

Relationship between Age, Education, Number of Children, and Knowledge Related to Exclusive Breastfeeding with the Father's Decisions Toward Supporting Breastfeeding Practices

Sophia Lorraine McKenzie-Knight¹, Cynthia Pitter^{2*} and Deborah Adedire Udoudo¹

¹The Ministry of Health and Wellness, Mandeville, Jamaica

²The University of the West Indies, Mona Campus, Mona, Jamaica

ABSTRACT

Breastfeeding is one of the most effective ways to ensure the health and survival of a child for the first two years of life. It is widely accepted that the father's support is one of the strongest predictors of exclusive and optimum breastfeeding. The purpose of the study was to assess the knowledge and attitude of fathers toward breastfeeding and the effects of their socio-demographic conditions on their decision to support breastfeeding practices. This descriptive cross-sectional quantitative research was conducted at two Child Health Clinics in rural Jamaica study in 2017. A validated questionnaire was used to guide the telephone interviews of 158 fathers who were selected by the systematic sampling technique. All ethical guidelines were adhered to. The data was analysed using SPSS. The findings of the study revealed that 104 (65.8%) of the fathers were knowledgeable about breastfeeding practices, and the remaining 54 (34.2%) had a low knowledge level. Only 65 (41.2%) of them agreed that they should support breastfeeding and play a more active role. There was no statistically significant relationship between age, education, number of children, and the knowledge level and attitude towards breastfeeding practices among fathers. There was however statistical significance in their union status and employment status. The study confirms that some fathers are knowledgeable about breastfeeding but their attitude towards the process needs improvement. The findings could assist in health promotion strategies to strengthen and support fathers' involvement as well as support the national campaign to improve breastfeeding practices in Jamaica.

Keywords: *Breastfeeding, Fathers, Health Centre, Jamaica.*

INTRODUCTION

Breastfeeding is one of the most effective ways to ensure a child's health and survival. However, nearly two out of three infants are not exclusively breastfed for the recommended 6 months [1]. Although there is an increase in the exclusive breastfeeding rate in Jamaica for infants within six months (from 15.2% to 23.8%), most infants are often only breastfed exclusively for the first three weeks [2]. One of the ways to improve breastfeeding duration is through the father's involvement in breastfeeding practices [3]. Lack of support can affect the father's involvement in breastfeeding, thereby influencing compliance with the initiation and continuity of optimal breastfeeding [3]. A quantitative study conducted in Malaysia among 104 participants on associations of a father's breastfeeding attitude and support with the duration of exclusive breastfeeding concluded that paternal support and positive attitude were associated with breastfeeding duration [4]. A similar study conducted among 203 males on the determinants of fathers' involvement in breastfeeding practices revealed that pertinent predictors of breastfeeding support among men include education and exposure to breastfeeding [3]. In addition, the literature also revealed that male partners can be a major predictor for exclusive breastfeeding.

A cross-sectional study evaluated the influence of knowledge and attitudes on exclusive breastfeeding practice among 599 rural Jamaican mothers from 11 Health Centres in a rural parish in Jamaica. Its findings revealed that although moral support from fathers or partners is important, financial contribution from the partner is just as significant, particularly in developing regions [5]. A similar study was conducted in Malaysia among 200 fathers of children between ages 6 months and 2 years [6]. The study revealed that 100 fathers had children who were exclusively breastfed for six months and the other hundred had children who were not exclusively breastfed for the first six months of life. Findings concluded that fathers from the exclusively breastfed group had higher knowledge and understanding of exclusive breastfeeding [6]. It is posited that socioeconomic factors, age, and educational background of fathers are significant contributors to breastfeeding initiation, exclusive breastfeeding, and continued breastfeeding in women [7]. Regrettably, fathers are rarely included in breastfeeding education activities or programs. Most fathers agreed that breastfeeding should not limit the mother socially and that employers should provide an area for breastfeeding or expressing breastmilk and flexible time schedules be allowed at work to facilitate breastfeeding. In a cross-sectional quantitative study conducted in the United Kingdom, some 117 men reported that they were in support of breastfeeding [8]. Further findings revealed that fathers showed willingness and enthusiasm toward

*Corresponding author: Cynthia Pitter; The University of the West Indies, Mona Campus, Mona, Jamaica, Email: cynthia.pitter02@uwimona.edu.jm
Received: September 28, 2023; Revised: February 20, 2024; Accepted: February 26, 2024
DOI: <https://doi.org/10.37184/lnjpc.2707-3521.6.41>

breastfeeding education and promotion. Unfortunately, some men reported feeling left out of breastfeeding education programs and planning. In the same study, fathers felt they lacked the knowledge, understanding, and skills to equip them in effective promotion and support of breastfeeding.

Father's support of exclusive breastfeeding can influence maternal decision to exclusively breastfeed their infants [9, 10]. The presence, understanding, and support of fathers during exclusive breastfeeding can encourage mothers to complete the process with minimal challenges. This assertion was supported by research findings which concluded that fathers influence the attitude of mothers towards exclusive breastfeeding [9, 10]. In addition, fathers are strong determinants in exclusive breastfeeding behaviour and decision-making [9, 10].

This study assessed the knowledge and attitude of fathers toward breastfeeding and the effects of their socio-demographic conditions on their decision to support breastfeeding practices.

MATERIALS AND METHODS

A quantitative descriptive cross-sectional research design was utilized for this study. From a population of 300 mothers, systematic sampling was done to select 158 of them, representing the 158 fathers for the study. These were fathers of children aged 0-2 years attending the Child Welfare Clinics at two Health Centres in rural Jamaica between July and August 2017. Mothers who were selected were asked to share a brochure with information about the study and a copy of the consent form with the fathers of their children. This strategy was used to sensitize the fathers and to seek their consent to be a part of the study. The fathers in return gave the mothers verbal consent to share their contact details with the research team. The mothers were contacted if they failed to contact the researcher within two days. Upon receiving the 158 fathers' contacts from the mothers, the fathers were contacted and a mutually agreed time was scheduled for a telephone interview.

The modified Ministry of Health Exclusive Breastfeeding Pilot and Evaluation 2009-2011 self-administered questionnaire was used to guide the telephone interviews. The questionnaire was itemized as follows: items 1-7, elicited the fathers' socio-demographic information as well as their social assistance; items 8-10, elicited information about the mothers' previous breastfeeding history/pregnancies. This section had questions that captured information on the age of previous children, number of visits the mothers made to the antenatal clinic, method of feeding, influence to support breastfeeding practices, complimentary feeding, continuation of breastfeeding, and expression of breast milk. It also contained information on fathers' influence in breastfeeding previous children and the duration of their breastfeeding; items 11-19, elicited data on the fathers'

attitude toward breastfeeding practices and captured the effects of breastfeeding on the mother and baby as well as the use of complementary feeds; and items 20-26, elicited data on the fathers' knowledge of breastfeeding; quality of milk formula *versus* breast milk, duration of exclusive and continued breastfeeding according to the Ministry of Health and Wellness, mothers' continuing breastfeeding if her breasts are engorged and source of information about breastfeeding. The average length for completion of each questionnaire was twenty (20) minutes. The telephone interviews were audiotaped.

ETHICAL CONSIDERATIONS

Before data collection data, ethical approval with reference number, ECP 117, 16/17 was sought from the ethical board relevant to this study. Fathers who agreed to participate were required to give oral consent and a verbal consent document with the participant's code number was signed and dated by one of the research team members.

VALIDITY AND RELIABILITY

Validity and reliability were ensured by pretesting the questionnaire on 20 fathers who attend other Child Health Clinics in the parish to verify the clarity, vagueness, or acceptability of questions. The pretest was used to measure the questionnaire's Cronbach's Alpha in the context of the population. The Cronbach's Alpha was used to measure internal consistency that is, how closely related a set of items are as a group. It is a measure of scale reliability. The pre-test derived the Chronbach Alpha of 0.64. This is consistent with the minimum 0.7 for the Chronbach Alpha, the 0.64 could have been influenced by sample size given that 20 participants were selected for the pre-test. This accounts for high variation in the response thereby restricting internal consistency.

DATA ANALYSIS

The data was analyzed using the Statistical Package for Social Sciences (SPSS) version 22.0 software. Descriptive statistics such as percentages for categorical and continuous (interval/ratio) variables and mean were utilized. The relationship between the dependent variable and the independent variables was tested using inferential statistics methods; namely, Pearson Correlation, ANOVA test, and T-test. These tests were appropriate as they matched the assumptions required to perform each test.

RESULTS

This study yielded a 100% response rate in which all 158 fathers participated. The majority were above 42 years (38%) with a median age of 38 years and a standard deviation of ± 10.09 years. Some 96 (61%) of them attained primary or secondary level education with a majority of 82 (52%) receiving secondary level education. Table 1 further illustrates other socio-demographic factors of the respondents. Table 1 also

Table 1: Socio-demographic factors of participants.

Variables	Number of fathers (n)	Percentage (%)	p-value
Age in years			0.949
<18	0	0	
18-22	6	3.8	
23-37	15	9.5	
28-32	27	17.1	
33-37	31	19.6	
38-42	19	12	
>42	60	38	
Education			0.658
Primary	14	9	
Secondary	82	52	
Tertiary	62	39	
Union Status			0.011
Single	31	19.6	
Married	84	53.2	
Living with partner	26	16.5	
Separated/Divorced	9	5.7	
Visiting Relationship	8	5	
Number of Children			0.215
1	42	26.6	
2	54	34.1	
3	20	12.7	
4	28	17.7	
5	5	3.2	
6	2	1.3	
7	2	1.3	
8	4	2.5	
14	1	0.6	
Employment Status			0.026
Employed	81	51	
Self Employed	68	43	
Unemployed	9	6	

The majority were above 42 years (38%) with a median age of 38 years and a standard deviation of ± 10.09 years. Their answers to the number of children have revealed a mean of 3 (2.65) with a standard deviation of 1.82.

shows that 118 fathers (74.7%) indicated that they were in a relationship, of this number 84 (53.2%) were married. Their answers to the number of children have revealed a mean of 3 (2.65) with a standard deviation of 1.82. Of the 158 fathers, 116 (73.4%) indicated that they had between one and three children with 42 (26.6%) being first-time fathers. As it relates to their employment status, most of the men 149 (94%) were employed, and of this number 68 (43%) were self-employed while 9 (6%) were unemployed.

Fathers’ Knowledge and Attitude of Fathers toward Breastfeeding Practices

Regarding fathers’ knowledge and attitude toward breastfeeding practices, approximately 104 (65.8%) of the fathers indicated that they were knowledgeable, while the remaining 54 (34.2%) indicated “Not Knowledgeable” about breastfeeding practices. Approximately 93 (58.8%) of participants presented a negative attitude, while the

Table 2: Knowledge and attitude of fathers toward breastfeeding practices.

Variable	Categories	Percent (%)
Knowledge	Very knowledgeable	64 (40.5)
	Knowledgeable	40 (25.3)
	Not Knowledgeable	54 (34.2)
Attitude	Very positive Attitude	23 (14.5)
	Positive attitude	42 (26.6)
	Negative Attitude	93 (58.8)

Table 3: Fathers’ Knowledge of Breastfeeding.

Statements	True n(%)	False n(%)	Don’t know n(%)
The quality of some milk formulas is as good as that of breast milk	31 (19.6)	96 (60.8)	31 (19.6)
When a breastfed baby produces a small amount of concentrated (dark yellow colour urine it means that the baby is not getting enough	53 (33.5)	14 (8.9)	91 (57.6)
According to the MOH, the best duration for the exclusive breastfeeding of infants is two months	24 (15.2)	108 (68.4)	26 (16.5)
The milk of a mother who delivers a baby before the date (preterm) has less nutrients than that of a mother who delivers full term baby	46 (29.1)	68 (43)	44 (27.8)
Mothers whose breasts become swollen and hard should not continue to breastfeed	56 (35.4)	55 (34.8)	47 (29.7)
The MOH recommends continued breastfeeding up to age two years	52 (32.9)	50 (31.6)	56 (35.4)

remaining 65 (41.1%) represented a positive attitude toward breastfeeding practices as shown in Table 2. To determine the knowledge level of the fathers, they were asked six questions having options, true, false, or don’t know. Table 3 illustrates that 19.6% agree that the quality of some milk formulas is as good as that of breast milk and 19.2% don’t know. Approximately 8.95% disagreed while 57.6% were unaware that when breastfed babies produce a small amount of concentrated urine, it means they are not getting enough milk. Approximately 31.7% (15.2% + 16.5%) were unaware that the Ministry of Health does not consider two months to be the best duration for exclusively breastfeeding a baby. Approximately 56.9% (29.1% + 27.8%) were unaware that the milk of a mother who delivers a baby before the date (preterm) does not have fewer nutrients than that of a mother who delivers full term. Approximately 65.1% (35.4% + 29.7%) were unaware that the mother whose breasts become swollen and hard should continue to breastfeed and 67% (31.6% + 35.4%) were unaware that the Ministry of Health recommends continued breastfeeding up to the age of two years.

To determine the fathers’ attitude toward breastfeeding practices, they were asked nine questions using a three-

Table 4: Father's attitude toward breastfeeding.

Statements	Agree n(%)	Disagree n(%)	Not Sure n(%)
Babies need bush tea to clear their stomachs in the mornings	50 (31.6)	75 (47.5)	33 (20.9)
Breastfeeding a baby for six months will make the breasts sag	31(19.6)	97(61.4)	30(19)
A three-month-old baby cannot grow well on breast milk alone	57 (36.1)	87 (55.1)	14 (8.9)
Women who have to go back to work must stop breastfeeding	8 (5.1)	135 (85.4)	15 (9.5)
Breastfeeding helps to protect babies against infections for the first six months	133 (84.2)	7 (4.4)	18 (11.4)
Breastfeeding is good for the mother's health	115 (72.8)	11 (7)	32 (20.3)
Breastfed babies need water after or between feeds	71 (44.9)	46 (29.1)	41 (25.9)
Mothers should stop breastfeeding if they have a cold	40 (25.3)	55 (34.8)	63 (39.9)
Mothers should stop breastfeeding a baby who continues to breastfeed after one year	51 (32.3)	64 (40.5)	43 (27.2)

point Likert Scale response of agree, disagree, or not sure. Table 4 illustrates that of the respondents who answered correctly, 47.5% of respondents disagreed that babies need bush tea to clear their stomachs in the morning, while 61.4% disagreed that breastfeeding the baby for six months will make the breasts sag. Approximately 55.1% disagreed that a three-month-old baby cannot grow well on breast milk only and 85.4% disagreed that the mother who must go back to work should stop breastfeeding. Approximately 84.2% agreed that breastfeeding helps to protect babies against infections for the first six months of life. Approximately 72.8% agreed that breastfeeding is good for the mothers' health. Only 29.1% disagreed that breastfed babies need water after or between feeds, 34.8% disagreed that mothers should stop breastfeeding if they have a cold and 40.5% disagreed that mothers should stop breastfeeding a baby who continues to breastfeed after one year.

The Effects of the Socio-Demographic Factors on Fathers' Decision Towards Supporting Breastfeeding Practices

This study shows that there was no statistically significant relationship between age ($p=0.949$, $r=0.005$), education (Welch Statistics (2, 47.44) = 0.422, $p=0.658$, number of children ($p=0.215$, $r=0.099$) and the fathers' decisions toward supporting breastfeeding practices. There was however a statistically significant relationship concerning union status, employment status, and their decisions toward supporting breastfeeding practices. Single respondents were more knowledgeable and presented a better attitude than those who were in a

relationship. The t-test results indicate that there is a statistically significant difference in knowledge and attitude of breastfeeding between single persons and those who are in a relationship ($t(156) = 2.57$, $p = 0.011$). Single respondents had more knowledge and a better attitude than those who were in a relationship, the mean for single persons is 7.97 with an SD of ± 1.76 while the mean for those in a relationship is 7.05 with an SD of ± 2.02 . There was a weak difference in knowledge and attitude between the groups as indicated by the eta value of 0.202. The coefficient of determination value of 0.048 indicates that approximately 4% of the variation change in breastfeeding knowledge and attitude can be explained by union status.

The t-test results indicate that there is a statistically significant difference in knowledge and attitude of breastfeeding between employed persons and unemployed ($t(11) = 2.57$, $p = 0.026$). Employed respondents had more knowledge and a better attitude than those unemployed, the mean for employed persons is 7.34 with an SD of ± 2.02 while the mean for those unemployed is 6.22 with an SD of ± 1.20 . There was a weak difference in knowledge and attitude between the groups as indicated by the eta value of 0.131. The coefficient of determination value of 0.017 indicates that approximately 2% of the variation change in breastfeeding knowledge and attitude can be explained by employment status. Concerning participants' source of breastfeeding education, most participants obtained information from family members as illustrated in Table 5.

Table 5: Father's source of breastfeeding information.

Statement	Yes n(%)	No n(%)
Do you get information about breastfeeding from healthcare workers	72 (46.2)	85 (53.8)
Do you get information about breastfeeding from family	112 (70.9)	46 (29.1)
Do you get information about breastfeeding from friends, television, and radio	70 (44.3)	88 (55.7)

DISCUSSION

This study explored the knowledge and attitude of fathers toward breastfeeding and the effects of socio-demographic conditions on their decision to support breastfeeding practices. The results revealed that a relationship exists between union status, employment status, and knowledge related to exclusive breastfeeding with the fathers' decisions toward supporting breastfeeding practices. These findings are congruent with those of similar research studies which revealed that fathers' knowledge of exclusive breastfeeding influences their support of breastfeeding practices [11, 12]. In addition, research studies conducted on factors that determine the support of exclusive breastfeeding among fathers revealed a positive relationship between union status and fathers' decisions toward supporting breastfeeding practices [13]. Furthermore, research evidence exists on the effect of employment status on fathers' support of breastfeeding practices [14].

There was a statistically significant relationship between union status, employment status, and fathers' knowledge and attitude toward breastfeeding practices as seen in similar studies [15]. However, the employed single fathers, were more knowledgeable and had a more positive attitude, and such mothers are more likely to breastfeed [15]. It was interesting to note that in the present study, the presence of the child's father did not create a more positive influence on breastfeeding practices as was established [15]. There was, however, no statistically significant relationship existing between respondents' number of children and their knowledge and attitude towards breastfeeding practices. Perhaps the fathers who previously produced children could have had better knowledge and attitude levels based on previous exposure. However, there was no information found in the literature review to support this.

There was a high level of breastfeeding interest among fathers as 65.8% of fathers were knowledgeable about breastfeeding. This is congruent with the findings of the Malaysian study which established that most fathers were knowledgeable about breastfeeding [16]. This study revealed that only 60.8% of the fathers knew that milk formulas are not as good as breast milk, 68.4% knew that the best duration for exclusive breastfeeding is not two months and only 38.4% were knowledgeable of the Ministry of Health's recommendation for continued breastfeeding up to age two years. Fathers are the head of the family and actively participate in choosing a method of infant feeding, the requisite knowledge of breastfeeding must be evident among them [17]. Furthermore, supporting breastfeeding practices has a greater effect on the mother's decision to breastfeed than any other existing factor [18]. Though fathers had a positive attitude in the areas of breastfeeding and its prevention of infection in babies (84.2%), breastfeeding being good for the mother's health (72.8%) and continuation of breastfeeding in women who go back to work (85.4%), other areas reflected moderate or negative attitudes.

The involvement of fathers in the breastfeeding process could prove beneficial in the attainment of the maternal health Sustainable Developmental Goal (SDG), which seeks to end preventable deaths of newborns and children under the age of five years. These deaths are often due to a lack of adequate nutrition which could be provided by breastfeeding [19]. Most of the fathers in this study were above 42 years of age. This is in congruence with the results of the study which revealed that fathers were encouraging breastfeeding and wanted to be able to support their partner [20]. In addition, fathers have been exposed to more information and possibly observed more events related to breastfeeding, hence they would be more knowledgeable and display a more positive attitude toward breastfeeding [21]. Approximately 52% of fathers attained secondary-level education. The higher the educational level the greater the chance of

being exposed to more information and the better the ability to interpret [21]. Therefore, most of the fathers in this study would benefit from continuous education on breastfeeding.

This study has positioned Jamaican fathers as partners in support of mothers' breastfeeding, giving rise to the opportunity for Jamaica to implement the 2002 WHO Global Strategy for Infant and Young Child Feeding to achieve optimal health outcomes in the early years and reduce the risk of long-term chronic diseases in young children [22].

This study reveals that fathers only encourage breastfeeding for the first ten months of their children's lives. This could undermine the WHO directives for most infants and young children to be breastfed up to age two and fathers are to be influencers of breastfeeding decisions [23]. The low support from fathers for breastfeeding after ten months is a cause for concern as continued breastfeeding up to age two years is important in assisting to promote and maintain a child's health status and reduce the risk of long-term chronic diseases and death. Moreover, breastfeeding decreases infant morbidity and mortality rates [23].

LIMITATIONS

A generalization of fathers' knowledge and attitude toward breastfeeding practices could not be made since fathers under the age of eighteen years and urban were not represented in the study. The questionnaires were administered via telephone hence the way the questions were asked by the researcher or research assistant could have influenced respondents' answers and could have been a source of bias. The instrument could have also presented limitations because it was modified and was used among a population of fathers for the first time. The use of close-ended questions might have limited the views of the participants and might not give a full reflection of their knowledge and attitudes.

CONCLUSION

This study has revealed a sub-optimal level of positive attitude toward breastfeeding practices (41%) which is not in congruence with the level of knowledge (66%). The study revealed no statistically significant relationship between age, education, number of children, and the knowledge level and attitude towards breastfeeding practices among fathers. There was however statistical significance in their union status and employment status. Single fathers were more knowledgeable and had a more positive attitude toward breastfeeding than fathers in a relationship. Employed fathers were more knowledgeable and had a more positive attitude toward breastfeeding practices. There is a need for continued education of fathers on breastfeeding practices, the benefits of breastfeeding, the possible negative impact of not breastfeeding, and the importance of their influence on breastfeeding. Further research is needed to assess

the possible barriers to fathers' positive influence on breastfeeding in Jamaica.

CONSENT FOR PUBLICATION

Written informed consent was taken from the participants.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ACKNOWLEDGEMENTS

Declared none.

REFERENCES

1. WHO. Breastfeeding 2022, Available from: https://www.who.int/health-topics/breastfeeding#tab=tab_1
2. WHO. What if all Jamaican hospitals were baby-friendly? 2018, Available from: <https://blogs.unicef.org/jamaica/jamaican-hospitals-baby-friendly/.dd>
3. Nurul IMN, Syahrul BAH. Determinants of fathers' involvement in breastfeeding practices in Kuala Selangor. *Mal J Nutr* 2020; 27(1): 015-026. DOI: <https://doi.org/10.31246/mjn-2020-0070>
4. Phua HW, Afrina NA, Shukri NHM. Associations of father's breastfeeding attitude and support with the duration of exclusive breastfeeding among first-time mothers. *Mal J Med Health Sci* 16(SUPP6): 84-89. Available from: https://medic.upm.edu.my/upload/dokumen/2020081014272011_MJMHS_0101.pdf
5. Chatman L, Saliyu HM, Roofe MEA, Wheatle P, Henry D, Jolly PE. Influence of knowledge and attitudes on exclusive breastfeeding practice among rural Jamaican mothers. *Birth* 2004; 31(4): 265-71. DOI: <https://doi.org/10.1111/j.0730-7659.2004.00318.x>
6. Mohamad N, Draman N, Muhamad R, Yusoff H. Knowledge and attitude towards exclusive breastfeeding practices among fathers who attend primary health care facilities in suburban, Malaysia. *Int J Collaborat Res Intern Med Public Health* 2015; 7(7): 154-63.
7. Vaaler ML, Castrucci BC, Parks SE, Clark J, Stagg J, Erickson T. Men's attitude toward breastfeeding: findings from the 2007 Texas behavioural risk factor surveillance system. *Matern Child Health J* 2011; 15(2): 148-57. DOI: <https://doi.org/10.1007/s10995-010-0605-8>
8. Brown A, Davies R. Fathers experience of supporting breastfeeding promotion and education. *Matern Child Nutr* 2014; 10(4): 510-26. DOI: <https://doi.org/10.1111/mcn.12129>
9. Ballesta-Castillejos A, Gómez-Salgado J, Rodríguez-Almagro J. *et al.* Factors that influence mothers' prenatal decision to breastfeed in Spain. *Int Breastfeed J* 2020; 15, 97. DOI: <https://doi.org/10.1186/s13006-020-00341-5>
10. Dadzie B, Bayor F, Doat AR, Kappiah JB, Akayuure CA, Lamptey AA, *et al.* Investigating factors that influence the practice of exclusive breastfeeding among mothers in an urban general hospital in Ghana: a cross-sectional study. *BMC Womens Health* 2023; 23(1): 24. DOI: <https://doi.org/10.1186/s12905-023-02164-y>
11. Shitu S, Adane D, Abebe H, Mose A, Yeshaneh A, Beyene B, Workye H. Knowledge of breastfeeding practice and associated factors among fathers whose wife delivered in last one year in Gurage Zone, Ethiopia. *PLoS One* 2021; 16(7): e0254824. DOI: [10.1371/journal.pone.0254824](https://doi.org/10.1371/journal.pone.0254824)
12. Mabele OM, Benedict MOA, Steinberg WJ, Reji E, Van Rooyen C, Adefuye AO. Knowledge, attitudes, and practices of men in a South African rural community in relation to exclusive breastfeeding. *S Afr Fam Pract* (2004) 2022; 64(1): 5366. DOI: <https://doi.org/10.4102/safp.v64i1.5366>
13. Bogale SK, Cherie N, Bogale EK. Fathers involvement in child feeding and its associated factors among fathers having children aged 6 to 24 months in Antsokia Gemza Woreda, Ethiopia: Cross-sectional study. *PLoS One* 2022; 17(11): e0276565. DOI: [10.1371/journal.pone.0276565](https://doi.org/10.1371/journal.pone.0276565)
14. Mithani Y, Premani ZS, Kurji Z, Rashid S. Exploring fathers' role in breastfeeding practices in the urban and semiurban settings of Karachi, Pakistan. *J Perinat Educ* 2015; 24(4): 249-60. DOI: <https://doi.org/10.1891/1058-1243.24.4.249>
15. Ouyang Y-Q, Nasrin L. Father's knowledge, attitude and support to mother's exclusive breastfeeding practices in Bangladesh: a multi-group structural equations model analysis. *Healthcare (Basel)* 2021; 9(3):276. DOI: <https://doi.org/10.3390/healthcare9030276>
16. Crippa BL, Consales A, Morniroli D, Lunetto F, Bettinelli ME, Snnino P, *et al.* From dyad to triad: a survey on fathers' knowledge and attitudes toward breastfeeding. *Eur J Pediatr* 180, 2861–2869 (2021). <https://doi.org/10.1007/s00431-021-04034-x>. [Accessed 2 April 2024]. Available from: doi: [10.1371/journal.pone.0254824](https://doi.org/10.1371/journal.pone.0254824). PMID: 34280223; PMCID: PMC8289068
17. Meijiao Q, Guangting C, Xiaoyu Z, Lixia W, Yuzhen L, Yiyi X, *et al.* Fathers' needs of breastfeeding support: Perspective of health nurses, midwifery. *ScienceDirect* 2024; 132: 103959. <https://doi.org/10.1016/j.midw.2024.103959>
18. Draman N, Mohamad N, Yusoff HM, Muhamad R. The decision of breastfeeding practices among parents attending primary health care facilities in suburban Malaysia. *J Taibah Univ Med Sci* 2017; 12(5): 412-7. DOI: <https://doi.org/10.1016/j.jtumed.2017.05.005>
19. Abdulla F, Hossain MM, Karimuzzaman M, Ali M, Rahman A. Likelihood of infectious diseases due to lack of exclusive breastfeeding among infants in Bangladesh. *PLoS One* 2022; 17(2): e0263890. DOI: <https://doi.org/10.1371/journal.pone.0263890>
20. Brown A, Davies, R. Fathers' experiences of supporting breastfeeding: Challenges for breastfeeding promotion and education. *Matern Child Nutr* 2014; 10(4): 510-26. DOI: <https://doi.org/10.1111/mcn.12129>
21. Agrawal J, Chakole S, Sachdev C. The role of fathers in promoting exclusive breastfeeding. *Cureus* 2022; 14(10): e30363. DOI: <https://doi.org/10.7759/cureus.30363>
22. Sokou R, Parastatidou S, Iliodromiti Z, Lampropoulou K, Vrachnis D, Boutsikou T, *et al.* Knowledge gaps and current evidence regarding breastfeeding issues in mothers with chronic diseases. *Nutrients* 2023; 15(13): 2822. DOI: <https://doi.org/10.3390/nu15132822>
23. WHO. Breastfeeding. 2023. [Accessed 18 March 2024]. Available from https://www.who.int/health-topics/breastfeeding#tab=tab_1.