researchers (OSL and KLA) independently compared and thoroughly examined the analysis. The results were presented with verbatim quotes from the respondents after thorough verification and accuracy. The interviews conducted in Yoruba were analysed in Yoruba and later translated into English. The quotes were reviewed by a native translator who was not directly involved with data collection.

Methodological rigor or trustworthiness is an important consideration in evaluating findings of qualitative research. Lincoln and Guba's criteria were used to establish the trustworthiness of this research [19]. Two authors from this research team triangulated all the data collected to enhance conformability, consistency, and validity of the study findings. Meetings were arranged with the two authors to discuss and question interpretation of the data to ensure its credibility. The results were discussed among team members for any possible error or bias, and the findings of this study were also shared with the participants to check for accuracy and interpretations of the data.

Ethical Consideration

Ethical approval for this study was received from Medical Research Ethics Committee of Unversiti Sultan Zainal Abidin Terengganu Malaysia (Ref No: UniSZA/UHREC/2023474). The written informed consent was obtained from all the study participants before the interviews. An information sheet about the study purpose, procedure, affiliation, benefits, and risk was given to all the participants. Privacy and confidentiality of the data were ensured by assigning pseudo name with omission of identifiable information, and individual right to refuse to answer the questions or participate was clearly communicated before the interview. All the study participants were informed verbally about the purpose, procedure, and benefit of the study during the first meeting with the researcher, they were assured that there will be no harm and all information collected will be treated with confidentiality. To ensure a neutral and comfortable environment, the interview was conducted at the home of the participants. While conducting the interview the individual right to privacy was observed and they were informed they can stop the interview anytime whenever they feel like doing so.

3. Results

Twelve mothers with the age ranges between 17 to 45 years were interviewed. Five (5) mothers had three (3) children at the time of interview, four (4) mothers had two (2) children and three (3) mothers had only one (1) child. Mothers had lived in Malaysia between 2 to 9 years. Majority of the mothers from this study had a high level of education; half of the participants had attained a third level of education, three mothers had second degree while others had attended secondary school. One third of the participants were stay at home mothers and others were either students (pursuing their first, second or third degree) or self-employed or had professional jobs, refer to table 2.

Table 2. Socio-demographic characteristics of mothers

Participant	Age (years)	Education attainment	No of children born in Malaysia	Employment status	Length of stay in Malaysia (years)
NM1	26-35	Postgraduate	2	Student	4
NM2	26-35	Postgraduate	1	Student	3
NM3	17-25	Higher school	2	Teacher	4
NM4	26-35	Diploma	1	Stay at home	3
NM5	>35	Higher school	3	Self employed	8
NM6	26-35	Secondary	1	Stay at home	5
NM7	26-35	Postgraduate	1	Student	2
NM8	>35	Higher school	3	Self employed	6
NM9	17-25	Higher school	2	Student	7
NM10	26-35	Secondary	4	Stay at home	9
NM11	>36	Secondary	2	Self employed	7
NM12	26-35	Diploma	3	Student	8

Note: Sources: Self developed

Table 3. Themes and Sub-themes

Themes	Sub-themes
Infant feeding practices	Importance of breastfeeding Breastfeeding Initiation Breastfeeding duration Exclusivity of breastfeeding
Breastfeeding barriers	Language barrier Lack of support: Healthcare professional, family & society Socio-economic condition: Late booking/skipping of antenatal Poor knowledge Postpartum stress: Pain, fatigue, overwhelming house choir, loneliness Social pressure & embarrassment Wrong belief

Note: Sources: Self developed

Infant Feeding Practices

The result of the data analysis found two main themes and eleven sub-themes, and their interpretation were presented by the researcher (Table 3).

Importance of Breastfeeding

All the participants perceived breastfeeding to be essential to both child and mother's health which align with existing literature. They considered that breastmilk is very important for the brain development and prevents early childhood sickness. Through the process of breastfeeding, mothers can easily lose excess weight gained during pregnancy and serves a means of contraception as mentioned below.

…" *Breastfeeding is good for both mother and child; it helps to lose excess pregnancy weight and give antibodies to the babies against diseases" … (NM1).*

…" *Breastfeeding has numerous benefits for the child's health" … (She pauses), it helps in the brain development of a child, it will help child to be intelligent and prevent the child from falling sick" … (NM 7).*

…" *Breastfeeding is beneficial to both mother and child; it will help the baby to grow well, and I heard that it serves as a good means of contraception for the mother too" … (NM 2.).*

Breastfeeding Initiation

Majority of the participants (8) met the WHO recommended standard for breastfeeding initiation with 30 minutes to 1 hour of delivery. Mothers from the study expressed that they initiated breastfeeding immediately after birth. Only four participants initiated breastfeeding the second day because of cesarean section and other birth complications as quoted below.

…"*I started breastfeeding my child immediately after birth, hum… (trying to remember), like 30minutes after birth" … (NM 3).*

…" *I initiated breastfeeding the second day after I gave birth because I underwent CS and my baby was under monitoring" … (NM 4).*

…" *Breastfeeding initiation is early here in Malaysia!!! (With surprised facial look), I was quite surprised when the nurse brought my baby to me so that I can breastfeed him, like 30 minutes after I delivered. I delivered two kids at my home country, and I never experienced such treatment" … (NM 7)*

Breastfeeding Duration

Only four (4) participants out of twelve participants breastfed or intended to breastfeed their child up to two years, while another four (4) out of the mothers intended to breastfeed or breastfed their child for period of 13-20 months, two (2) mothers breastfed for 1 year and 2 mothers expressed that they only breastfed their child for the period of 7 to 8 months.

…" *Actually, I want to breastfeed my child for two years, I believed by doing so, she will be stronger, healthier and her immunity will be boosted" … (NM 7).*

…" *I breastfed my child for 15 months when I discovered I was pregnant coupled with study" … (NM 1).*

…" *I want to breastfeed her for 8 months" (she pauses), "you know that it is not really compulsory for every mother to breastfeed for a long time especially when you have other things to do" … (NM 11).*

… *"You know... (She smiles), is not easy to breastfeed, especially when you are outside and baby is crying, so I stopped breastfeeding when my baby was one year" … (NM 12).*

Exclusivity of Breastfeeding

Seven (7) of twelve participants practiced exclusive breastfeeding for the period of six months while the remaining five (5) participants gave water and other baby food together with breast milk as shown below.

…" *I exclusively breastfed my baby without adding anything, I believe exclusive breastfeeding will prevent diarrhea" … (NM 1).*

…" *I used to do exclusive breastfeeding for all my children because it will help them when they start having teeth and also prevent them from having diseases because the breast milk is rich in nutrient especially the colostrum" … (NM 7).*

…" *Am not really into exclusive breastfeeding, I feel like the baby needs water especially with the heat of Malaysia" … (NM 6).*

…" *Every human-being needs water to survive, although some of my friends said breastmilk alone is ok for baby for six months" (She purse,) but I used to give my baby water and some medicinal herb from my country to make her stronger" … (NM 11).*

Barriers Related to Breastfeeding

Lack of support (healthcare professional, family, and society)

The mothers expressed they experienced insensitive treatment from some healthcare providers as some healthcare professionals played a major role in influencing the mother's decision to opt for formula feeding. Some mothers expressed lack of trust, suggesting that some of the healthcare professional needs to update their knowledge.

…" *Exclusive breastfeeding is ideal for the first six month of life, but some of the healthcare professional had little or no knowledge about how breastfeeding works, it is quite pathetic when they encourage and promote a brand of formula to the mothers. Arguing with me, looking at me like I want to teach them their job" … (NM 7).*

…" *My husband does not support exclusive breastfeeding, always saying baby needs water and other food for weight gain, if only he was supportive, I wouldn't have stopped breastfeeding when my baby was 16 months" … (NM10).*

…" *The nurses encouraged me to give my baby formula after delivery, I was told the breast milk was not enough" …. (NM 2).*

.. "*I had to go to the hospital few days after delivery for checkup (due caesarian delivery), despite pleading with the staff for home checkup due to the pain, .I didn't have choices than to give my baby the free formula. I received on our way to the hospital, because he was crying and I couldn't breastfeed in a public transport"… (NM 12).*

Language Barrier

Language barrier as well as poor communication between healthcare providers and immigrant mothers pose a major threat to perinatal usage by the mothers.

…" *As a first-time mother, I expected the nurses to at least explain some few things concerning breastfeeding, infant nurturing, common lactation problem and how to solve them but to my surprise, none of the healthcare professionals mentioned anything related to these during my antenatal class"… (NM 4).*

…" *Communication is a major problem here, the healthcare workers do not understand English language, when you ask question as an expecting mother, some of the nurses will just be laughing, and you just have to figure it out yourself (online) or ask a friend or ask elders back home. She signs" … (NM 2).*

…" *I had one miscarriage and lost my first baby at three months at my home country, so I don't want to live any stone untouched while am in Malaysia especially something that needs to do the health of my baby but unfortunately, most of the breastfeeding materials at the clinic were written in Malay, even the language barrier between me and nurses. I didn't even bother again to ask questions (she shakes her head), is a bit difficult" …. (NM 7).*

Socio-economic Condition (Skipping of Ante-natal class)

Economic difficulties were expressed by the mothers as it requires a tangible amount of money for medical checkup which makes the mothers either skip antenatal classes or register late.

…" *Despite paying huge amount of money for medical service, you still did not get the best, what is the purpose then" … (NM 1).*

…" *I started attending antenatal class lately… (Trying to remember), when I was almost seven months pregnant, you know we are foreigners. It is not easy for us, medical services are very expensive, there is huge gap between foreigners and locals when it comes to medical bill, we just have to compromise sometimes" … (NM 11).*

…" *Skipping antenatal classes is a major problem among immigrant women like us, every mother wants the best for their child, no mother wants to risk her health and that of her unborn child, but what to do? When it is very expensive, and you don't have the means especially during the late pregnancy when you must go to clinic every week or every two weeks" … (NM 8).*

Poor Knowledge

Lack of breastfeeding knowledge was found to be a dominant barrier among some mothers. Some of the participants do not have adequate knowledge on how breastfeeding works, how to express and store breastmilk as well as how to solve common lactation problems due to limited access to breastfeeding education and support.

…" *I had to stop breastfeeding for some days due to sore nipple, if only I had the proper knowledge, then, I wouldn't have stopped" … (NM 4).*

…" *I would appreciate if someone explained to me how to express and store breastmilk for future use. I was not lactating as expected (shortage of breast milk) when my child was three months, whereas I had excess breastmilk when I newly delivered, just recently found out that breastmilk can be stored in a freezer for up to 1year, it is quite painful I wasted my breastmilk then due to lack of knowledge" … (NM 3).*

…" *I experienced a lot of pain after delivery as 1 delivered through CS and my baby was with nurses. I started having severe pain due to breast engorgement, my breast was full, hard, and I also had severe headache, after three days doctor told nurses to check my breast, I cried a lot before I could express the milk. It is high time we immigrants start having support group where infant nurturing knowledge and lactation support can be provided to mothers especially new mums" … (NM1)*

Postpartum Stress (Pain, Fatigue, Overwhelming House Chores and Loneliness)

Mothers experienced stress due to pain from backaches, perineal pain, fatigue from overwhelming house chores, poor sleep, and loneliness because absence of family members and poor support from their partner which makes them want to stop breastfeeding. Loneliness at home with baby especially when their partner was not around makes them sad and uninterested in breastfeeding. Maternal tiredness due to overwhelming house chores makes them want to abandon breastfeeding to formula feeding.

…" *I was very sad and lonely, no family member to assist. I must depend on myself for everything, coupled with all the pains that come with the baby delivery can make one opt out of breastfeeding since there is an alternative" ... (NM 4)*

…" *Postpartum stress should be one of important topics that should be thought to mothers before delivery" most women have little or no knowledge about it, if not addressed, can lead to depression, and affect all processes of breastfeeding especially immigrant mothers like us" (she signs) …" (NM 6)*

…" *You have to cater for the baby at same time attend to the household choir, you hardly have enough time to sleep, you suffer from, backaches and other body pain...tell me how I will breastfeed very well in that situation" …. (NM 12)*

Social Pressure and Embarrassment

Social pressure from family members or friends as well as feeling of embarrassment of breastfeeding in public were among the barriers expressed by the mothers. Participants stated that family member tends to interfere with breastfeeding process due to inadequate information received from them making mothers not to practice exclusive breastfeeding or stopping breastfeeding before two years.

…" *My husband often encourages me to give water, corn gruel and medicinal herbs (concoction) to our baby when she was two months...Saying the breast milk alone is not enough for the first six months'… (NM 10).*

…" *I normally carried baby formula with me whenever am going out as I used to feel embarrassed to breastfeed in a public place" … (NM 2).*

…" *Many times, people used to question me...like. Are you still breastfeeding a child as big as this, she is old enough to live breastmilk, when are you going to stop breastfeeding your child, even my family at my home country are not helping at all, as they used to pressure me stop breastfeeding my child anytime, they call, this usually makes me frustrated and nervous"... (NM 8)*

Wrong Belief

One third of the mothers had incorrect breastfeeding beliefs such as breastmilk alone is not sufficient for the first six months of life, baby needs water to quench their thirst, given baby herbs can make him or her strong, and baby is not satisfied after breastfeeding. While insufficient breastmilk supply was presumed to be the dominant barrier

that makes some mothers stop breastfeeding and switch to formula feeding.

…"*Sometimes as a mother, one will be afraid of low milk supply, and this can make one stop breastfeeding and opt for formula feeding" … (NM 6)*

…"*Even though I have heard about exclusive breastfeeding, I feel baby needs water or fruit juice just like adult as he/she may be thirsty" … (NM 11)*

…"*My family sent some medicinal herbs which I use to give my newborn baby then, the herbs make them strong when you give them" (trying to remember the name of the herbs) … (NM10)*

4. Discussion

The present study utilized a qualitative approach to explore the breastfeeding practices of Nigerian mothers living in Malaysia. The findings align with existing literature, highlighting the lack of support from healthcare professionals as a significant barrier to breastfeeding [20], [21]. Mothers reported that insufficient support from both healthcare professionals and family members discouraged them from adhering to recommended breastfeeding practices [22]–[24]. Conflicting messages from healthcare staff and family members often led to a decrease in breastfeeding and an inclination towards formula feeding. Mothers shared their experiences of being encouraged to breastfeed, only to be provided with formula as part of delivery gifts, which created confusion about the best feeding option for their infants.

This study reported the role of healthcare workers such as nurses, midwives, and doctors as the main source of breastfeeding information to mothers, as such, provision of adequate breastfeeding education and information to mothers during antenatal clinic visit through demonstration, in cooperating breastfeeding interactive classes, showing breastfeeding related videos, providing education pamphlets can help to improve breastfeeding barriers [25]–[28]. Although studies have highlighted barriers to infant feeding education provided by healthcare professionals to immigrants mothers could be a result of differences in language, inaccurate or inadequate information on breastfeeding, high work load, and cultural differences leaving them unsure of how to respond to mothers' concerns [29]–[31]. This leads to negative experiences, such as dismissive responses to questions or doubts, inadequate care, or negative attitudes [20], [32]–[34]. Therefore, adequate, and continuous support should be provided to healthcare workers especially nurses to assist them in their health promotion roles as they are often burdened with multiple tasks.

When healthcare professionals are well-trained, mothers express a preferrence for their support and view it as crucial factor for successful breastfeeding [26], [30], [35]. In this particular setting, medical doctors were acknowledged as healthcare professionals who promoted and reinforced early initiation of breastfeeding by providing appropriate advice tailored to the mothers'specific needs [6], [32]. Studies suggest the need for continuing education for nurses and midwives providing breastfeeding support, where knowledge and attitudes, clinical practices and skills, and counseling were identified as the key concepts to be included in the education programs [35], [36]. Ensuring sustainability and fostering a resistance to change were found–to be crucial for the successful implementation of exclusive breastfeeding. Therefore, the development of continuous staff education programs addressing these issues is imperative [34], [37].

Lack of support and negative comments from partners and family members contributed to mothers choosing formula feeding or discontinuing breastfeeding. However, when partners were supportive, mothers felt encouraged to engage in exclusive breastfeeding or continue breastfeeding for longer duration [23], [38]. Nigerian immigrant mothers in Malaysia faced unique challenges regarding support from their partners and family members, influenced by cultural norms. The belief among some mothers and members of the family especially partners that breast milk alone is not sufficient for infant during the first six months of life due to arid environment was one of the major barriers to exclusive breastfeeding, and this belief was corroborated by several other studies that explored the social cultural determinant of exclusive breastfeeding [39]–[43]. Some of these beliefs were carried over from the immigrant's home country. Other harmful socio-cultural beliefs such as babies need herbal drink or food to make them strong, negative comments such as "baby is old enough to stop breastfeeding" and how can you be breastfeeding a child as old as this?" or lack of support undermined mothers' confidence and motivation. Conversely, studies have reported that partner's words of encouragement to new mum were a key strategy to improve breastfeeding practices [25], [26], [39], [40]. Therefore, partner's engagement by accompanying their wife to antenatal clinic should be encouraged. Since some partners usually accompany their wives to hospital during delivery, one-on-one counselling fostering importance of early breastfeeding initiation, exclusive and longer breastfeeding duration should be taught to husband. Increasing partner's knowledge about breastfeeding practices can promote positive social and cultural changes which can directly influence mother's attitude towards adhering recommended breastfeeding [39].

Language barriers were identified as a significant obstacle in breastfeeding education for both healthcare professionals and mothers [44]–[46]. In this study, language barriers were found to be the primary cause of communication difficulties and miscommunication, negatively impacting the quality of health services [7]. Mothers expressed struggles in comprehending breastfeeding materials provided at local clinics and faced challenges in effectively communicating with healthcare professionals due to language barriers. These difficulties

hindered their access to perinatal services, limiting their understanding and ability to make informed decisions. Overcoming language barriers through the provision of interpreters, multilingual resources, and culturally sensitive communication strategies is crucial to ensure effective breastfeeding support for immigrant mothers.

Late booking and skipping antenatal checkups due to medical costs and economic difficulties can have adverse effects on the health of pregnant women and infants [47]. Vulnerable populations, such as women with low socioeconomic status and migrants, are particularly susceptible to not booking or booking late for antenatal care and missing scheduled medical appointments [27], [48], [49] [50]. In this study, half of the participants reported registering late or skipping antenatal classes due to financial constraints [48]. Since, monitoring of pregnant women's health and that of their infants through antenatal appointments allow for early detection and management of potential complication, therefore, these findings highlight the importance of providing accessible and affordable antenatal care services to ensure the well-being of pregnant women and their infants.

Breastfeeding support groups were found to have a positive association with improvement in breastfeeding duration and exclusivity. Immigrant mothers from this study expressed greater demand for breastfeeding support groups during pre- and post-natal periods to enhance improvement in breastfeeding rates and provide solutions to common breastfeeding problems [51]–[53]. Breastfeeding support groups were found to positively impact breastfeeding duration and exclusivity among immigrant mothers in this study [8], [27], [48]. The participants expressed a strong desire for such support groups during the pre- and post-natal periods to promote breastfeeding rates and address common breastfeeding challenges.

Furthermore, the immigrant mothers in our study emphasized stress in the form of pain, loneliness, overwhelming household chores, sore nipples, and fatigue as obstacles that hinder successful breastfeeding. Discussion of the positive, as well as the challenging aspects of breastfeeding needs to be included in discussions with new mothers [20], [21], [34], [54]. This study implications can be a reference for policy makers, managements, and health providers, such as nurses, midwives, doctors, and health educators, in planning and designing breastfeeding support and intervention to improve breastfeeding experiences among immigrant mothers living in Malaysia. Lack of support from health care providers and family (wrong belief), language barrier, financial constraint and stress were among the major barriers revealed by our study. Therefore, the need for various stakeholders' involvement in resolving these issues identified might further promote early initiation, exclusivity, and longer duration of breastfeeding among immigrant mothers.

Strengths and Limitations

The strength of this study is that it provides valuable insights into the experiences and barriers faced by Nigerian mothers living in Kuala Lumpur, Malaysia, regarding breastfeeding. It fills a gap in the existing literature as there are limited or no qualitative reports in Malaysia specifically exploring the experiences and barriers related to breastfeeding among Nigerian mothers. However, no interview was conducted with immigrant mothers' partner which can strengthen the evidence of this study, further research is required to explore breastfeeding knowledge, beliefs, and support of the immigrant husbands. A small sample is another limitation in the transferability of the results but as the aim of using the qualitative approach is to gain in-depth insight into the experiences from the participant's perspective, i.e. the immigrant mothers' experiences on breastfeeding, however, the sample size is adequate due to the thickness and richness of the data obtained. The communication of the result from the interview conducted and analysed in Yoruba to English may affect our result which may be a possible limitation of this study. Furthermore, majority of the participants included in our study were highly educated; further research may focus on immigrant mothers with low level of education as the experience of this group of mothers may have been under-reported in our study.

5. Conclusions

In conclusion, this study highlights the experiences and challenges encountered by Nigerian immigrant mothers residing in Malaysia regarding breastfeeding. The study emphasizes the crucial role of family support, particularly the husband, in determining the success of breastfeeding. It also highlights the importance of healthcare professionals in providing appropriate support and education to empower mothers with the requisite knowledge for successful breastfeeding practices. The study emphasizes the importance of availability of healthcare professionals proficient in multiple languages to assist immigrant mothers throughout their breastfeeding journey. Consideration of socio-economic factors and offering affordable or subsidized breastfeeding support resources, such as lactation consultations can help reduce the breastfeeding barrier. Furthermore, establish culturally sensitive breastfeeding support groups or facilitate connections with existing community organizations to provide social support and knowledge sharing to mothers. Finally, prioritize comprehensive postpartum care, including addressing postpartum stressors and providing referrals to mental health services to support emotional well-being.

By implementing these recommendations, healthcare professionals can improve the breastfeeding experiences of Nigerian immigrant mothers, leading to better health

outcomes for both mothers and infants. Ultimately, this study underscores the need for increasing support and resources to ensure successful breastfeeding outcomes for immigrant mothers. The findings of this study may have implications beyond Malaysia and extend to Nigerian immigrant mothers in other countries. Ultimately the study's finding can serve as a valuable reference for healthcare providers, educators, researchers, and lecturers in tertiary institutions, helping them design new methods to support immigrant mothers that are living across the world.

Abbreviations

WHO: World Health Organization; UNICEF: United Nations Children's Fund, NM: Nigeria Mother, COREQ: Consolidated Criteria for Reporting Qualitative research.

Competing Interests

We declare that the work submitted is entirely our own and is not under consideration in any other journal. All authors have contributed towards the paper and have read and approved the final manuscript. We have no conflict of interest to declare.

Funding

This study receives no funding.

Acknowledgements

Special thanks to all mothers for their time and enthusiasm in taking part in this study.

REFERENCES

[1] WHO, "Exclusive breastfeeding for optimal growth, development and health of infants," *e-Library of Evidence for Nutrition Actions (eLENA)*. World Health Organization, pp. 1–3, 2019, Accessed: Nov. 14, 2021. [Online]. Available: http://www.who.int/elena/titles/exclusive_breastfeeding/en/.

[2] N. M. Shohaimi *et al.*, "Intention and practice on breastfeeding among pregnant mothers in Malaysia and factors associated with practice of exclusive breastfeeding: A cohort study," *PLoS One*, vol. 17, no. 1, Jan. 2022, doi: 10.1371/JOURNAL.PONE.0262401.

[3] I. U. Duru, "Examination of the Causes and Consequences of International Migration in Nigeria," *Asian Dev. Policy Rev.*, vol. 9, no. 4, pp. 180–193, Oct. 2021, doi: 10.18488/JOURNAL.107.2021.94.180.193.

[4] S. L. Ong *et al.*, "The effectiveness of a structured nursing intervention program on maternal stress and ability among mothers of premature infants in a neonatal intensive care unit," *J. Clin. Nurs.*, vol. 28, no. 3–4, pp. 641–649, Feb. 2019, doi: 10.1111/JOCN.14659.

[5] S. S. Hwang, J. Xi, Y. Cao, X. Feng, and X. Qiao, "Anticipation of Migration and Psychological Stress and the Three Gorges dam project, China," *Soc. Sci. Med.*, vol. 65, no. 5, p. 1012, Sep. 2007, doi: 10.1016/J.SOCSCIMED.2007.05.003.

[6] A. Bischoff and K. Denhaerynck, "What do language barriers cost? An exploratory study among asylum seekers in Switzerland," *BMC Health Serv. Res.*, vol. 10, 2010, doi: 10.1186/1472-6963-10-248.

[7] H. Al Shamsi, A. G. Almutairi, S. Al Mashrafi, and T. Al Kalbani, "Implications of Language Barriers for Healthcare: A Systematic Review," *Oman Med. J.*, vol. 35, no. 2, p. e122, Mar. 2020, doi: 10.5001/OMJ.2020.40.

[8] F. L. H. Chuah, S. T. Tan, J. Yeo, and H. Legido-Quigley, "The health needs and access barriers among refugees and asylum-seekers in Malaysia: A qualitative study," *Int. J. Equity Health*, vol. 17, no. 1, pp. 1–15, 2018, doi: 10.1186/s12939-018-0833-x.

[9] T. Loganathan, D. Rui, C. W. Ng, and N. S. Pocock, "Breaking down the barriers: Understanding migrant workers' access to healthcare in Malaysia," *PLoS One*, vol. 14, no. 7, pp. 1–24, 2019, doi: 10.1371/journal.pone.0218669.

[10] O. C. Chikezie and M. F. Sabri, "The Financial Well-Being of Nigerian Students in Universiti Putra Malaysia," *J. Educ. Soc. Sci.*, vol. 6, no. 2, pp. 287–294, 2017.

[11] A. Umar, N. Azlan, M. Noon, and M. Abdullahi, "Challenges confronting African students in Malaysia: A case of postgraduate Nigerian students at International Islamic University Malaysia (IIUM) Kuala Lampur," *academicjournals.org*, vol. 6, no. 9, pp. 161–168, 2014, doi: 10.5897/JASD2013.0269.

[12] KPT, "Statistik Pendidikan Tinggi 2020 : Kementerian Pengajian Tinggi," *Kementeri. Pengaj. Tinggi Malaysia*, pp. 47–59, 2021.

[13] A. Booth, K. Hannes, A. Harden, J. Noyes, J. Harris, and A. Tong, "COREQ (Consolidated Criteria for Reporting Qualitative Studies)," *Guidel. Report. Heal. Res. A User's Man.*, pp. 214–226, Jul. 2014, doi: 10.1002/9781118715598.CH21.

[14] G. Guest, A. Bunce, and L. Johnson, "How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability," *http://dx.doi.org/10.1177/1525822X05279903*, vol. 18, no. 1, pp. 59–82, Jul. 2016, doi: 10.1177/1525822X05279903.

[15] V. Braun and V. Clarke, "To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales," *Qualitative Research in Sport, Exercise and Health*, vol. 13, no. 2. Routledge, pp. 201–216, 2021, doi: 10.1080/2159676X.2019.1704846.

[16] C. MacDougall and E. Fudge, "Planning and recruiting the sample for focus groups and in-depth interviews," *Qual. Health Res.*, vol. 11, no. 1, pp. 117–126, Jan. 2001, doi: 10.1177/104973201129118975.

[17] D. F. Vears and L. Gillam, "Inductive content analysis: A guide for beginning qualitative researchers," *Focus Heal. Prof. Educ. A Multi-Professional J.*, vol. 23, no. 1, pp. 111–127, 2022, doi: 10.11157/fohpe.v23i1.544.

[18] V. Braun and V. Clarke, "Using thematic analysis in psychology," *Qual. Res. Psychol.*, vol. 3, no. 2, pp. 77–101, 2006, doi: 10.1191/1478088706QP063OA.

[19] E. G. Guba, "Criteria for assessing the trustworthiness of naturalistic inquiries," *Educ. Commun. Technol.*, vol. 29, no. 2, pp. 75–91, Jun. 1981, doi: 10.1007/BF02766777.

[20] B. Iglesias-Rosado and F. Leon-Larios, "Breastfeeding experiences of Latina migrants living in Spain: a qualitative descriptive study," *Int. Breastfeed. J.*, vol. 16, no. 1, pp. 1–9, Dec. 2021, doi: 10.1186/S13006-021-00423-Y/TABLES/3.

[21] Q. Jiang *et al.*, "Postnatal mental health, breastfeeding beliefs, and breastfeeding practices in rural China," *Int. Breastfeed. J.*, vol. 17, no. 1, Dec. 2022, doi: 10.1186/S13006-022-00504-6.

[22] I. Blixt, M. Johansson, I. Hildingsson, Z. Papoutsi, and C. Rubertsson, "Women's advice to healthcare professionals regarding breastfeeding: 'offer sensitive individualized breastfeeding support' - An interview study," *Int. Breastfeed. J.*, vol. 14, no. 1, Dec. 2019, doi: 10.1186/S13006-019-0247-4.

[23] S. Radzyminski and L. C. Callister, "Health Professionals' Attitudes and Beliefs About Breastfeeding," *J. Perinat. Educ.*, vol. 24, no. 2, pp. 102–109, 2015, doi: 10.1891/1058-1243.24.2.102.

[24] [24] V. Schmied, H. Olley, E. Burns, M. Duff, C. L. Dennis, and H. G. Dahlen, "Contradictions and conflict: A meta-ethnographic study of migrant women's experiences of breastfeeding in a new country," *BMC Pregnancy Childbirth*, vol. 12, Dec. 2012, doi: 10.1186/1471-2393-12-163.

[25] S. S. Piro and H. M. Ahmed, "Impacts of antenatal nursing interventions on mothers' breastfeeding self-efficacy: An experimental study," *BMC Pregnancy Childbirth*, vol. 20, no. 1, Jan. 2020, doi: 10.1186/S12884-019-2701-0.

[26] C. M. C. Muda, T. A. T. Ismail, R. A. Jalil, S. M. Hairon, Z. Sulaiman, and N. Johar, "Postnatal breastfeeding education at one week after childbirth: What are the effects?," *Women and Birth*, vol. 32, no. 2, pp. e243–e251, 2019, doi: 10.1016/j.wombi.2018.07.008.

[27] A. Ludwig *et al.*, "Are Social Status and Migration Background Associated with Utilization of Non-medical Antenatal Care? Analyses from Two German Studies," *Matern. Child Health J.*, vol. 24, no. 7, p. 943, Jul. 2020, doi: 10.1007/S10995-020-02937-Z.

[28] S. Meedya, K. Fahy, and A. Kable, "Factors that positively influence breastfeeding duration to 6 months: A literature review," *Women and Birth*, vol. 23, no. 4, pp. 135–145, 2010, doi: 10.1016/j.wombi.2010.02.002.

[29] D. Marks and R. O'Connor, "Health professionals' attitudes towards the promotion of breastfeeding," *Br. J. Midwifery*, vol. 23, no. 1, pp. 50–58, Jan. 2015, doi: 10.12968/BJOM.2015.23.1.50.

[30] A. Gavine, S. Macgillivray, M. J. Renfrew, L. Siebelt, H. Haggi, and A. Mcfadden, "Education and training of healthcare staff in the knowledge, attitudes and skills needed to work effectively with breastfeeding women : a systematic review," *Int. Breastfeed. J.*, pp. 1–10, 2017, doi: 10.1186/s13006-016-0097-2.

[31] M. Čatipović, Z. Puharić, and L. Golić, "Behavior, Attitudes and Knowledge of Healthcare Workers About Breastfeeding," *Paediatr. Croat.*, vol. 66, no. 3–4, pp. 51–60, 2022, doi: 10.13112/PC.2022.10.

[32] A. Scott, M. Shreve, B. Ayers, and P. A. McElfish, "Breast-feeding perceptions, beliefs and experiences of Marshallese migrants: an exploratory study," *Public Health Nutr.*, vol. 19, no. 16, p. 3007, Nov. 2016, doi: 10.1017/S1368980016001221.

[33] M. Wandel, L. Terragni, C. Nguyen, J. Lyngstad, M. Amundsen, and M. de paoli, "Challenges in child feeding practices among immigrant mothers living in Norway," *Eur. J. Public Health*, vol. 26, no. suppl_1, 2016, doi: 10.1093/eurpub/ckw169.024.

[34] K. M. Wood and K. Qureshi, "Facilitators and Barriers for Successful Breastfeeding Among Migrant Chuukese Mothers on Guam:," vol. 3, p. 237796081668890, Jan. 2017, doi: 10.1177/2377960816688909.

[35] K. N. Ward and J. P. Byrne, "A critical review of the impact of continuing breastfeeding education provided to nurses and midwives," *J. Hum. Lact.*, vol. 27, no. 4, pp. 381–393, Nov. 2011, doi: 10.1177/0890334411411052.

[36] J. Nichols, N. S. Schutte, R. F. Brown, C. L. Dennis, and I. Price, "The impact of a self-efficacy intervention on short-term breast-feeding outcomes," *Heal. Educ. Behav.*, vol. 36, no. 2, pp. 250–258, Apr. 2009, doi: 10.1177/1090198107303362.

[37] N. K. Wood, N. F. Woods, S. T. Blackburn, and E. A. Sanders, "Interventions that enhance breastfeeding initiation, duration, and exclusivity," *MCN Am. J. Matern. Nurs.*, vol. 41, no. 5, pp. 299–307, Aug. 2016, doi: 10.1097/NMC.0000000000000264.

[38] K. Snyder, E. Hulse, H. Dingman, A. Cantrell, C. Hanson, and D. Dinkel, "Examining supports and barriers to breastfeeding through a socio-ecological lens: a qualitative study," *Int. Breastfeed. J.*, vol. 16, no. 1, Dec. 2021, doi: 10.1186/S13006-021-00401-4.

[39] F. A. Ogbo *et al.*, "Breastfeeding in the community—how can partners/fathers help? A systematic review," *Int. J. Environ. Res. Public Health*, vol. 17, no. 2, 2020, doi: 10.3390/ijerph17020413.

[40] E. S. Seabela, P. Modjadji, and K. E. Mokwena, "Facilitators and barriers associated with breastfeeding among mothers attending primary healthcare facilities in Mpumalanga, South Africa," *Front. Nutr.*, vol. 10, 2023, doi: 10.3389/fnut.2023.1062817.

[41] O. M. Agunbiade and O. V. Ogunleye, "Constraints to exclusive breastfeeding practice among breastfeeding mothers in Southwest Nigeria: Implications for scaling up," *Int. Breastfeed. J.*, vol. 7, Apr. 2012, doi: 10.1186/1746-4358-7-5.

[42] K. Y. W. Lok, D. L. Bai, N. P. T. Chan, J. Y. H. Wong, and M. Tarrant, "The impact of immigration on the breastfeeding practices of Mainland Chinese immigrants in

Hong Kong," *Birth*, vol. 45, no. 1, pp. 94–102, Mar. 2018, doi: 10.1111/BIRT.12314.

[43] F. I. Joseph and J. Earland, "A qualitative exploration of the sociocultural determinants of exclusive breastfeeding practices among rural mothers, North West Nigeria," *Int. Breastfeed. J.*, vol. 14, no. 1, pp. 1–11, 2019, doi: 10.1186/s13006-019-0231-z.

[44] A. O. Odeniyi, N. Embleton, L. Ngongalah, W. Akor, and J. Rankin, "Breastfeeding beliefs and experiences of African immigrant mothers in high-income countries: A systematic review," *Matern. Child Nutr.*, vol. 16, no. 3, p. e12970, Jul. 2020, doi: 10.1111/MCN.12970.

[45] C. L. Timmins, "The impact of language barriers on the health care of Latinos in the United States: a review of the literature and guidelines for practice," *J. Midwifery Womens. Health*, vol. 47, no. 2, pp. 80–96, Mar. 2002, doi: 10.1016/S1526-9523(02)00218-0.

[46] K. A.-S. medical journal and undefined 2015, "Culture and language differences as a barrier to provision of quality care by the health workforce in Saudi Arabia," *ncbi.nlm.nih.gov*, 2015, Accessed: Nov. 14, 2021. [Online]. Available: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4404475/.

[47] C. Zilidis and C. Hadjichristodoulou, "Economic Crisis Impact and Social Determinants of Perinatal Outcomes and Infant Mortality in Greece," *Int. J. Environ. Res. Public Heal. 2020, Vol. 17, Page 6606*, vol. 17, no. 18, p. 6606, Sep. 2020, doi: 10.3390/IJERPH17186606.

[48] J. Phillimore, "Migrant maternity in an era of superdiversity: New migrants' access to, and experience of, antenatal care in the West Midlands, UK," *Soc. Sci. Med.*, vol. 148, pp. 152–159, Jan. 2016, doi: 10.1016/J.SOCSCIMED.2015.11.030.

[49] L. Lauria, M. Bonciani, … A. S.-A. dell'Istituto, and undefined 2013, "Inequalities in maternal care in Italy: the role of socioeconomic and migrant status," *SciELO Public Heal.*, vol. 49, no. 2, pp. 209–218, 2013, doi: 10.4415/ANN_13_02_12.

[50] W. Chaveepojnkamjorn, S. Songroop, P. Satitvipawee, S. Pitikultang, and S. Thiengwiboonwong, "Association between Breastfeeding and Child Stunting among Adolescent Mothers," *Universal Journal of Public Health.*, vol. 9, no. 6, pp. 484–491, Dec. 2021, doi: 10.13189/UJPH.2021.090617.

[51] V. Schmied, E. Black, N. Naidoo, H. G. Dahlen, and P. Liamputtong, "Migrant women's experiences, meanings and ways of dealing with postnatal depression: A meta-ethnographic study," *PLoS One*, vol. 12, no. 3, Mar. 2017, doi: 10.1371/JOURNAL.PONE.0172385.

[52] A. McFadden *et al.*, "Counselling interventions to enable women to initiate and continue breastfeeding: A systematic review and meta-analysis," *Int. Breastfeed. J.*, vol. 14, no. 1, pp. 1–19, Oct. 2019, doi: 10.1186/S13006-019-0235-8/TABLES/7.

[53] J. Sutton, M. He, C. Despard, and A. Evans, "Barriers to breastfeeding in a Vietnamese community: a qualitative exploration," *Can. J. Diet. Pract. Res.*, vol. 68, no. 4, pp. 195–200, Dec. 2007, doi: 10.3148/68.4.2007.195.

[54] Q. Zhou, K. M. Younger, and J. M. Kearney, "An exploration of the knowledge and attitudes towards breastfeeding among a sample of Chinese mothers in Ireland," *BMC Public Health*, vol. 10, 2010, doi: 10.1186/1471-2458-10-722.