

FACTORS THAT INFLUENCE MOTHERS WITH DIABETES MELLITUS IN PROVIDING EXCLUSIVE BREASTFEEDING TO INFANTS AGED 0-6 MONTHS

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Abstract

Breast milk (ASI) is water produced by humans for consumption by babies and the main source of nutrition in meeting the baby's nutritional needs. Breastfeeding should be started early and is the only method used for babies. Breastfeeding helps defend the body against disease because breast milk contains antibodies. Decree of the Minister of Health Number 450/MenKes/SK/IV/2004 issued by the Ministry of Health stipulates that health workers must inform newlyweds that they are able to provide exclusive breastfeeding. The purpose of this study was to determine the Factors that Influence Exclusive Breastfeeding Mothers Diabetes melitus for Ages 0-6 Months. This type of research uses cross-sectional methodology and is analytical and observational. The sampling technique used is non-probability sampling with the Accidental Sampling approach and the number of samples is 52 respondents. Data collection through questionnaires. The results of the study showed that 40 respondents (76.92%) who provided exclusive breastfeeding were 22 respondents (48.8%) mothers with good knowledge who provided exclusive breastfeeding with a p-value of 0.000 with an OR (Odds Ratio) of 12.833, meaning that mothers Diabetes melitus with good knowledge have a 12.833 times greater chance of providing exclusive breastfeeding than mothers with less knowledge. While the relationship between maternal Diabetes melitus attitudes and the provision of exclusive breastfeeding obtained p-value 0.002, with OR (Odds Ratio) 2.429 means that mothers who have a Positive Attitude have a 2.429 times chance of giving exclusive breastfeeding compared to mothers who have a negative attitude. Health workers need to improve mothers' understanding of exclusive breastfeeding and their support, and families in an effort to increase exclusive breastfeeding need to follow the socialization of health workers and actively seek information about exclusive breastfeeding. Mothers Diabetes melitus who have babies aged 0-6 months need to improve their knowledge and attitudes about exclusive breastfeeding.

Keywords: Knowledge, Attitude, Age, Exclusive Breastfeeding Education, Diabetes melitus

Introduction

Exclusive breastfeeding is breast milk that is given to babies from birth for 6 months, without giving or replacing it with additional food or drinks such as formula milk, orange juice, honey, sugar water, without solid foods such as bananas, porridge and rice (except medicines, vitamins and minerals) according to (Kemenkes 2020). Breast milk has a significant role in the growth and development of babies, (Yulita et al. 2021). Exclusive breastfeeding aims to reduce infant mortality and neonatal mortality rates. In addition, according to the Indonesian government, it also issued Government Regulation (PP) Number 33 of 2012 concerning exclusive breastfeeding which aims to guarantee the rights of babies to receive exclusive breastfeeding for 6 months. This is done because exclusive breastfeeding in Indonesia is relatively low. The nutritional needs of babies for 6 months can be met only by providing exclusive breastfeeding (Istianah, Septiani, and Dewi 2020)

Data *World Health Organization* (WHO) In 2020, only about 44% of babies worldwide aged 0-6 months received exclusive breastfeeding. This is not in accordance with the WHO target for 2025, which is at least 50%. (WHO 2020). In Indonesia, 66% of babies received exclusive breastfeeding in 2021. This figure has exceeded the 2021 target of 40%, but has decreased from 2019, which was 67.7% (Kemenkes RI 2022)

Based on the routine report of the Directorate of Community Nutrition in 2021 as of February 4, 2022, it is known that out of 1,845,367 babies aged <6 months who were recalled, there were 1,287,130 babies aged <6 months who received exclusive breastfeeding, so it can be concluded that the achievement of the indicator for babies aged <6 months receiving exclusive breastfeeding is 69.7%. This achievement has met the 2021 target, namely Papua (11.9%), West Papua (21.4%), and West Sulawesi (27.8%), while 31 other provinces have achieved the target with the highest achievement being West Nusa Tenggara province (86.7%), the Directorate (Direktorat Gizi Masyarakat 2021)

Exclusive breastfeeding is very important for optimal growth and development physically, mentally and intellectually of the baby. Exclusive breastfeeding is given to babies up to 6 months old without being given food and drink, continued until the baby is 2 years old. In 2020, exclusive breastfeeding in Riau province for babies aged 0-6 months was 43.5% and in 2021 it was 39.4% (Kemenkes RI 2022). Data on the coverage of exclusive breastfeeding in 2021 in Pekanbaru City was 45.1%. Only 6 districts/cities have achieved the exclusive breastfeeding target, with the exclusive breastfeeding achievement set at 45%. In this case, it is necessary to increase the awareness of mothers and families to continue to give their babies exclusive breastfeeding, considering the importance of exclusive breastfeeding for the needs and growth of their babies. (Kemenkes RI 2022)

Exclusive breastfeeding has several benefits for both mother and baby. In babies, exclusive breastfeeding can prevent babies from getting sick and help the baby's brain and physical

development, while in mothers, it can overcome trauma and prevent breast cancer. (Krishnendu and Devaki 2017). There are several factors that make some mothers not breastfeed their children exclusively. First, the intensive campaign of milk producers and breast milk substitutes, second, the lack of awareness and knowledge of mothers regarding feeding their children coupled with a history of illness that makes mothers worry about fulfilling breast milk, one of which is mothers with Diabetes Mellitus. Third, the lack of serious attention from health experts to encourage the habit of breastfeeding children. Fourth, the lack of targeted social welfare programs, which are run by several government agencies in developing countries. Therefore, the knowledge and attitudes of mothers about efforts to improve health and breast milk production are fundamental things that are very important as an effort to increase the success of exclusive breastfeeding. (Jessri et al. 2013)

Non-communicable diseases (NCDs) can cause more than 1.6 million deaths worldwide, one of which is Diabetes Mellitus (DM), which is a chronic disease that is a challenge for the world of health. The glycemic index and glycemic load also affect the amount of total carbohydrates, fiber, protein, and fat, as well as low levels of physical activity and obesity. Eating foods with a low glycemic index and glycemic load, such as coconut pulp and tofu pulp, can reduce weight in obese people and lower blood glucose in breastfeeding mothers with diabetes. It is highly recommended to eat more than usual (Istianah, Septiani, and Dewi 2020)

Exclusive breastfeeding is recommended for the first 6 months of age by the World Health Organization. Sensing occurs through the five human senses, namely sight, hearing, smell, taste and touch. Most human knowledge is obtained through the eyes and ears. Health workers have a very special role in supporting exclusive breastfeeding and helping mothers to provide breast milk properly. Based on the background above, the author is interested in conducting research with the theme "Factors that Influence Exclusive Breastfeeding in Infants Aged 0-6 Months

Methods

This type of research uses a quantitative method with a cross-sectional design which is the purpose of the study to determine the relationship between one variable and another and also to compare or find out the differences between one or more variables seen from various aspects or points of view. The instrument used in this study is a questionnaire. This research was conducted in the Sidomulyo Inpatient Health Center area. From December to June 2024. The sample in this study were mothers diabetes Melitus who had babies aged 0-6 months totaling 52 respondents. This sampling technique uses non-probability in the form of accidental sampling, this is a method of determining samples and taking respondents who happen to be or are available in a place that is in accordance with the context of the study

Results

Table 1. Frequency of Age, Education, Knowledge and Attitudes on Exclusive Breastfeeding

Variabel	f	%
Age		
< 20 Tahun	0	0
20 – 35 Tahun	44	84,6
> 35 Tahun	8	15,4
Education		
<SMP	10	19,2
SMA	27	51,9
>SMA	15	28,8
Knowledge		
Good	45	86,5
Enough	4	7,7
Not enough	3	5,8
Attitude		
Positive	49	94,2
Negative	3	5,8
Breastfeeding		
Exclusive Breastfeeding	40	76,9
Not Exclusive Breastfeeding	12	23,1

Based on table 1, it can be explained that out of 52 breastfeeding mothers diabetes Melitus, it was found that the majority of mothers were aged 20-35 years with a total of 44 (84.6%), and a minority of breastfeeding mothers aged >35 years with a total of 8 (15.4%). While the majority of mothers whose education level was high school were 27 (51.9%), college with a total of 15 (28.8%), and a minority of junior high school with a total of 10 (19.2%). Then the results showed that the majority of mothers who provided exclusive breastfeeding were 40 (76.9%) of 52 respondents and a minority who did not provide exclusive breastfeeding with a total of 12 (23.1%). Mothers who had good knowledge were 45 (86.5%), had sufficient knowledge of 4 (7.7%) and a minority of less knowledgeable 3 (5.8%). While breastfeeding mothers whose attitudes were categorized as positive were 49 (94.2%) and a minority of mothers based on attitudes were categorized as negative with a total of 3 (5.8%)

Table 2. Relationship between Age, Education, Knowledge and Attitude with Exclusive Breastfeeding

Variabel	Not Exclusive Breastfeeding		Exclusive Breastfeeding		Total	OR	P Value
	%	n	%	n	%		
	Age						
< 20 Tahun	0	0	0	0	0	12,980	0.0001
20-35 Tahun	33	75	11	25	44	100	
	4	50	78	50	8	100	

>35 Tahun								
Education	4	40	6	60	10	1000	12,900	0.0004
<SMP	4	18,8	23	85,2	27	100		
SMA	8	53,3	7	46,6	15	100		
>SMA								
Knowledge								
Good	22	48,8	23	61,1	45	100	12,833	0,000
Enough	2	50	2	50	4	100		
Not enough	1	33,3	2	66,6	3	100		
Attitude								
Positive	27	55,10	22	44,9	49	100	2,429	0,002
Negative	1	33,3	2	66,6	3	100		
Breastfeeding								
Exclusive Breastfeeding	27	67,5	13	32,5	40	100	10,357	0,000
Not Exclusive Breastfeeding f	8	66,6	4	33,6	12	100		

Based on table 2, it can be seen that out of 40 respondents (76.92%) who provided exclusive breastfeeding, 22 respondents (48.8 mothers with good knowledge provided exclusive breastfeeding, and 12 respondents (23.07%) who did not provide exclusive breastfeeding, 4 respondents (33.6%) and mothers with less knowledge provided exclusive breastfeeding

. The results of statistical tests conducted using Chi-square for the relationship between the level of maternal diabetes Melitus knowledge and the provision of exclusive breastfeeding by mothers who have babies aged 0-6 months showed that the significant number p-value 0.000, meaning the value is lower than the significant standard of 0.005, then there is a relationship between the level of maternal diabetes Melitus knowledge and the provision of exclusive breastfeeding in babies aged 0-6 months with an OR (Odds Ratio) of 12.833, meaning that mothers with knowledge have a 12.833 times greater chance of providing exclusive breastfeeding compared to mothers with less knowledge.

DISCUSSION

Based on table 1, it can be explained that out of 52 breastfeeding mothers diabetes Melitus, it was found that the majority of mothers were aged 20-35 years with a total of 44 (84.6%), and a minority of breastfeeding mothers aged >35 years with a total of 8 (15.4%). While the majority of mothers whose education level was high school were 27 (51.9%), college with a total of 15 (28.8%), and a minority of junior high school with a total of 10 (19.2%). Then the results showed that the majority of mothers who provided exclusive breastfeeding were 40 (76.9%) of 52 respondents and a minority who did not provide exclusive breastfeeding with a total of 12 (23.1%). Mothers who had good knowledge were 45 (86.5%), had sufficient knowledge of 4 (7.7%) and a minority of less knowledgeable 3 (5.8%). While breastfeeding mothers whose attitudes were categorized as positive were 49 (94.2%) and a minority of mothers based on attitudes were categorized as negative with a

total of 3 (5.8%)

Knowledge is a very important domain in the form of a person's actions. as a person's activity. Individual information about objects has different strengths or levels in the frame of six degrees of information, more specifically (Notoatmodjo 2010). Lack of knowledge and lack of advice on the importance of providing colostrum in the first days of birth can cause mothers to provide complementary breastfeeding so that exclusive breastfeeding will not be successful. Lack of confidence in the ability to produce breast milk to satisfy their babies encourages mothers to provide additional milk through bottles, so that IEC is very necessary for mothers immediately after giving birth supported by IMD. IEC is not only given at the time after the baby is born or during the baby's growth and development but should be since in the womb or pregnancy through pregnant women's classes

Based on table 2, it can be seen that out of 40 respondents (76.92%) who provided exclusive breastfeeding, 22 respondents (48.8 mothers diabetes Melitus with good knowledge provided exclusive breastfeeding, and 12 respondents (23.07%) who did not provide exclusive breastfeeding, 4 respondents (33.6%) and mothers with less knowledge provided exclusive breastfeeding. The results of statistical tests conducted using Chi-square for the relationship between the level of maternal knowledge and the provision of exclusive breastfeeding by mothers who have babies aged 0-6 months showed that the significant number p-value 0.000, meaning the value is lower than the significant standard of 0.005, then there is a relationship between the level of maternal knowledge and the provision of exclusive breastfeeding in babies aged 0-6 months with an OR (Odds Ratio) of 12.833, meaning that mothers with knowledge have a 12.833 times greater chance of providing exclusive breastfeeding compared to mothers with less knowledge.

The results of this study are in line with the theory that states that knowledge is a very important domain in the form of a person's actions. as a person's activity. Individual information about objects has different strengths or levels in the frame in six degrees of information, more specifically (Notoatmodjo 2010). Research conducted (Sulistiyowati and Pulung Siswantara 2014), with the title The Relationship Between Mother's Knowledge and Attitude with Exclusive Breastfeeding at the Silau Laut Health Center, Silau Laut District, Asahan Regency in 2023. This research method is an analytical survey with a Cross-Sectional research design, namely to determine the Relationship Between Mother's Knowledge and Attitude with Exclusive Breastfeeding in Infants at the Silau Laut Health Center, Silau Laut District, Asahan Regency in 2023. The sample in this study was 38 mothers who had babies aged 7-12 months. Based on the results of the study, it showed that most of the respondents had good knowledge, as many as 27 respondents (71.1%), most had positive attitudes, as many as 28 respondents (73.7%), and most of the respondents gave Exclusive Breastfeeding as many as 22 respondents (57.9%). The results of the chi square test with a 95%

confidence level obtained a p-value of 0.004, thus it was found that there was a significant relationship between mother's knowledge and Exclusive Breastfeeding in infants aged 0-6 months

Meanwhile, based on the good attitude that provides Exclusive Breastfeeding, there are 40 respondents (76.92%) 27 respondents (55.2%), and mothers who are categorized as Positive Attitudes who provide Exclusive Breastfeeding. From the results of the statistical test conducted by Chi-square for the relationship between maternal attitudes and the provision of Exclusive Breastfeeding by mothers who have babies aged 0-6 months, it shows that the significant number is p-value 0.002, meaning the value is lower than the significant standard of 0.05, then there is a relationship between maternal attitudes and the provision of Exclusive Breastfeeding in babies aged 0-6 months with OR (Odds Ratio) 2.429 meaning that mothers who have a Positive Attitude have a 2.429 times greater chance of providing Exclusive Breastfeeding compared to mothers who have a Negative Attitude

According to the theory, attitude is a response or reaction that is still closed from a person to an impulse or desire. Signs of mentality should not be seen directly but can be controlled before taking closed actions (Rahman et al. 2017)

This is in line with research conducted by (Wulandari and Winarsih 2023), with the title Relationship between Knowledge and Attitude of Mothers Regarding Exclusive Breastfeeding 2022. The research method is cross-sectional with the sample being mothers who have children aged 6 months to 24 months at RSIA Siti Fatimah Makassar. The results of the study showed that of the 27 respondents who had sufficient knowledge about colostrum, exclusive breastfeeding, pre-lacteal foods and MP-ASI, 24 people (75%) provided exclusive breastfeeding and 3 people (9.38) did not provide exclusive breastfeeding. of the 23 respondents who had negative attitudes, 5 people (15.62%) did not provide exclusive breastfeeding and 18 people (56.26) provided exclusive breastfeeding. Using the Chi-square statistical test, $X = 2.319$ and $p = 0.128$ were obtained. So $p < \alpha$ (0.05) then H_0 is rejected and H_a is accepted, which means there is a relationship between maternal willingness and exclusive breastfeeding

Conclusion

There is a relationship between knowledge in the success of exclusive breastfeeding, as well as attitudes have a relationship in the success of exclusive breastfeeding. While age and education have an insignificant relationship in the success of exclusive breastfeeding. It is recommended to improve the knowledge and attitudes of breastfeeding mothers diabetes Melitus towards exclusive breastfeeding.

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