

The Preparation of Lactation on 3rd Trimester Pregnant Women with the Approach of WHO Behavior Determinant

A Factor Analysis

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Abstract: The level of breast milk coverage in Indonesia is still far from the target. The preparation of lactation during pregnancy affects the mother's confidence, self-efficacy and breast milk production, which are the predictors of breastfeeding and exclusive breastfeeding practices. Given the low level of preparation by mothers for lactation, it needs to be studied further regarding what factors affect the preparation of lactation. This study aims to analyze the preparation factors of lactation in 3rd trimester pregnant women with the approach of WHO behaviour determinants. This research uses a quantitative method with a cross-sectional approach. The population of this study were all 3rd trimester pregnant women with 88 respondents with a large sample obtained by a total sampling technique of 62 respondents with drop out of 26 respondents due to childbirth. Independent variables include thoughts and feelings, personal references, culture and resource (antenatal visits). The dependent variable of this study is lactation preparation. The data was collected by using questionnaires and lists of antenatal visits which were analyzed using the Rho Spearman statistic test with a 0.05 level of significance. The results of this study indicate a significant relationship between thoughts and feelings, culture and resource (antenatal visits) with lactation preparation. While the personal references factor does not have a significant relationship with lactation preparation. The role of parents is needed because parents are a reference character. Factors associated with lactation preparation are thoughts and feelings, culture and resource (antenatal visits). The socialization on the importance of preparation of lactation needs to be taken by health agencies and health workers to the entire community both community leaders, religious leaders, families and also pregnant women.

1 INTRODUCTION

Breast milk (ASI) is the secretion result of the breast glands that is fluid; it has many benefits for mothers and babies. Breastfeeding is the most effective effort in improving infant health and reducing mortality of infants in their first week (Monika, 2014). Breastfeeding practice still encounters many obstacles (Robinson, 2016). The Indonesian Demographic and Health Survey (SDKI) regarding national breastfeeding shows an increase in breastfeeding, although the coverage rate of national breastfeeding is still too low, in 2013 the national coverage rate was still around 54.3% (Ministry of Health, 2014). A general survey stated that the main reasons that inhibit breastfeeding are pain during feeding, lack of milk production and job demands (Helda, 2009). Most mothers encounter obstacles after starting breastfeeding by not preparing for it

during pregnancy (Aisha, 2016). Preparation for lactation is very important in the practice of breastfeeding. The relationship with the feeling of readiness for breastfeeding will increase maternal comfort and confidence and improve self-efficacy of mothers in breastfeeding (Mcmullen & Newburn, 2014).

Preparation for lactation during pregnancy affects the self-confidence and self-efficacy of mothers, which are the predictors of breastfeeding and exclusive breastfeeding practices (Mcmullen & Newburn, 2014). In addition to the effect on breastfeeding, lactation preparation also affects breast milk production (Maga et al., 2013). Psychological disorders during pregnancy are one of the factors that may influence maternal breastfeeding decisions and practices (Figueiredo et al., 2014). Preparation of the mother's psychology for breastfeeding during pregnancy is very significant because a mother's

positive decisions and attitudes must be shown during pregnancy or even long before pregnancy (Mcmullen & Newburn, 2014).

In an effort to prepare mothers for breastfeeding the government held an ANC (antenatal care) program. This includes a program that prepares for breastfeeding and breast care for pregnant women scheduled for K1 and K3 (Maternal and Child Health Nutrition, 2014). East Java Provincial Health Office in 2014 stated that the coverage of pregnant women of East Java Province for K1 reached 96.20% and K4 88.6%. The city with the highest coverage rate is Surabaya and one of the districts with the lowest number is Sampang Regency with 76% coverage (Health Office of East Java Province, 2015).

Preliminary study conducted with the Midwife Coordinator of Sreseh Sampang Community Health Centre shows that pregnant mother visits are still low. At K1 it is targeted that all pregnant women should attend but only 65% came and the number of visits always reduced in the next pregnancy visit. The procurement of the ANC program in Sreseh Community Health Centre itself is in accordance with the guidelines and SOP set by the Ministry of Health of the Republic of Indonesia. The distance of the housing from the services is far enough to be one of the obstacles; in addition social support from community leaders is still considered deficient concerning the promotion of breastfeeding. People still believe in myths about avoiding eating food that comes from the sea and assume that when the mother is outside the home the baby does not have to receive breast milk. Giving mashed bananas (lotheke) has become an alternative food that is given while the mother is doing activities so that the baby is full and not crying. Most of the knowledge of pregnant women is deficient regarding breastfeeding techniques and handling problems surrounding breastfeeding is still poor.

2 METHODS

The design of this study used a cross-sectional study design with the population of all 3rd trimester pregnant women in Purwida Sreseh working areas of Sampang Regency. The sampling used total sampling and amounted to 88 people with a drop out of 26 people. The variables studied were lactation preparation of pregnant women and the WHO determinant factors include thoughts and feelings, personal references, culture and resource (antenatal visit). The research instrument used were questionnaires and determinants of WHO factors with

modification. This study was conducted from 12th November 2017 to 30th November 2017. This research has passed an ethical test which is proved by ethical certificate No. 559-KEP K by Health Research Ethic Commission of Nursing Faculty, Airlangga University.

3 RESULTS

Table 1 on the relation of thoughts and feelings as well as lactation preparation by 3rd trimester pregnant women showed that the majority of respondents had negative thoughts and feelings. The results of statistical tests show that there is a significant relation between thoughts and feelings as well as lactation preparation, which is a strong and positive relation. The results of the study in Table 2 on the relation of personal reference and lactation preparation by 3rd trimester pregnant women showed that the majority of respondents had positive personal references. The results of this study indicate that there is no relation between personal references and lactation preparation performed by 3rd trimester pregnant women.

The results of the study in Table 3 on the relation of culture and lactation preparation by 3rd trimester pregnant women showed that the majority of respondents have negative culture. Culture is related to lactation preparation including avoiding seafood which is a protein needed by pregnant women, not giving colostrum during less than one hour of birth, not exclusively breastfeeding because of the habit of feeding babies with bananas or lontong and not giving breast milk if the mother's nipple is inverted.

Table 1: The relation of thoughts and feelings as well as lactation preparation in Sreseh Community Health Centre, Sampang Regency, November 2017.

Thought and feelings	Lactation Preparation				Total	
	Not Ready		Ready			
	f	%	f	%	f	%
Deficient	27	43	6	9,65	33	53.2
Good	6	11	23	35	29	46.8
Total	33	55	29	44	62	100
Spearman's Test Rho = 0,00 correlation coefficient (r) = 0,611						

The results of this study indicate that there is a significant relation between culture and lactation preparation.

The results of the study in Table 4 on the relation of antenatal visits and lactation preparation by 3rd

Table 2: The relation of personal references and lactation.

Personal references	Lactation Preparation				Total	
	Not Ready		Ready			
	f	%	f	%	f	%
Negative	15	37,7	14	22,6	29	46,7
Positive	18	15,5	15	24,1	33	53,2
Total	33	53,2	29	46,7	63	100
Spearman's Test Rho p = 0,828 correlation coefficient (r) = -0,028						

Table 3: The relation of culture and lactation preparation in Sresih Community Health Centre, Sampang Regency, November 2017.

Culture	Lactation Preparation				Total	
	Not Ready		Ready			
	f	%	f	%	f	%
Negative	26	42	9	14,4	35	56,5
Positive	7	11,2	20	32,3	27	43,5
Total	33	53,2	29	46,7	58	100
Spearman's Test Rho p = 0,00 correlation coefficient (r) = 0,481						

Table 4: The relation of antenatal visits and lactation preparation in Sresih Community Health Centre, Sampang Regency, November 2017.

Antenatal visit	Lactation Preparation				Total	
	Not Ready		Ready			
	f	%	f	%	f	%
Irregular	26	44,8	11	19	37	63,8
Regular	6	10,3	15	25,6	21	36,2
Total	32	55,2	26	44,8	58	100
Spearman's Test Rho p = 0,02 correlation coefficient (r) = 0,403						

trimester pregnant women showed that the majority of respondents were irregular in following the antenatal visits. The results of this study indicate that

there is a relation between antenatal visits and lactation preparation.

4 DISCUSSION

Thoughts and feelings in this research combined four factors, knowledge, perception, attitude and belief. Critical factors of thoughts and feelings are based on the total score of the four factors. The merger of these four factors is rarely used, as most studies only look at a few factors such as knowledge and attitude. Based on the results found in the field, researchers argue that mothers who have good thoughts and feelings about lactation preparation have a tendency to make lactation preparations so that they are more ready in breastfeeding the baby. While mothers with negative thoughts and feelings are not likely to be ready for breastfeeding.

We can see that for factors such as thoughts and feelings, the first is knowledge. Based on the results of research the majority of respondents have less knowledge. Knowledge affects lactation preparation, so respondents with less knowledge are not likely to be ready for breastfeeding. Prior research on the analysis of exclusive breastfeeding factors conducted by Kharismawati (2014) using WHO theory where one of the variables raised is knowledge, found that knowledge has a positive relation with exclusive breastfeeding.

The results of this study show the experience of mothers who previously already had children in relation with maternal knowledge level on lactation preparation. This is supported by demographic data in which the respondents have enough knowledge and a high majority are respondents who have children, either one or more. This is in line with research by Saraswati (2014) where it was found that the higher the parity the more mothers have the tendency to give more health attention to the next child. The level of parity has largely determined maternal concerns about maternal and child health. According to the theory proposed by Notoatmodjo (2012), experience is a source of knowledge, a way of obtaining the truth of knowledge by repeating the knowledge gained in solving problems faced in the past.

Mothers' perception about lactation preparation is still in the negative category due to the deficiency of knowledge of pregnant women. From the results of research conducted, it was found that the majority of respondents with negative perceptions have less knowledge about lactation preparation. This is according to the theory put forward by Thoha (2009) where knowledge is an external factor that affects the

perception of a person other than family background and information obtained.

The next factor is attitude. The majority of respondents still have negative attitudes towards lactation preparation. This is supported by research by Yulianah et al. (2013) showing that the attitudes of mothers in breastfeeding tend to be negative hence they cannot achieve exclusive breastfeeding. Research by Rahmadani et al. (2012) mentions that a mother's positive attitude will lead to good behaviour in pregnancy and breast examination which are parts of lactation management. While the study by Amiel et al. (2017) found that the attitude during pregnancy is a key predictor and can increase 20-30% of breastfeeding practices.

Based on data obtained the majority of respondents have a positive belief about lactation preparation. However, some respondents with positive beliefs did not make lactation preparations so they were considered not ready. Nevertheless, from the results of the study, it can be seen that the respondents with positive trust tend to be more ready to breastfeed their baby.

Based on the above description, it was found that the thoughts and feelings factors have a relation with lactation preparation. From the results of this study, the majority of respondents have a deficiency in knowledge, negative perceptions, negative attitudes and positive beliefs. Based on the above explanation it can be concluded that for lactation preparation, thoughts and feelings are not only influenced by the trust but also influenced by other factors such as knowledge, perception and attitude.

The results of the study in Table 2 on the relation of personal preferences and lactation preparation by 3rd trimester pregnant women showed that the majority of respondents had positive personal preferences. The results of this study indicate that there is no relation between personal preferences in lactation preparation performed by 3rd trimester pregnant women.

In this study the people who are considered important and influential in lactation preparation are health workers, cadres, parents and religious leaders. Negative preferences are encouragement and support that can inhibit lactation preparation. Positive preferences are suggestions that can support lactation preparation of 3rd trimester pregnant women. The majority of personal preference respondents are positive, whose support and suggestions are good for lactation preparation.

The results of this study indicate that although the respondent has a positive personal preference the majority of respondents are not considered ready for

breastfeeding. This study is not in line with the research by Rahmadani et al. (2012), which shows that factors that support the action of pregnant women are still in the medium category so that the behavior of pregnant women in lactation management is in the medium category.

From the demographic data it is found that the majority of respondents consider parents as the figures they obey and they consider as an example. Based on the results of the interviews, the respondent's parents provided support for what the respondents did. The respondents were given more advice and information about lactation preparation from health workers. Based on the results of research, most respondents did not conduct regular antenatal visits so that the information obtained is still minimal. The results of this study are supported by the research of Chang et al. (2015) showing that the provision of information by health workers can be positive and motivate the mother in extending the duration of breastfeeding.

The results of the study in Table 3 on the relation of culture and lactation preparation by 3rd trimester pregnant women showed that the majority of respondents have negative culture. Culture is related to lactation preparation including avoiding seafood which is a protein needed by pregnant women, not giving colostrum during less than one hour of birth, not exclusively breastfeeding because of the habit of feeding babies with bananas or lontong and not breastfeeding if the mother's nipple is inverted. The results of this study indicate that there is a significant relation between culture and lactation preparation.

The results of this study are not supported by previous research on the analysis of exclusive breastfeeding factors conducted by Kusumaningrum et al. (2009), which found that there is no relation between social culture and exclusive breastfeeding. However, based on research in Palu, Central Sulawesi conducted by Rahman et al, (2017) it was found that socio-culture has a significant relationship with exclusive breastfeeding in a positive direction. According to Notoatmodjo (2012) the culture where someone lives and breeds has a great influence on the formation of one's attitudes.

The results of this study indicate that there is a relation between antenatal visits and lactation preparation. This is supported by Aisyah and Fitriani's research (2013), in which the regularity of ANC visits has a positive relationship with breastfeeding skills. Respondents making regular antenatal visits were better prepared to breastfeed than respondents with irregular antenatal visits. The results of this study are in line with McMullen and

Newburn (2014) where mothers taking antenatal classes will be better prepared to breastfeed and the Bonuck et al. (2015) study showed that giving education about breastfeeding is better given during pregnancy. Meanwhile, according to the WHO behavioral theory (1984) resources are supporters for the occurrence of behavior of people.

Low antenatal visits are due to socio-economics i.e. education, employment and income. From the data obtained, most respondents have a low educational background and insufficient knowledge. Most of the respondents are housewives who do not have income independently so they depend on their husband's income. The majority of respondents' revenue is still below the minimum wage, hence it might affect antenatal visits, which need money and the distance to the health facility is quite far. From demographic data it was also found that the majority of respondents have children aged between 2 and 5 years old who live with the large family.

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