

# The association between breastfeeding technique and knowledge



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### The association between breastfeeding technique and knowledge with exclusive breastfeeding

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Original Article

#### ABSTRACT

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**Background:** Breastmilk is the ideal food for babies. There are various inhibiting factors for the formation of awareness of parents in providing exclusive breastfeeding for example ignorance from the mother about the importance of breastfeeding, how to breastfeed properly, and aggressive marketing launched by infant formula manufacturers.

**Objective:** This study aimed to determine the association between knowledge and techniques of breastfeeding with exclusive breastfeeding in the area of Puskesmas Pengasih II, Kulonprogo.

**Methods:** This research employed cross-sectional design. The population was all mothers with babies six to 12 months with total sample 142 mothers. The data was analyzed using Chi-square test with alpha significance=5%.

**Results:** This study found more subjects with a low level of knowledge (57%), the same goes with breastfeeding technique (52,1%). There was statistically significant association between knowledge with exclusive breastfeeding ( $p=0,006$ ). There was a statistically significant association between breastfeeding technique with exclusive breastfeeding ( $p=0,002$ ).

**Conclusion:** There were relationships between knowledge ( $p = 0.006$ ) and feeding techniques ( $p = 0.002$ ) with exclusive breastfeeding.

**Latar Belakang:** ASI adalah makanan paling ideal untuk bayi. Ketidaktahuan ibu tentang pentingnya ASI, cara menyusui dengan benar, serta pemasaran yang dilancarkan secara agresif oleh para produsen susu formula, merupakan faktor penghambat bagi terbentuknya kesadaran orang tua untuk memberikan ASI eksklusif.

**Tujuan:** Penelitian ini bertujuan mengetahui hubungan pengetahuan dan teknik menyusui dengan pemberian ASI eksklusif di wilayah kerja Puskesmas Pengasih II Kulon Progo.

**Metode:** Jenis penelitian adalah observasional dengan metode cross sectional. Populasi penelitian adalah seluruh ibu yang mempunyai bayi enam sampai 12 months sebanyak 142 orang, menggunakan teknik total sampel. Analisis data menggunakan uji Chi square dengan tingkat kepercayaan 95%.

**Hasil:** Ibu dengan tingkat pengetahuan rendah lebih banyak (57%) begitu juga pengetahuan teknik menyusui (52,1%). Ada hubungan antara pengetahuan dengan pemberian ASI eksklusif ( $p=0,006$ ) dan ada hubungan antara teknik menyusui dengan pemberian ASI eksklusif ( $p=0,002$ ).

**Kesimpulan:** Ada hubungan tingkat pengetahuan dan teknik menyusui dengan pemberian ASI eksklusif.

## INTRODUCTION

World Health Organization (WHO), stated that breastfeeding is an incomparable way of providing ideal nutrition for appropriate growth and development of a baby.<sup>1</sup> International guidelines, which recommend exclusive breastfeeding within the first 6 months, are based on scientific evidence about the benefit of breast milk for baby's immunology, growth, and development.<sup>2</sup>

Nevertheless, the proportion of exclusive breastfeeding in Indonesia still could not able to fulfill national standard, which is 80%. Exclusive breastfeeding is quite a difficult program to promote because it is related to multiple aspects of various social problems in the society. The scope of exclusive breastfeeding in Daerah Istimewa Yogyakarta (DIY) was only 58, 20% in 2012.<sup>3</sup>

Knowledge or cognitive is an important domain in determining one's action, including the action of exclusive breastfeeding. The knowledge related in this case are those specifically regarding exclusive breastfeeding and not general knowledge. An action could only be realized through some stages, such as knowledge, attitude, and practice. In terms of this study, the practice of exclusive breastfeeding could happen only if a mother has adequate knowledge, attitude, and breastfeeding technique.

Based on these reasons, we aimed to do a study to determine the association between breastfeeding knowledge and technique with the scope of exclusive breastfeeding in the working area of Puskesmas Pengasih II. Due to the fact that the proportion of exclusive breastfeeding in infant 0-6 months old in this area was only 48% in 2012.<sup>4</sup>

## METHODS

This research used cross-sectional approach. The population target of this study was all mothers who have 6-12 months old infant and lived within the area of Puskesmas Pengasih II Kabupaten Kulon Progo Yogyakarta, in the total of 142 mothers. Sampling technique was Total sampling. The instrument used in this study was

questionnaire with adequate reliability (Alpha Cronbach = 0.75)<sup>5</sup> comparable to previous reliability (Alpha Cronbach = 0.77).<sup>5</sup> Check list was used to measure 'breastfeeding technique' variable, adapted from Ikatan Bidan Indonesia (IBI/ Indonesian Midwife Association). Data analysis used Chi Square with 0,05 significantly.

## RESULTS

This study was done in mothers who have 6-12 months old infants and lived within the working area of Puskesmas Pengasih II Kabupaten Kulon Progo Yogyakarta, in the total of 142 mothers. Respondent characteristics showed that the majority of subjects were within the productive age, which was 20-35 years old, in the total of 83 subjects (58,5%). However, mothers who were younger than 20 years old and older than 35 years old could still be found. Most respondents had high educational status (graduated high school or above) in the total of 85 subjects (59,9%) but lower educational status was also found in the total of 57 subjects, and elementary graduate could still be found (Table 1).

Table 2 showed that most infants in this study were 12 months old, in the total of 28 infants (19,7%), while the least was 6 months old infant in the total of 11 infants (7,7%).

As much as 55% mothers who had little knowledge about breastfeeding did not provide exclusive breastfeeding for their babies, while there were more mothers with more knowledge about exclusive breastfeeding who provided exclusive breastfeeding for their babies (42 mothers / 68,85%). The results of Chi-Square test were  $p=0,006$ ,  $RP=1,78$  and 95%  $CI=1,171-2,717$ .

As much as 58,1% mothers with lesser breastfeeding technique did not provide exclusive breastfeeding for their babies, while there were more mothers with better breastfeeding technique who provided exclusive breastfeeding for their babies (69,11%). The results of Chi-Square test were  $p=0,002$ ,  $RP=1,88$  and 95%  $CI=1,255-2,821$ .

Table 1. Distribution of respondent based on demographic characteristics

	Characteristic	Total	Percentage (%)
Age	<20 years old	14	9,8
	20-35 years old	83	58,5
	35 years old	45	31,7
Educational Status	Elementary	14	9,9
	Junior high school	43	30,3
	Senior high school	66	46,5
	Bachelor degree	19	13,4
Occupation	Houswives	94	66,2
	Farmers	10	7,0
	Private company's employee	15	10,6
	Merchant	9	6,3
	Civil servant	11	7,7
	Entrepreneur	3	2,1
Financial Income	< Minimum wage	57	40,1
	> Minimum wage	85	59,9
Number of Children	One	52	36,6
	Two	60	42,3
	> 2	30	21,1
Previous Breastfeeding history	Exclusive breastfeeding	48	33,8
	Non Exclusive breastfeeding	42	29,6
	Never	52	36,6

Table 2. Distribution of infant's age 6-12 months.

No.	Age	Total	Percentage (%)
1	6 months	11	7,7
2	7 months	14	9,9
3	8 months	19	13,4
4	9 months	22	15,5
5	10 months	22	15,5
6	11 months	26	18,3
7	12 months	28	19,7

Table 3. Breastfeeding knowledge and adequate breastfeeding technique

	Age	Total (n)	Percentage (%)
Breastfeeding knowledge	High	61	43
	Low	81	57
Breastfeeding technique	High	68	47,9
	Low	74	52,1
Breastfeeding	Exclusive breastfeeding	78	54,9
	Non-exclusive breastfeeding	64	45,1

## DISCUSSION

### Association between breastfeeding knowledge with exclusive breastfeeding

The results of Chi-Square analysis showed p-value 0,006 (<0,05), which mean that there was

statistically significant association between the level of breastfeeding knowledge with exclusive breastfeeding. Biologically, the result showed RP 1,784, which mean that mothers with lesser knowledge about exclusive breastfeeding have

1,78 more tendency of not providing exclusive breastfeeding for their babies compare to those with more knowledge. Knowledge is one of the predisposing factor, or in other words, the action of a person could be determined by the level of their knowledge. Lack of knowledge impacts negatively on a mother's action of providing exclusive breastfeeding for her babies.<sup>6</sup>

The results of this study are similar to the previous study by Sriningsih who found that there was statistically significant association between a mother's knowledge with exclusive breastfeeding ( $p=0,015$ ).<sup>7</sup> It is hoped that the more knowledge a mother has on exclusive breastfeeding, the better her tendency on providing exclusive breastfeeding for her babies. In contrast, the lesser a mother's knowledge, then the lesser her tendency on providing exclusive breastfeeding for her babies. Knowledge or cognition is a very important factor in forming a person's action, one of which is the less knowledge a mother has about the importance of breastmilk would alter her perception on providing breastmilk for her babies.<sup>8</sup> A mother who lacks knowledge about the importance of exclusive breastfeeding would have worse tendency on providing exclusive breastfeeding for her babies and would assume that breast milk substitutes (such as formula milk) would be better thus she would not give exclusive breastfeeding for her babies.<sup>9</sup>

Tradition could also affect a person's knowledge. There are a few other factors that could affect knowledge, such as level of education, occupation, age, environment, and sociocultural background.<sup>10</sup> Susin, et al (1999) found that mothers who have better knowledge would have better tendency on providing exclusive breastfeeding.<sup>1</sup> Kong and Lee, (2004) concluded in their study that knowledge is an important factor to determining the tools or method used in providing food for babies.<sup>12</sup> Furthermore, previous research by Shaker, Scott, & Reid, (2004) showed that parents, who gave their children breastmilk, have better understanding about the benefits of breastfeeding.<sup>1</sup> The result of this study is also similar to the previous research by

Dungy, et al (2008).<sup>1</sup> They found that knowledge is a predictor for breastfeeding initiation. In contrast, Chatman, et al (2004) in Jamaica<sup>1</sup> found no significant correlation between the level of knowledge with exclusive breastfeeding and this is in line with social cognitive theory (SCT).<sup>16</sup> SCT perspectives stated that a mother's action could be affected by multiple factors, one of which is personal factors such as knowledge.

### **The association between breastfeeding technique with exclusive breastfeeding**

The results of the Chi-Square analysis showed that p-value 0,002 ( $<0,05$ ), which means that there was statistically significant association between breastfeeding technique and exclusive breastfeeding. Biologically, RP value 1,88 which means that a mother with lesser breastfeeding technique has 1,88 times more tendency to not provide exclusive breastfeeding for her baby, compare to those with better breastfeeding technique.

This result is coherent with the previous study by Rumpati who found that there was statistically significant association between breastfeeding technique and exclusive breastfeeding ( $p=0,027$ ).<sup>17</sup> The better a mother's breastfeeding technique, the better her tendency to provide exclusive breastfeeding for her babies. Contrary, the lower a mother's ability to provide adequate breastfeeding technique, the lesser her tendency to give exclusive breastfeeding for her babies.

Chronologically, it could be said that action or behavior could only be realized if a person already has adequate knowledge, attitude, and practice. In this context, the practice of exclusive breastfeeding could be achieved when a mother already has adequate knowledge, attitude, and good breastfeeding technique.<sup>6</sup>

Most mothers, who chose not to breastfed their babies, usually not because they are physically incapable but mostly due to inappropriate lactation counseling, one of which is about breastfeeding technique. Sometimes, mothers look like they are able to appropriately breastfed their babies, but most of the times they actually

lack knowledge about adequate breastfeeding technique.<sup>18</sup> A previous study by Nurhidayah stated that knowledge is an important variable which has a major association with breastfeeding technique in postpartum mothers.<sup>19</sup> Thus, mothers who have lesser knowledge about breastfeeding technique would show inadequate breastfeeding practice.

### CONCLUSION

Either the level of knowledge and breastfeeding technique of mothers, who live in the working area of Puskesmas Pengasih II, was found to be low. There was a statistically significant association between knowledge and breastfeeding technique with exclusive breastfeeding. Further efforts are needed in order to improve breastfeeding knowledge and breastfeeding technique through the continuous cooperation of related departments, such as Health Department.

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