

## ORIGINAL ARTICLE

# Associations of Father's Breastfeeding Attitude and Support With the Duration of Exclusive Breastfeeding Among First-time Mothers

Hui Wen Phua, Nur Aina Afrina Abdul Razak, Nurul Husna Mohd Shukri

Department of Nutrition and Dietetics, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia

## ABSTRACT

**Introduction:** Initiating and sustaining breastfeeding are influenced by many factors including involvement, attitude and support from the partner. Research on breastfeeding mostly investigates maternal factors, although the father's behaviour and role may influence the success of breastfeeding. Hence, this study aimed to determine the associations of father's attitude and support with the duration of exclusive breastfeeding new parents. **Methods:** The study involved 104 new parents in Kuala Lumpur, Malaysia, recruited at three randomly selected antenatal clinics using purposive sampling. Fathers' breastfeeding attitude was measured using Iowa-Infant-Feeding-Attitude-Scale, whereas paternal support using Subjective Norms and Paternal-Breastfeeding-Influence-Scale questionnaires. Mothers were asked about breastfeeding practice. **Results:** Exclusive breastfeeding duration rates at six months was 27.9%. The average score for paternal attitude on breastfeeding was  $61.0 \pm 6.3$ , indicating father's positive attitude towards breastfeeding. The mean score of paternal breastfeeding supports for subjective norms surrounding breastfeeding and overall support score were  $4.3 \pm 0.6$  and  $4.06 \pm 0.6$ , respectively, demonstrating frequent paternal engaging and support in breastfeeding. Duration of exclusive breastfeeding were positively associated with the paternal attitude ( $\beta=0.235$ ,  $p=0.027$ ) and overall mean score for breastfeeding support ( $\beta=2.166$ ,  $p=0.028$ ), but negatively associated with support strategies score ( $\beta=-2.203$ ,  $p=0.026$ ). **Conclusion:** Overall, paternal support and positive attitude were associated with breastfeeding duration. It is important to increase public awareness on the important roles of fathers during the breastfeeding process such as emphasizing the husband's role in supporting their wives to breastfeed, as well as the importance of paternal role in caring the baby, especially among new couples.

**Keywords:** Lactation, Parenting, Breastfeeding support, Breastfeeding attitude, Paternal behavior

## Corresponding Author:

Nurul Husna Mohd Shukri, PhD  
Email: n\_husna@upm.edu.my  
Tel: +603 86092963

## INTRODUCTION

Appropriate infant feeding practices are important to ensure adequate nutrition for a child's survival, growth and development, which breastfeeding being the gold standard to feed an infant aged below 6 months. Breastfeeding is not only providing food to infants but also nourishing them with all necessary non-nutrient components including bioactive substances that needed for growth, behavioural and brain development. Comprehensive studies showed that exclusive breastfeeding not only protect the infants against respiratory and gastrointestinal infections, but it also improves the birth spacing and protects women from chronic diseases such as ovarian cancer, breast cancer and type 2 diabetes mellitus (1).

In the 21st century, the exclusive breastfeeding rate in most countries was below 50% and the duration of any breastfeeding was only moderate (2). In Malaysia, the National Health and Morbidity Survey (NHMS) 2016 reported that the prevalence of exclusive breastfeeding among infants under six months of age increased from 14.5% to 47%, but it was still considered below the target level which was 70% to be achieved in 2025 (3-5).

Many people have thought that breastfeeding decision is ultimately held by the mother. However, the support, assistance and the perceived influence of other people's views (subjective norms) especially the partner or husband was one of the factors that associate with breastfeeding practices (6,7). Increasing evidence showed that fathers have a significant influence on mothers' breastfeeding decision (8-10). However, research on breastfeeding support and practice mostly involved mothers, and less involve fathers directly in the study, although the partner/husband also plays an important role in infant

feeding practice. In Malaysia particularly, only two studies assessed paternal breastfeeding knowledge and attitude, but none has investigated the influence of paternal factors on breastfeeding duration or exclusivity (11-12). Both studies found that many fathers had good knowledge of breastfeeding benefits, but the practical aspects or attitude and direct supports are still needed to be improved. Paternal breastfeeding support includes the behaviours, involvement and engage in providing support to mothers during the lactation duration (13). Therefore, this study aimed to determine the relation of paternal breastfeeding attitude and support with the duration of exclusive breastfeeding among first-time mother-father dyads in Kuala Lumpur, Malaysia.

## MATERIALS AND METHODS

This cross-sectional study involved first-time parents attending three out of sixteen randomly selected governmental health clinics in Kuala Lumpur, using computer generated randomisation. Recruitment started from January to April 2018. Purposive sampling was used by inviting all eligible couples who attended the selected clinics during recruitment. The inclusion criteria were first-time mothers (primigravida) and partners (fathers) with healthy full-term infants aged 6 to 12 months. Respondents were excluded if they were, illiterate (the parent), on medication or have an illness which may have interfered breastfeeding practice. Based on sample size calculation (14) in determining the correlation between variables (15), the minimum sample size required for this study was 103 respondents. The study was approved by the [removed for blind peer review] and registered in [removed for blind peer review]. A total of 110 out of 150 respondents that were approached and provided informed consent were enrolled in the study. Once enrolled, both fathers and mothers were given self-administered questionnaires to complete at the time of data collection.

Fathers were asked to answer three questionnaires, which were on sociodemographic, breastfeeding attitude and breastfeeding support to mothers. Paternal infant feeding attitude levels were measured using Iowia-Infant-Feeding-Attitude-Scale (IIFAS) consisting of seventeen attitude questions with 5-point Likert Scale (16). IIFAS comprised 17-items, which to be rated on a 5-point Likert-scale from strongly disagree (scale-1) to strongly agree (scale-5). The minimum score of 17 indicating favourable towards formula feeding whereas the maximum score of 85 indicating favourable towards breastfeeding. Hence, the result will be reported as one value of overall mean breastfeeding attitude score. Paternal breastfeeding support were measured based on 11 items on 'subjective norms' surrounding father's involvement in infant feeding practice, and also fathers involvement in supporting and helping mothers in breastfeeding using the Paternal-Breastfeeding-Influence-Scale (PBIS), measuring husband's support

and involvement in breastfeeding such as, appreciation, helping, being presence and responsiveness, and breastfeeding savvy on a 32-items. The subjective norms in this context is defined as the perceived social pressure in performing or demonstrating supporting behaviour to breastfeeding mothers (15). These questionnaires were measured on the frequency scale from 1 (not-at-all) to 5 (very often/strong). The higher mean of all items score (from 1 to 5) indicating better support received from the father. These tools have been tested for reliability with Cronbach's alpha values of  $\geq 0.85$  (16-18). Questionnaires were available in both English and Malay versions, and have been used previously in studies among parents and first-time-mothers in Malaysia and Singapore (17, 19-22).

Mothers were asked about their breastfeeding practice in the past months, before infants starting complementary feeding, using an adapted questionnaire from Malaysia Health Morbidity Survey 2016 (3). The infant feeding practice questions were asked to determine the mean breastfeeding duration, and the rate of exclusive breastfeeding duration up to four and six months. According to WHO, the exclusive breastfeeding definition is the practice of infant being fed only breast milk, hence have not been fed any other milk or liquid or food such as infant formula, water or any solid food, in the range of the first-six months of infant life.

Data analysis were done using IBM SPSS version-22, which the statistical level significance was set at  $p < 0.05$ . The results were presented as frequencies and percentages for categorical variables such as sociodemographic categories and breastfeeding rates. Whereas the results for continuous variables were presented as means and standard deviation, which are the overall IIFAS mean score for breastfeeding attitude, overall mean score for questionnaires on subjective norms, and overall and subscale of breastfeeding support of PBIS questionnaire. Pearson correlation coefficient was used to test the associations between paternal mean scores for each questionnaire and exclusive breastfeeding duration. Further analysis was done using multiple linear regression to seek significant predictor(s) of exclusive breastfeeding duration at 6 months.

## RESULTS

Subjects comprised first-time fathers and mothers with mean ages of  $30.6 \pm 4.2$  years and  $26.7 \pm 3.8$  years, respectively. Majority of the subjects were Malay (84.6%). More than half of the respondents were highly educated with 56.7% of fathers and 64.4% of mothers had pursued their studies until tertiary education. More than half of the employed fathers (64.4%) and mothers (43.3%) were working in private sectors. Meanwhile, about one-third (34.6%) of parents earned more than RM 5000 as monthly household income, 25% earned RM 3000-RM 3999 and only 1% with household income

**Table 1: Socio-demographic characteristics of respondents (n=104)**

Variables	Fathers (n=104)		Mothers (n=104)	
	n (%)	Mean±SD	n (%)	Mean±SD
<b>Age</b>		30.6±4.2		26.6±3.8
<b>Ethnicity</b>				
Malay	88 (84.6)		87 (83.7)	
Chinese	8 (7.7)		9 (8.7)	
Indian	4 (3.8)		4 (3.8)	
Others	4 (3.8)		4 (3.8)	
<b>Education levels</b>				
No formal education	1 (1.0)		0 (0.0)	
Primary education	1 (1.0)		0 (0.0)	
Secondary education	43 (41.3)		37 (35.6)	
Tertiary education	59 (56.7)		67 (64.4)	
<b>Occupation</b>				
Public sector	24 (23.1)		18 (17.3)	
Private sector	67 (64.4)		45 (43.3)	
Self-employed	13 (12.5)		10 (9.6)	
Unemployed	0 (0.0)		30 (28.8)	
Student	0 (0.0)		1 (1.0)	
<b>Monthly household income</b>				
≤ RM 1000	1 (1.0)			
RM 1000 - RM 1999	13 (12.5)			
RM 2000 - RM 2999	14 (13.5)			
RM 3000 - RM 3999	26 (25.0)			
RM 4000 - RM 4999	14 (13.5)			
RM 5000 and above	36 (34.6)			

less than RM 1000 (Table I).

The mean exclusive breastfeeding (EBF) duration was 14.4±8.5 weeks. Mothers who exclusively breastfeed their infants up to 4 months were 27.9%, whereas 24% mothers able to exclusively breastfeed their infants for a six-month duration. In total, half infants of the study population (51.9) were exclusively breastfed up to a range of four to six months.

The average score for father's breastfeeding attitude was 61.0±6.3, indicating a positive attitude result towards breastfeeding. Consistently, mean score of father's breastfeeding supports for subjective norms surrounding breastfeeding and overall PBIS score were 4.3±0.6 and 4.06±0.6, respectively, which both were close to the maximum mean score of 5, demonstrated frequent paternal engagement in supporting breastfeeding.

The IIFAS breastfeeding score was positively correlated with paternal breastfeeding support total score of PBIS (r=0.202, p=0.04) and subjective norm surrounding paternal involvement in breastfeeding practice (r=0.296, p=0.02). This indicates that husbands who scored higher for IIFAS questionnaire (indicating a positive attitude toward breastfeeding) tend to also provide greater breastfeeding support to their partner, breastfeeding mothers. A significant positive correlation was shown between paternal attitude (IIFAS) and exclusive breastfeeding duration (r=0.212, p=0.039) (Table II). However, the duration of exclusive breastfeeding were not correlated with two paternal factors, namely the subjective norm surrounding paternal involvement in breastfeeding practice and also overall paternal breastfeeding support of PBIS score (all p >0.05) (Table II).

**Table 2. Correlation between exclusive breastfeeding duration and paternal attitude and breastfeeding support variables (n=104).**

Variables	Exclusive breastfeeding duration	
	r	p-value
Paternal infant feeding attitude (IIFAS)	<b>0.212</b>	<b>0.039*</b>
<b>Breastfeeding support</b>		
Subjective norm surrounding paternal involvement in breastfeeding process	0.10	0.334
PBIS total score	0.001	0.989
Breastfeeding savvy	-0.059	0.572
Helping	0.011	0.918
Appreciation	0.001	0.992
Breastfeeding presence	0.022	0.835
Responsiveness	0.142	0.169

\*Correlation is significant at level p < 0.05;

PBIS = Paternal-Breastfeeding-Influence-Scale for breastfeeding support subscales.

Nevertheless, after controlled for sociodemographic variables, the linear regression results showed that longer duration of EBF (weeks) was significantly associated with higher IIFAS score ( $\beta=0.23$ ,  $p=0.031$ ), lower total support score ( $\beta=-2.09$ ,  $p=0.032$ ), and higher overall mean score for breastfeeding support ( $\beta=2.07$ ,  $p=0.034$ ) (Table III). These factors predicted 15.0% of the variance in the duration of EBF (weeks). Total support score is the accumulated scores of all subscales, whereas overall mean score is the average score of all subscales in PBIS, hence the number of items in each subscales is controlled.

**Table III: Multiple linear regression analysis of factors contributed towards duration of exclusive breastfeeding (EBF) (n=104)**

Model	Unstandardized Coefficients	Standardized Coefficients	95% CI		p-value
			Lower bound	Upper bound	
(Constant)	-16.46		-38.52	5.597	0.142
IIFAS total score	0.30	0.23	0.03	0.58	0.031
Total support score	-1.01	-2.09	-1.94	-0.09	0.032
Mean score for breastfeeding support	31.40	2.07	2.47	60.33	0.034

Multiple linear regression model: R=0.388, R<sup>2</sup>=0.150, F=2.198, p=0.042; Confounders has been controlled for sociodemographic variables: household income, parental education levels (p>0.05)

## DISCUSSION

This study found that the study population rate of exclusive breastfeeding at six months was 27.9 % and at four months was 24 %. These were relatively lower as compared to the national prevalence of exclusive breastfeeding at six (47.1%) and four months (47.4%) in Malaysia (3). The Malaysian National Health Morbidity Survey reported that perception of having insufficient breast milk was one the main possible reasons perceived by the mothers of stopping breastfeeding (3) but external or environmental factors such as family involvement are yet to be explored.

A recent systematic review (23) supported that father's involvement during antenatal and postnatal periods improve EBF at 4 and 6 months. The increasing support indirectly prolonged the duration of breastfeeding due to the father's exposure to the benefits of breastfeeding (23). Nevertheless, research regarding paternal perspective on breastfeeding is limited, especially in Malaysia. Most studies were predominantly focused on maternal factors, and usually included only mothers as the respondents in the study. This includes asking mothers regarding their perspectives of their partner's (or father's) involvement in helping or supporting breastfeeding. To our knowledge, only two studies in Malaysia assessed paternal knowledge, attitude and support in breastfeeding, but none has studied the relationship with breastfeeding outcomes, such as duration or exclusivity (11,12). Hence, there is lacking of studies that involve fathers directly in assessing their engagement or involvement in supporting and helping mothers, and also the influence on breastfeeding outcomes. Hence, the strength of the present study was being able to assess the paternal breastfeeding attitude and support and its association with exclusive breastfeeding duration.

The present study found a significant correlation between paternal infant feeding attitude and exclusive breastfeeding duration. Our findings showed that the duration of EBF was predicted to increase by an average 0.24 SD (week) for every 1% increase in infant feeding attitude score. This was consistent with a longitudinal study in Canada as they reported that fathers' positive attitudes were more likely to strengthen mother's breastfeeding intention and influenced duration that mothers intended to breastfeed (9). A study in Malaysia stated that the mothers acknowledged their partners played important role in their decision to breastfeed (24). Another study reported mothers practiced exclusive breastfeeding when their partners were supportive (25). This was, however, was not a factor in a previous Malaysian study when they found that father's knowledge and attitude scores were not significantly different between exclusively and non-exclusively breastfed infants (11). The findings of the study could also be confounded by the selection and recall biases due to convenient sampling criteria and study population that involves fathers with infants up to 2 years. Nevertheless, paternal breastfeeding education could remain crucial as a recent intervention study in Turkey has shown that providing breastfeeding education to fathers during the postpartum period was not only effective in increasing the EBF rates but also strengthens the father-infant bonding (26).

Overall, the result from the present study shows that fathers perceived their involvement in the breastfeeding practice from the people surrounding them as fairly positive. Our findings showed that for every 1 score increase in the overall mean score for breastfeeding support was associated with 2.17 SD increase in the

duration of EBF. This is consistent with experimental studies (27) showing the positive impact of paternal roles and support to their partner in breastfeeding on longer breastfeeding duration. Although there are many ways to support mothers, studies suggested that the husbands shall also be more responsive towards their partners' need during the postnatal period, as coordinate teamwork approach between the husband and wife was suggested to likely being the most effective method to support mothers breastfeed longer (18).

Although the majority of fathers in the present study reported to often engage in overall breastfeeding support, accumulated or mean subscales scores were correlated with exclusive breastfeeding duration. However, after adjusted for sociodemographic variables, duration of EBF was predicted to decrease by 2.20 SD (week) for every 1-point increase in support total score. Breastfeeding savvy subscale has most items than the other subscales in the questionnaire, contributed to the accumulated total score. From the univariate analysis, breastfeeding savvy was found to have a negative trend association with breastfeeding duration, although the result was non-significant (Table 2). Strategies that involve in breastfeeding savvy include sharing and practising the breastfeeding knowledge, such as able to handle breast pump, as part of the practical aspect of breastfeeding. This subscale behaviour among fathers was also reported to be less influence towards breastfeeding (18). The study also reported that other subscale such as appreciation, was associated with shorter breastfeeding duration, but not has been shown in the present study. The behaviour includes fathers who reported being more present and express direct appreciation (appreciation subscales of PBIS) during the breastfeeding process, which in some case was considered could increase the risk of earlier breastfeeding cessation (18). The study stated that this might be due to some women may feel stress and begin to feel that the breastfeeding experience was not authentic to them. This is especially when fathers were highly motivated to be present during the breastfeeding process, which mothers could tendency perceive of being obliged to have their child breastfed (15).

Therefore, apart from being present during breastfeeding, it would be important to inform or educate fathers on various ways to support mothers during breastfeeding, including learning to be more sensitive towards mother's need during the early breastfeeding period, such as offer help and care on a newborn infant (18). A study involves a focus group among first-time mother-father dyads (28) found that paternal emotional and practical support such as sharing the experience of childbirth and early breastfeeding, could help mothers to boost their confidence, hence help to maintain breastfeeding. The fathers also expressed wanting to learn more about breastfeeding and gain knowledge on nursing, hence making them feel more competent of being a new parent (28). Overall, the influence of different types



of behaviours (or different subscales of support) on breastfeeding outcomes highlights the importance to understand support strategies that shall be practiced among fathers in different populations. Exploring this further could be helpful for breastfeeding mothers, which could positively influence breastfeeding outcomes, such as lengthen breastfeeding duration or sustain the exclusive breastfeeding in the first six months.

On the other note, our study examined only first-time parents showing an important advantage in the current study in which all parents were equally inexperienced with the breastfeeding behaviours stated. Thus, the present results was not confounded with individual experience. However, there are several limitations which required to be acknowledged in the present study. First, all data were obtained by using a self-administered questionnaire where there was a tendency to recall bias. Second, the findings of this result could not be generalized for the whole population of first-time parents in Malaysia since the majority were Malay and highly educated. The sample size of the population is also small hence future studies with a larger sample size with a more heterogeneous population is suggested. Nevertheless, this present study highlights the needs of future research to determine the causal or long-term relationship between the paternal factors and breastfeeding success. Future intervention is also suggested to include the implementation of paternal breastfeeding perspectives and support on breastfeeding outcomes such as exclusive at six month and long duration of breastfeeding.

## CONCLUSION

In conclusion, paternal infant feeding attitude and breastfeeding support were significant predictors of exclusive breastfeeding duration in this study. Therefore, it is important to increase public awareness of the important roles of fathers during the breastfeeding process and provide appropriate educational programs on breastfeeding to new parents. This includes acknowledging that, besides health care professional, and also as part of the community, husband or partner is an important active member of the team to help mothers sustain and prolong breastfeeding. For example, paternal role in caring for the baby and husband's role in supporting and helping their wives breastfeed their infant. Apart from this, it is recommended to investigate whether mothers' perception of their male partners' attitude and engagement in breastfeeding support strategies is congruent with fathers' reports. Future research is suggested to identify the types of breastfeeding support required by mothers during the breastfeeding process so that fathers can be more sensitive or aware towards their partner's needs and provide the exact or efficient support needed to improve breastfeeding practices. Hence, it is important to build the paternal awareness and sensitivity towards mothers, especially the first-time

fathers, and to emphasize that the mothers are likely to value and appreciate the fathers' involvement as a team to nurture and care their infant.

## ACKNOWLEDGEMENTS

We are thankful to all mothers and fathers who participated in the study and to nurses and clinic staffs who assisted the recruitment process. We are grateful to the Ministry of Health Malaysia for allowing us to recruit participants at the health clinics in Kuala Lumpur. This study is supported by the Grant Putra IPS UPM (GP-IPS/2019/9675400).

## REFERENCES

1. Duijts L, Jaddoe VWV, Hofman A, Moll HA. Prolonged and Exclusive Breastfeeding Reduces the Risk of Infectious Diseases in Infancy. *Pediatrics*. 2010;126(1):e18–e25.
2. Victora CG, Bahl R, Barros AJD, et al. Breastfeeding in the 21st century: Epidemiology, mechanisms, and lifelong effect. *The Lancet*. 2016;387(10017):475–490.
3. Ahmad Nadzri J, Aminah Bee MK, Azah A, et al. National Health And Morbidity Survey 2016. Ministry of Health, Malaysia. 2016;2. Retrieved from <http://www.iku.gov.my/images/IKU/Document/REPORT/2016/NHMS2016ReportVolumeII-MaternalChildHealthFindingsv2.pdf>
4. Fatimah S, Siti Sa'adiah HN, Hussain Imam MI, Tahir A, Ahmad Faudzi Y. Breastfeeding in Malaysia: Results of the Third National Health and Morbidity Survey (NHMSIII) 2006. *Malaysia Journal of Nutrition*. 2010;16(20):195–206.
5. National Coordinating Committee on Food and Nutrition. National Plan of Action for Nutrition of Malaysia (NPANM III), 2016-2025. 2016. Putrajaya, Malaysia. (3):13
6. Thulier D, Mercer J. Variables Associated with Breastfeeding Duration. *Jognn*. 2009;38:259–268.
7. Swanson V, Power KG. Initiation and continuation of breastfeeding: Theory of planned behaviour. *J Adv Nurs*. 2005;50(3):272-282.
8. Arora S, Mcjunkin C, Wehrer J, Kuhn P. Major Factors Influencing Breastfeeding Rates: Mother's perception of father's attitude and milk supply. *Pediatrics*. 2000;106(5):1–5.
9. Rempel LA, Rempel JK. Partner influence on health behavior decision-making: Increasing breastfeeding duration. *Journal of Social and Personal Relationships*. 2004;21(1):92–111.
10. Scott JA, Landers MCG, Hughes RM, Binns CW. Factors associated with breastfeeding at discharge and duration of breastfeeding. *Journal of Paediatrics and Child Health*. 2001;37(3):254–261.
11. Mohamad N, Draman N, Muhamad R, & Yusoff HM. Knowledge and Attitude towards Exclusive Breastfeeding Practices among fathers who attend

- Primary Health Care Facilities in Subur-ban , Malaysia. *International Journal of Collaborative Research on Internal Medicine & Public Health*. 2015;7(7):154–163.
12. Muda, S. M., Rozi, M. S. M., Arifin, S. R. M., & Makhtar, A. The perceptions of married men on breastfeeding practice. *International Journal of Public Health and Clinical Sciences*, 2017. 4(2): p. 95-109.
  13. Ng, R. W. L., Shorey, S., & He, H.-G. Integrative Review of the Factors That Influence Fathers' Involvement in the Breastfeeding of Their Infants. *Journal of Obstetric, Gynecologic & Neonatal Nursing*. 2019. 48(1): p. 16-26.
  14. Hulley S, Cummings S, Browner W, Grady D, & Newman T. *Designing clinical research : an epidemiologic approach*. Lippincott Williams & Wilkins. Philadelphia. 2013.
  15. Moore K. *Father involvement in the breastfeeding process: Determining contributing aspects*. Master thesis. 2010. Brock University. Retrieved from [http://dr.library.brocku.ca/bitstream/handle/10464/3179/Brock\\_Moore\\_Katrina\\_2010.pdf?sequence=1&isAllowed=y](http://dr.library.brocku.ca/bitstream/handle/10464/3179/Brock_Moore_Katrina_2010.pdf?sequence=1&isAllowed=y)
  16. Mora, A. d. I., Russell, D. W., Dungy, C. I., Losch, M., & Dusdieker, L. The Iowa Infant Feeding Attitude Scale: Analysis of Reliability and Validity. *Journal of Applied Social Psychology*. 1999. 29(11): p. 2362-2380.
  17. Leng, R. N. W., Shorey, S., Yin, S. L. K., Chan, C. P. P., & He, H.G. Fathers' Involvement in Their Wives'/Partners' Breastfeeding: A Descriptive Correlational Study. *Journal of Human Lactation*. 2019. 35(4): p. 801-812.
  18. Rempel, L. A., Rempel, J. K., & Moore, K. C. Relationships between types of father breastfeeding support and breastfeeding outcomes. *Maternal & Child Nutrition*. 2017. 13(3): p. e12337.
  19. Ishak, S., Adzan, N. A. M., Quan, L. K., Shafie, M. H., Rani, N. A., & Ramli, K. G. Knowledge and Beliefs About Breastfeeding Are Not Determinants for Successful Breastfeeding. *Breastfeeding Medicine*. 2014. 9(6): p. 308-312.
  20. Mohd Shukri, N. H., Wells, J., Eaton, S., Mukhtar, F., Petelin, A., Jenko-Pražnikar, Z., & Fewtrell, M. Randomized controlled trial investigating the effects of a breastfeeding relaxation intervention on maternal psychological state, breast milk outcomes, and infant behavior and growth. *The American Journal of Clinical Nutrition*. 2019. 110(1): p. 121-130.
  21. Pilus, F. M., Ahmad, N., & Zulkefli, N. A. M. Ahmad, and N.A.M. Zulkefli. Predictors of Exclusive Breastfeeding Among Mothers Attending Rural Health Clinics in Hulu Langat District. *Malaysian Journal of Medicine and Health Sciences*. 2019. 15(SP3): p. 15-21.
  22. Shukri, N., Wells, J., Mukhtar, F., Lee, M., & Fewtrell, M. Study protocol: An investigation of mother-infant signalling during breastfeeding using a randomised trial to test the effectiveness of breastfeeding relaxation therapy on maternal psychological state, breast milk production and infant behaviour and growth. 2017. 12(1): p. 33.
  23. Mahesh P, Gunathunga M, Arnold S et al. Effectiveness of targeting fathers for breastfeeding promotion: systematic review and meta-analysis. *BMC Public Health*. 2018;18(1).
  24. Radzniwan A, Azimah N, Zuhra H, Khairani O. Breast feeding practice and knowledge among mothers attending an urban malaysian maternal and child health clinic. *Med & Health*. 2009;4(1):1–7.
  25. Tan KL. Factors associated with exclusive breastfeeding among infants under six months of age in Peninsular Malaysia. *International Breastfeeding Journal*. 2011;6(1):2.
  26. Lzlüses E, Çelebioglu A. Educating fathers to improve breastfeeding rates and paternal-infant attachment. *Indian Pediatr*. 2014;51(8):654-657.
  27. Abbass-Dick J, Stern S, Nelson L, Watson W, Dennis C. Coparenting Breastfeeding Support and Exclusive Breastfeeding: A Randomized Controlled Trial. *Pediatrics*. 2014;135(1):102-110.
  28. Tohotoa J, Maycock B, Hauck Y, Howat P, Burns S, Binns C. Dads make a difference: an exploratory study of paternal support for breastfeeding in Perth, Western Australia. *Int Breastfeed J*. 2009;4(1):15.