Original Article

Internal factors affecting the mother's psychological capital in exclusive breastfeeding during the COVID-19 pandemic

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Abstract

Background: During the pandemic, in terms of breastfeeding, most mothers experience anxiety and discomfort. The impact of this condition will decrease the production of breast milk. The purpose of this study was to determine the internal factors that affect the psychological capital of mothers when breastfeeding during the COVID-19 pandemic in Petiken Village, Gresik.

Design and methods: This study was an analytical study with a cross-sectional approach. The population of this study was all breastfeeding mothers who had babies aged 6–12 months. The sampling technique used was simple random sampling involving 102 respondents. The independent variables were motivation, perception, and attitude. The dependent variable was psychological capital. Data were collected from June to July 2021. The data analysis was conducted using the logistic regression test to determine the variable with a significance level of p < 0.05.

Results: The results of the multivariate analysis showed that the motivation variable was p = 0.036. Motivation had effect on psychological capital. While the perception variable was p = 0.056 (p > 0.05), the perception had no effect on psychological capital. The attitude variable p = 0.055 (p > 0.05), the attitude had no effect on psychological capital. The factor that affects the mother's psychological capital in relation to exclusive breastfeeding during the COVID-19 pandemic was motivation.

Conclusion: It is expected that mothers have a high motivation which can affect the mother's psychological capital. It is needed to increase and succeed at providing exclusive breastfeeding.

Keywords

Motivation, psychological capital, exclusive breastfeeding

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Introduction

Breast milk is the main food and the most perfect nutrition for infants. It contains an ideal composition that is according to the infant's needs when it comes to growing and developing optimally.¹ Exclusive breastfeeding refers to the breast milk that is given to babies from birth to 6 months of age, without adding and/or replacing it with other foods or drinks (except drugs, vitamins, and minerals).²

Factors that influenced non-exclusive breastfeeding was caused by the mother's fear of the adequacy of breast milk.³ During the COVID-19 pandemic, most mothers experience

fear, anxiety, and psychological discomfort because the conditions were uncertainty.^{4,5} The psychological impact on the production of breast milk involves their pessimistic about milk that they are producing.⁵ If the mother consumes

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nutritious food and gets stimulation from the baby's mouth, her breast milk will automatically continue to be produced.^{6,7} In addition, the status of mothers working is also factor that influenced non-exclusive breastfeeding.⁸

The WHO target for exclusive breastfeeding is 50% until 2025. It reached 46% in 2019.⁹ In Indonesia, the number of infants receiving exclusive breastfeeding in 2019 was 67.74%. The data showed that the number of infants receiving exclusive breastfeeding in East Java in 2019 was 78.3%. This coverage has increased other than in 2018 when it was 76.8%.¹⁰ Data from Riskesdas 2018 stated that the percentage of exclusive breastfeeding in Gresik Regency was 64.6% of 3121 infants aged 0–6 months. This has decreased from 2017, when it reached 74%. This coverage does not reach the government target of 77%, and in 2018, for Driyorejo sub-district, the coverage of exclusive breastfeeding was only 52.4%.¹¹

The postpartum stress condition is common experienced by women after giving birth.^{12,13} This refers to feelings of sadness or irritability that occur in the period ranging from 2 to 10 days after delivery.¹⁴ The psychological factor is one of the factor groupings that occur within individuals that can affect the decision to do something. The psychological factors are affected by three internal factors, specifically motivation, perception, and attitude.¹⁵ Psychological capital is one of the capacities that help an individual to develop and influence their individual work behavior. Besides that, psychological capital is a positive capacity that is included in positive organizational behavior. Individuals with the highest psychological capital feel more positive effects, therefore psychological capital is identified as an enabler, despite facing many obstacles to imagining success.^{16,17} Previous study showed that psychological capital is needed to provide exclusive breastfeeding.18

As a health worker, using a psychological capital approach to support the mother is important to affect breast milk production. Based on this background, this study aimed to determine the factors that affect the mother's psychological capital in breastfeeding.

Methods

This study used a cross-sectional research design. The population consists of 116 respondents consisting of breastfeeding mothers who have babies aged 6–12 months in Petiken Village, Gresik, Indonesia. The total of the sample was calculated based on the simple random sampling technique, it was 102 respondents. Data retrieval online by providing a Google Form link as well as offline. The questionnaire used in this study was the Psychological Capital Questionnaire (PCQ) according to Luthans et al.¹⁹ It included motivation, perception, and attitude measured

 Table I. Distribution of the respondent characteristics by age, education, and parity.

Characteristics	Criteria	Frequency	Percentage (%)	
Age	<21 years old	2	2	
-	21–35 years old	83	81	
	>35 years old	17	17	
Education	Middle	75	74	
	Upper	27	26	
Parity	Primipara	57	56	
	Multipara	50	44	
Total		102	100	

Source: Primer Data, July 2021.

Table 2. Distribution of the motivation, perception, attitude, and psychological capital variables.

Variable	Criteria	Frequency	Percentage (%)	
Motivation	Good	70	68.6	
	Fair	23	22.5	
	Poor	9	8.9	
Perception	Good	42	41.2	
	Fair	48	47.1	
	Poor	12	11.7	
Attitude	Good	45	44.1	
	Fair	48	47.1	
	Poor	9	8.8	
Psychological capital	High	70	68.6	
	Medium	23	22.6	
	Low	9	8.8	
Total		102	100	

Source: Primer Data, July 2021.

using a Likert scale. In this study, the data analysis used was a statistical test, specifically a logistic regression test.

Results

The results of this study started with examining the characteristics of breastfeeding mothers which included age, education, and parity.

Table 1 showed that almost all of the respondents (81%) were aged 21–35 years old. Most of the respondents (74%) have a middle education level, and most of the respondents (56.5%) had primipara parity (first time giving birth).

Table 2 showed that almost all respondents (68.6%) have a good level of motivation when it comes to giving exclusive breastfeeding. Almost half of the respondents (47.1%) have a fair motivation and almost half of respondents (47.1%) have a poor motivation regarding the giving of exclusive breastfeeding. Most of the respondents

Table 3. Multivariate analysis results.

Variable	Estimate	Wald	Df	Sig.	(Cl 95%)
Motivation Perception Attitude	-4.274 -3.979 -2.999	4.408 3.657 3.669	I	0.056	(-8.265 to -284) (-8.058 to 099) (-6.067 to 070)

Source: Primer Data, July 2021.

(68.6%) have a high level of psychological capital in giving exclusive breastfeeding.

Based on Table 3, the results of the multivariate analysis show that the motivation variable was p=0.036(p<0.05). This proves that there is an effect due to motivation on psychological capital. According to the perception variable p=0.056 (p>0.05), it is proven that there is no effect due to attitude on psychological capital. The attitude variable obtained a result of p=0.055 (p>0.05). This proves that there is no effect due to attitude on psychological capital.

Discussion

The mother's motivation to breastfeed during the COVID-19 pandemic in Petik Village in Gresik was the most dominant factor affecting the psychological capital of the mothers engaged in exclusive breastfeeding. The results showed that the motivation of the breastfeeding mothers was good and the motivation had significantly effect on psychological capital compared to the attitude and perception.

This study was similar with previous study that mentioned that motivation is needed among mothers to give their babies exclusive breastfeeding.^{20,21} Meanwhile, mothers who have a low level of motivation do not give their babies exclusive breastfeeding. The results showed that there was a relationship between the mother's motivation and exclusive breastfeeding.²² Motivation as the internal and external encouragement in a person which is seen by the desire and interest to carry out activities, inclusive of the energy to carry out activities, their hopes and ideals, self-rewards, a good environment, and interesting activities. Those, support from husband or family is needed to motivate mother to provide exclusive breastfeeding.^{23,24}

The education level of the respondents shows that almost all of the respondents (76.1%) have a middle level of education, and only a small proportion have an upper level of education (23.9%). Mothers who know the benefits of exclusive breastfeeding will be more motivated to give their babies exclusive breastfeeding.²⁵ Mothers who are highly educated will easily accept new ideas more than the mothers with low education. This means that the promotion of information and information about exclusive breastfeeding can be accepted and implemented easily.²⁶ In addition, mothers do not provide additional food or drinks and juices other than breast milk to infants before the age of 6 months.²⁷

The characteristics of mothers to determine the motivation included age and education. Age is one of the factors that affect the behavior of mothers when exclusive breastfeeding. The results of this study stated that almost all of the respondents were aged 21–35 years old. This study similar with previous study that states that maternal age related to exclusive breastfeeding.²⁸ Based on this data the government should recommend reproductive age for pregnancy, birth and breastfeeding is between the ages of 20 and 35 years.

The mother's ability to provide exclusive breastfeeding is also strongly affected by the mother's psychological capital. This result similar with previous study that mentioned women in Asia have experienced a range of psychological disorders after giving birth.^{29,30} The lowest prevalence was in Malaysia and the highest was in Pakistan.³⁰ The psychological disorders that occur among pregnant and lactating women will affect the relationship between the mother and baby, as well as the timing of breastfeeding.³¹ In addition, it was needed to strength the psychological capital during pregnancy and childbirth to reduce the negative impact of psychological conditions that can affect exclusive breastfeeding.

Conclusion

Motivation is a psychological power that makes a person capable of taking action. Motivation is the power of an individual to do what must be done, including when and how to achieve their goals. When an individual has a strong motivation, this will make the individual not easily give up. Mothers who have a high motivation to provide exclusive breastfeeding to their babies will have the desire to continue breastfeeding. Strong motivation can help the mothers to stimulate their milk production so then the mother's milk is enough for her baby.

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Contributors

The authors contributed equally.

Ethics approval

The procedure of this study was granted by ethical clearance number 188/EC/KEPK/UNUSA/2021 from Universitas Nahdlatul Ulama, Surabaya, Indonesia.

Significance for public health

Promoting exclusive breastfeeding is needed in public health concern because it is the component of life programing. However, the target of exclusive breastfeeding in Indonesia has not been reached. This condition was affected by psychological disorder among mother who give exclusive breastfeeding. This study highlights he psychological capital during pregnancy and childbirth, especially motivation to reduce the negative impact of psychological conditions that can affect exclusive breastfeeding.

References

- 1. Walker A. Breast milk as the gold standard for protective nutrients. *J Pediatr* 2010; 156(2 Suppl): S3–S7.
- Kramer MS and Kakuma R. Optimal duration of exclusive breastfeeding. *Cochrane Database Syst Rev* 2012; 8: CD003517.
- 3. Bowles BC. Promoting breastfeeding self-efficacy: fear appeals in breastfeeding management. *Clin Lact* 2011; 2(1): 11–14.
- Dimopoulou D, Triantafyllidou P, Daskalaki A, et al. Breastfeeding during the novel coronavirus (COVID-19) pandemic: guidelines and challenges. *J Matern Fetal Neonatal Med* 2020; 1–7.
- Hull N, Kam RL and Gribble KD. Providing breastfeeding support during the COVID-19 pandemic: concerns of mothers who contacted the Australian Breastfeeding Association. *Breastfeed Rev* 2020; 28(3): 25–35.
- Keikha M, Bahreynian M, Saleki M, et al. Macro- and micronutrients of human milk composition: are they related to maternal diet? A comprehensive systematic review. *Breastfeed Med* 2017; 12(9): 517–527.
- Jonas W and Woodside B. Physiological mechanisms, behavioral and psychological factors influencing the transfer of milk from mothers to their young. *Horm Behav* 2016; 77: 167–181.
- Abekah-Nkrumah G, Antwi MY, Nkrumah J, et al. Examining working mothers' experience of exclusive breastfeeding in Ghana. *Int Breastfeed J* 2020; 15(1): 56–10.
- Shrivastava S and Shrivastava P. Empower parents and enable breastfeeding: role of employers. *Ibnosina J Med Biomed Sci* 2019; 11(3): 109.
- 10. Dinkes J. *Profil Kesehatan Provinsi Jawa Timur*. Surabaya: Jawa Timur, 2019.
- 11. Ministry of Health. *Hasil utama RISKESDAS 2018. Jakarta Badan Penelit dan Pengemb Kesehatan, Kementrian Kesehat Republik Indones.* 2018.
- Harrison S, Ayers S, Quigley M, et al. Prevalence and factors associated with postpartum posttraumatic stress in a population-based maternity survey in England. J Affect Disord 2021; 279: 749–756.
- 13. Salm Ward T, Kanu FA and Robb SW. Prevalence of stressful life events during pregnancy and its association with

postpartum depressive symptoms. Arch Womens Ment Health 2017; 20(1): 161–171.

- Beck CT. Postpartum depression: it isn't just the blues. AJN Am J Nurs 2006; 106(5): 40–50; quiz 50.
- Gunawan S. The impact of motivation, perception and attitude toward consumer purchasing decision: a study case of Surabaya and Jakarta Society on Carl's Junior. *IBuss Management* 2015; 3(2).
- Newman A, Ucbasaran D, Zhu F, et al. Psychological capital: a review and synthesis. *J Organ Behav* 2014; 35(S1): S120–S38.
- Avey JB, Luthans F and Youssef CM. The additive value of positive psychological capital in predicting work attitudes and behaviors. *J Manag* 2010; 36(2): 430–452.
- Nisa F, Damayanti NA, Suhariadi F, et al. The intention for providing exclusive breastfeeding associated from self-leadership and psychological capital of Mother. *Indian J Forensic Med Toxicol* 2021; 15(3).
- Luthans F, Avolio BJ, Avey JB, et al. Positive psychological capital: Measurement and relationship with performance and satisfaction. *Pers Psychol* 2007; 60(3): 541–572.
- Lange A, Nautsch A, Weitmann K, et al. Breastfeeding motivation in Pomerania: survey of neonates in Pomerania (snip-study). *Int Breastfeed J* 2016; 12(1): 3–7.
- Mulyani S, Subiyanto A, Anantanyu S, et al. Path analysis: knowledge, motivation factor, and their relationship with readiness to provide exclusive breastfeeding among pregnant women. *Int Res J Manag IT Soc Sci* 2017; 4(1): 8–13.
- Kestler-Peleg M, Shamir-Dardikman M, Hermoni D, et al. Breastfeeding motivation and self-determination theory. *Soc Sci Med* 2015; 144: 19–27.
- Alianmoghaddam N, Phibbs S and Benn C. The impact of family culture on six months exclusive breastfeeding: a qualitative study in New Zealand. *Breastfeed Rev* 2018; 26(1): 23–36.
- Rempel LA, Rempel JK and Moore KCJ. Relationships between types of father breastfeeding support and breastfeeding outcomes. *Matern Child Nutr* 2017; 13(3): e12337.
- 25. Suárez-Cotelo MDC, Movilla-Fernández MJ, Pita-García P, et al. Breastfeeding knowledge and relation to prevalence. *Rev Esc Enferm USP* 2019; 53.
- Tang K, Wang H, Tan SH, et al. Association between maternal education and breast feeding practices in China: a populationbased cross-sectional study. *BMJ Open* 2019; 9(8): e028485.
- Dukuzumuremyi JPC, Acheampong K, Abesig J, et al. Knowledge, attitude, and practice of exclusive breastfeeding among mothers in East Africa: a systematic review. *Int Breastfeed J* 2020; 15(1): 70–17.
- Jones JR, Kogan MD, Singh GK, et al. Factors associated with exclusive breastfeeding in the United States. *Pediatrics* 2011; 128(6): 1117–1125.
- 29. Patel V, Rahman A, Jacob KS, et al. Effect of maternal mental health on infant growth in low income countries: new evidence from South Asia. *BMJ* 2004; 328(7443): 820–823.
- Klainin P and Arthur DG. Postpartum depression in Asian cultures: a literature review. *Int J Nurs Stud* 2009; 46(10): 1355–1373.
- Krol KM and Grossmann T. Psychological effects of breastfeeding on children and mothers. *Bundesgesundheitsblatt* 2018; 61(8): 977–985.