

# Maternal Attainment of Exclusive Breastfeeding in Sampang Madura

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**Abstract---** Exclusive breastfeeding is important to reduce death and pain rates among babies, which are high in Indonesia. Exclusive breastfeeding is still very low in Madura (38%). The aim of this research was to explain the factors related to maternal attainment of exclusive breastfeeding. This research was a cross-sectional study. Sampling was conducted using a purposive sampling technique. The instrument was a questionnaire which was tested for validity and reliability and given to 110 mothers who had babies aged 6-12 months in the working area of Sreseh Health Center, Sampang Regency. Most of respondents (59.09%) did not provide exclusive breastfeeding. Maternal attainment of exclusive breastfeeding was only in 19.09%; there was a relationship between family support, economic status, infant care, and health services ( $p=0.000$ ) with maternal attainment of exclusive breastfeeding. Economic Status ( $\chi^2=80,670 > 9,488$ ) and health services ( $\chi^2=41,594 > 5.99$ ) had a strong relationship with maternal attainment of exclusive breastfeeding compared to other factors. Economic status and health care were the basis of improving maternal attainment of exclusive breastfeeding.

**Keywords---** Breastfeeding; Infant Mortality Rate; Attainment

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## I. INTRODUCTION

Exclusive breastfeeding is important for a baby's growth and development [1], [2]. The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) recommend that mothers breastfeed for the first 6 months of a baby's life [3] and introduce complementary foods by continuing breastfeeding until 2 years old. The importance of breastfeeding for child health has been documented repeatedly.

The prevalence of Infant Mortality Rate (IMR) in Indonesia is still very high. The percentage of infants who received exclusive breastfeeding in East Java in 2016, specifically Sampangregency, amounted to 58.94% or 4,127 of the existing 7,002 infants. This was not in line with the target of 70% [4] while the exclusive breastfeeding coverage at Sreseh Health Center was only 38.0% [5]. The low number of babies that get exclusive breastfeeding is for the lack of the role of mothers in nutrient delivery, i.e., breastfeeding exclusively.

Previous research mentions family pressure is an important reason for introducing complementary food early [6]. Family economic status and a mother's knowledge in conducting infant care are associated with breastfeeding practices. Health care facilities support mothers to begin and maintain breastfeeding practices [7]. The support from health officers and families is a factor that helps the mother to achieve exclusive breastfeeding for 6 months [8]. Therefore, the mother's

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role in breastfeeding becomes a preventive strategy to improve the infant's health. The purpose of this research was to explain the factors related to the mother's attainment of exclusive breastfeeding in the working area of Sreseh Health Center, Sampang Regency.

## II. METHODS

This research was a cross-sectional study conducted in the working area of Sreseh Health Center, Sampang Regency. Data obtained from Puseskesmas Sreseh mentioned that 524 mothers had babies. Then, 110 mothers with babies aged 6-12 months were selected in the working area of Sreseh Health Center, Sampang Regency. Data collection was conducted by using purposive sampling. Mothers with mental disorders and mothers or babies with anatomic and biological abnormalities in breastfeeding were excluded from the research.

A structured questionnaire which had been tested for validity ( $r$  arithmetic  $>$   $r$  tables (0.4438)) and reliability (Cronbach's alpha method) was given to respondents who agreed to be the subject of research and the SPSS 24 correlation product moment was used through questions relating to the characteristics of the subject research. Family support included: emotional support, information, physical and judgment; economic status included: education, employment, income, number of liabilities, ownership status, type of residence; infant care included: understanding, benefits, time, way of breastfeeding, problems, an exclusive breastfeeding myth; health care services included: providing information, participating in programs; and the What Being the Parent of a New Baby is Like: Revision of an Instrument (WPL-R) included: evaluation, centrality and life change.

Data were analyzed using Statistical Package for Social Sciences (SPSS) 24. Chi-square was statistically tested with the value of the significance of the values  $\text{sig } p \leq 0.05$  to know the relationship between the factors of the mother's attainment of exclusive breastfeeding.

This study was approved by the chairman of the Health Research Ethics Commission of the Faculty of Nursing, Universitas Airlangga, Surabaya with the code: 949-KEPK.

## III. RESULTS

In Table 1, the respondents' sociodemographic characteristics show that most of the mothers (85.45%) were 20-35 years old and had 2 children (36.36%). Most babies were aged 12 months (38.18%) living within a nuclear family (60.91%) with 5 family members (27.27%) and the parents were still married (96.36%). Mothers who did not breastfeed exclusively totaled around 59.09%.

Table 1. Respondents demographic characteristics distribution (n=110)

Respondents Characteristics	n (%)
Mother's Age	
< 20 years	1 (0.91)
20-35 years	94 (85.45)
> 35 years	15 (13.64)
Infant Age	
6 months	18 (16.36)
7 months	9 (8.18)
8 months	15 (13.64)
9 months	8 (7.27)
10 months	10 (9.09)
11 months	8 (7.27)
12 months	42 (38.18)
Number of Children	
1 Child	37 (33.64)

<b>Respondents Characteristics</b>	<b>n (%)</b>
2 Child	40 (36.36)
≥ 3 Child	33 (30)
Family Form	
NuclearFamily	67 (60.91)
Extended Family	43 (39.09)
Number of Family Members	
3 Persons	24 (21.82)
4 Persons	28 (25.45)
5 Persons	30 (27.27)
≥ 5 persons	28 (25.45)
Marital Status	
Married	106 (96.36)
Widowed	4 (3.64)
Exclusive Breastfeeding	
Providing exclusive breastfeeding	45 (40.91)
Not exclusive breastfeeding	65 (59.09)

In Table 2, it has been shown that around 62.27% of breastfeeding mother's lacked family support. Among the 110 respondents living in the working area of Sreseh Health Center of Sampang Regency, the majority still had a low economic status, 40.91%. Knowledge about good baby care was only held by 12.73%, while more mothers have poor baby care knowledge at around 33.64%. Respondents said health care is still less beneficial (70.91%) to make the mother's independent decision. Meanwhile, the maternal attainment of exclusive breastfeeding was still low at 42.73%.

Table 2. Variable-based respondents' distribution (n=110)

<b>Variable</b>	<b>n (%)</b>
Family Support	36 (32.73)
Good	36 (32.73)
Less Good	74 (67.27)
Economic Status	27 (24.55)
High	27 (24.55)
Medium	38 (34.54)
Low	45 (40.91)
Infant Care	14 (12.73)
Good	14 (12.73)
Quite Good	26 (23.64)
Less Good	33 (30)
Not Good	37 (33.64)
Health Care	32 (29.09)
Helpful	32 (29.09)
Useless	78 (70.91)
Maternal Attainment	21 (19.09)
High	21 (19.09)
Medium	42 (38.18)
Low	47 (42.73)

Table 3 shows that breastfeeding mothers who got less family support had poorer attainment of exclusive breastfeeding. If breastfeeding mothers had high family support, there was higher attainment of exclusive breastfeeding.

Table 3. Relationship between family support and the mother's attainment of exclusive breastfeeding (n=100)

<b>Family Support (n)</b>	<b>Attainment of Exclusive Breastfeeding</b>		
	<b>High n (%)</b>	<b>Medium n (%)</b>	<b>Low n (%)</b>
Good (74)	15 (13.63)	12 (10.91)	9 (8.18)
Less (36)	6 (5.45)	30 (27.27)	38 (34.54)
<b>*Chi Square P Test = 0.000, <math>\chi^2=18,552 &gt; 5.99</math></b>			

Table 4 shows that mothers with high economic status also had high attainment of exclusive breastfeeding. Meanwhile mothers with low economic status had low attainment of exclusive breastfeeding for the first 6 months of their baby's life.

Table 4. Relationship between economic status and mother's attainment of exclusive breastfeeding (n=110)

Economic Status (n)	Attainment of Exclusive Breastfeeding		
	High n (%)	Medium n (%)	Low n (%)
High (27)	16 (14.54)	6 (5.45)	5 (4.54)
Medium (38)	2 (1.82)	30 (27.27)	6 (5.45)
Low (45)	3 (2.73)	6 (5.45)	36 (32.73)

**\*Chi square p test= 0.000, x<sup>2</sup>=80,670>9,488**

Table 5 shows that the majority of mothers who had bad knowledge of baby care had low maternal attainment of exclusive breastfeeding. Conversely, mothers with good knowledge had high exclusive breastfeeding. There was a significant relationship between baby care and maternal attainment of exclusive breastfeeding.

Table 5. Relationship between infant care and mother's attainment of exclusive breastfeeding (n=110)

Baby Care (n)	Attainment of Exclusive Breastfeeding		
	High n (%)	Medium n (%)	Low n (%)
Good (14)	8 (7.27)	5 (4.54)	1 (0.91)
Enough (27)	8(7.27)	14 (12.73)	5 (4.54)
Less (32)	3 (2.73)	9 (8.18)	20 (18.18)
Not good (37)	2 (1.82)	14 (12.73)	21 (19.09)

**\*Chi square p test = 0.000, x<sup>2</sup>=32,079>12,592**

Table 6 shows that most mothers who felt that health services were useless had poor attainment of exclusive breastfeeding, whereas mothers who felt that health care was beneficial had higher attainment of exclusive breastfeeding.

Table 6. Relationship between health care and mother's attainment of exclusive breastfeeding (n=110)

Care Health (n)	Attainment of Exclusive Breastfeeding		
	High n (%)	Medium n (%)	Low n (%)
Helpful (32)	18 (16.36)	9 (8.18)	5 (4.54)
Useless (78)	3 (2.73)	33 (30)	42 (38.18)

**\*Chi square p Test= 0.000, x<sup>2</sup>=41,594>5,99**

#### IV. DISCUSSION

If breastfeeding mothers get less family support, then it affects the attainment of exclusive breastfeeding. It means that many mothers introduce complementary food before the recommended age, which is 6 months. Further, a mother with high family support will also get higher attainment of exclusive breastfeeding. The bigger the support that mothers receive to continue breastfeeding, the greater the ability for mothers to continue breastfeeding [9]. The community still has poor knowledge about feeding complementary food early.

According to other authors, feedback and suggestions from extended families influence lack of autonomy and decision-making about breastfeeding [10], [11]. So mothers have negative characteristics to determine baby care included in the role of mothers giving exclusive breastfeeding.

The most widely gained family support in this study was emotional support that can be seen from the question of encouragement and a calm atmosphere during breastfeeding. Mothers with good family support had high attainment in delivering exclusive breastfeeding, but 8.18% had good family support and low attainment. Infant feeding, especially breastfeeding, is still poor in developing countries, because many babies have been introduced to complementary food before the age of 6 months, increasing the risk of infection and inadequate nutritional quality [12].

The previous research has observed that family support had a big influence on how mothers looked at themselves and cared for babies, so mothers gained personal motherhood and felt more competent in their role, especially in providing exclusive breastfeeding [13], [14]. If parents have an important role in advising and supporting mothers in baby feeding, it may be wise to develop an intervention program for family members [6].

Income may have to be used to fulfill the needs of technological factors such as buying a breastfeeding pump and refrigerator. This is to store expressed milk, so that it can be given to a baby when a mother can not breastfeed directly [15]. In this study, economic status is the most powerful item that encouraged mothers to provide exclusive breastfeeding. Economic status is also influenced by work. The most frequent answer to the job question showed that most mothers were housewives.

Most mothers did not work or worked as housewives, so they did not earn a monthly income. They only had an income from other family members, such as husbands. Low-income sources influence the purchasing power in terms of food consumed by mothers, so spending money on breastfeeding is disrupted and causes the mother to give complementary food early.

Mothers with good economic status had high attainment, but 4.54% of those with a good economic status had low attainment. This was influenced by social classes, background, occupation, lack of knowledge, and family choices. This research is also strengthened by Yunitasari's research results [16]. These stated that the economic status of the family (education, employment, and income) significantly affects self-esteem and leads mothers to consider themselves more competent in their role of providing exclusive breastfeeding. Income affects family lifestyle.

A mother's knowledge about exclusive breastfeeding is the result of knowledge, and this occurs after the mother senses a certain object [17]. A mother's knowledge of exclusive breastfeeding affects the mother's understanding of actions that should be taken to exclusively breastfeed her child.

The level of knowledge about exclusive breastfeeding is influenced by the level of education. Mothers with good knowledge had high attainment, but 0.91% with good knowledge had low attainment. High maternal education enhances mothers' understanding of the importance of exclusive breastfeeding and rejects outside interference and pressure [18].

Similar findings were observed in previous research studies; the role of mothers in childcare (exclusive breastfeeding) is more difficult for mothers than they previously thought due to lack of information, and therefore mothers need education [14], [19], [20]. The mistaken beliefs of the mother in relation to breastfeeding include the idea that she does not have enough milk, and a belief that baby will not gain adequate weight if given breastmilk only. This was shown by most respondents' answers to the questionnaire. Health workers must investigate local beliefs in improving education about exclusive breastfeeding [21].

Health workers must be able to provide conditions that can influence positive behavior towards health [22]. The influence depends on persuasive communication. Mothers who felt health services were beneficial had high attainment in providing exclusive breastfeeding, but 4.54% of mothers who thought health services seem beneficial had low attainment.

The high expectations of respondents towards health workers, difficulty understanding information, lack of trust, and culture all affected this.

In this research, health services are one of the strong factors in supporting mothers in exclusive breastfeeding. Many respondents answered that there was a lack of health education from health workers, so the mothers' knowledge about breastfeeding properly and correctly could not be realized due to lack of support.

The success of breastfeeding mothers requires the role of health workers. Similar findings were observed by Zakar, Ketbi, and Oakley, who showed that the support and role of health workers is very important in reducing the number of mothers who stop breastfeeding exclusively [19][20][23]. The role of health workers is the beginning of the success or failure of mothers' exclusive breastfeeding. Empowerment from health workers encourages the right way to give exclusive breastfeeding to the society [8].

## V. CONCLUSION

Several factors influence maternal attainment of breastfeeding, namely, family support, economic status, baby care, and health services. Among the several variables that have a strong relationship with maternal attainment of breastfeeding are economic status and health services. With the improved economic status of mothers, it is easier to increase the mothers' understanding of the importance of exclusive breastfeeding and the outcome of food in supporting breastfeeding. Also, support from health workers influences a mother's decision to breastfeed exclusively. So, it needs support from health workers as role models and government cooperation in improving the economic status of families.

## CONFLICT OF INTEREST

No conflict of interest was disclosed.

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## REFERENCES

- [1] WHO, *The Optimal Duration of Exclusive Breastfeeding: Report of An Expert Consultation*. 2001.
- [2] Unicef, *The State of the World's Children 2009: Maternal and Newborn Health*. 2009.
- [3] World Health Organization, "Indicators for Assessing Infant and Young Child Feeding Practices: Conclusions of a Consensus Meeting Held 6-8 November 2007 in Washington DC, USA," 2008.
- [4] Depkes RI, "Pedoman Umum Pemberian Makanan Pendamping Air Susu Ibu (MP-ASI Lokal) Tahun 2006," *Pedoman Umum Pemberian Makanan Pendamping Air Susu Ibu (MP-ASI Lokal)*, 2006.
- [5] V. M. Kartika, "Faktor-Faktor Yang Berhubungan Dengan Kekurangan Energi Kronis (Kek) Pada Ibu Hamil Di Kecamatan Kamoning Dan Tambelangan, Kabupaten Sampang, Jawa Timur.," *Bul. Penelit. Sist. Kesehat.*, 2014.
- [6] S. A. Motadi, "Breastfeeding knowledge and practices among mothers of children younger than 2 years from a rural area in the Limpopo Province, South Africa," *SAJCH South African J. Child Heal.*, 2019.
- [7] L. Sibeko, M. A. Dhansay, K. E. Charlton, T. Johns, and K. Gray-Donald, "Beliefs, attitudes, and practices of breastfeeding mothers from a periurban community in South Africa," *J. Hum. Lact.*, 2005.

- [8] O. U. Anyanwu, C. T. Ezeonu, O. B. Ezeanosike, and C. O. Okike, "The practice of breastfeeding by healthcare workers in the federal teaching hospital, Abakaliki, southeastern Nigeria," *SAJCH South African J. Child Heal.*, 2014.
- [9] S. Azwar, "Sikap Manusia: Teori dan Pengukurannya," *Sikap Manusia: Teori dan Pengukurannya*. 2013.
- [10] A. Perez, M. H. Labbok, and J. T. Queenan, "Clinical study of the lactational amenorrhoea method for family planning," *Lancet*, vol. 339, no. 8799, pp. 968–970, 1992.
- [11] M. S. Kramer and R. Kakuma, "The optimal duration of exclusive breastfeeding: A systematic review," in *Advances in Experimental Medicine and Biology*, 2004.
- [12] M. Zafar, Z. Fatmi, and K. Shafi, "Determinants of child feeding practices in Pakistan; secondary data analysis of demographic and health survey 2006-07," *J. Med. Nutr. Nutraceuticals*, vol. 3, no. 2, p. 78, 2014.
- [13] S. Shrooti, S. Mangala, P. Nirmala, S. Devkumari, and B. Dharanidhar, "Perceived maternal role competence among the mothers attending immunization clinics of Dharan, Nepal," *Int. J. Community Based Nurs. Midwifery*, 2016.
- [14] S. Esmaelzadeh Saeieh, M. Rahimzadeh, M. Yazdkhasti, and S. Torkashvand, "Perceived social support and maternal competence in primipara women during pregnancy and after childbirth," *Int. J. Community Based Nurs. Midwifery*, 2017.
- [15] A. Saleh, E. Nurachmah, V. Hadju, S. As'ad, and S. K. Hamid, "Baby nutritional status improvement through mother empowerment in baby care in South Sulawesi Indonesia," *Pakistan J. Nutr.*, 2017.
- [16] E. Yunitasari and H. Permanasari, "Pola Menyusui dan Pemberian Makanan Tambahan Meningkatkan Status Gizi Balita Usia 7-24 Bulan," *Ners J. Vol. 5 Nomor 1 April 2010*, 2010.
- [17] R. Wardani, "Faktor-Faktor Yang Mempengaruhi Perilaku Ibu Dalam Memilih Makanan Sehari-Hari Dalam Keluarga Di Rt 25 Rw 09 Lingkungan Tirtoudan Kelurahan Tosaren," *Eduhealth*, vol. 3, no. 2, 2013.
- [18] U. O. Uchendu, A. N. Ikefuna, and I. J. Emodi, "Factors associated with exclusive breastfeeding among mothers seen at the University of Nigeria Teaching Hospital," *SAJCH South African J. Child Heal.*, 2009.
- [19] R. Zakar, M. Z. Zakar, L. Zaheer, and F. Fischer, "Exploring parental perceptions and knowledge regarding breastfeeding practices in Rajanpur, Punjab Province, Pakistan," *Int. Breastfeed. J.*, 2018.
- [20] M. I. Al Ketbi, S. Al Noman, A. Al Ali, E. Darwish, M. Al Fahim, and J. Rajah, "Knowledge, attitudes, and practices of breastfeeding among women visiting primary healthcare clinics on the island of Abu Dhabi, United Arab Emirates," *Int. Breastfeed. J.*, 2018.
- [21] E. R. J. Giugliani, "Growth in exclusively breastfed infants," *Jornal de Pediatria*. 2019.
- [22] Widdefrita and Mohanis, "Peran Petugas Kesehatan Dan Status Pekerjaan Ibu Dengan Pemberian Asi Eksklusif," *JKMA (Jurnal Kesehat. Masy. Andalas) (Andalas J. Public Heal.*, 2013.
- [23] L. L. Oakley, J. Henderson, M. Redshaw, and M. A. Quigley, "The role of support and other factors in early breastfeeding cessation: an analysis of data from a maternity survey in England," *BMC Pregnancy Childbirth*, vol. 14, no. 1, p. 88, 2014.