

Article

The Relationship of Exclusive Breastfeeding History to Morbidity In Infants Aged 1-14 Months

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SUBMISSION TRACK

Recieved: November 20 Desember 2020

Final Revision: November 23 2020

Available Online: Desmeber 06 2020

KEYWORDS

Exclusive breastfeeding, morbidity

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A B S T R A C T

Objectives: This study aims at determining the relationship between the history of exclusive breastfeeding and morbidity in babies aged 1-14 months in the city of Sukabumi.

Materials and Methods: This study uses a cross-sectional method with a sample of 71 babies aged 1-14 months in the city of Sukabumi. Data sources used are primary and secondary data, and the Spearman test is used for data analysis.

Results: The results showed that there was no relationship between the history of exclusive breastfeeding and ISPA ($p=1,000$), there was no relationship between the history of exclusive breastfeeding and diarrhea ($p=1,000$), there was no relationship between the history of exclusive breastfeeding and fever ($p=0,477$), there is no relationship between the history of exclusive breastfeeding and seizures ($p=1,000$), there is no relationship between the history of exclusive breastfeeding and pneumonia ($p=1,000$).

Conclusion: The study concludes that there is no relationship between the history of exclusive breastfeeding and morbidities namely ISPA, diarrhea, fever, seizures and pneumonia in babies aged 1-14 months in the city of Sukabumi.

Keywords: Exclusive breastfeeding, morbidity

1. INTRODUCTION

The morbidity or morbidity rate for infants and toddlers in Indonesia is still quite high. In the Socio-Economic and Social Survey (2014), there are several health complaints that are usually experienced by toddlers, namely fever, cough, colds, asthma or shortness of breath, diarrhea, recurring headaches, and toothaches. More than half of toddlers in Indonesia experience cough (57.62%), cold (58.32%), fever (53.90%). These three health complaints are often experienced by toddlers, because toddlers are still susceptible to disease. (Kemen PPPA, 2015)

Apart from the complaints that are often experienced by toddlers, toddlers are also susceptible to disease which can increase the morbidity rate for infants and toddlers including diarrhea, respiratory infections, fever, and pneumonia. Based on data from the 2013 Hospital Information System, there were eleven morbidity in children under five including Upper Respiratory Tract Infection with 97,198 people, 69,338 diarrhea, 51,011 fever, 11,260 seizures and 9,180 pneumonia. (Kemenkes, 2015).

The existence of a disease in toddlers will allow stunted growth and development of children under five. Based on research conducted by Olack et al 2011 that sick children will find it difficult to eat so that they will tend to be malnourished compared to healthy children. Diseases suffered by infants and toddlers if not handled quickly and appropriately will certainly pose a risk to children's health. (Kemenkes, 2015)

The results of this study are part of a research grant from Unpad Lecturer Competence Research by Dr. Meita Dhamayanti, dr., SpAK., M.Kes, which was previously carried out in the City of Sukabumi and Cirebon in 2019. As many as 55 babies in the Sukabumi area have experienced illness. The diseases that babies often experience in the Sukabumi area are coughs, colds, fever, itching -itching and vomiting. (Dhamayanti, 2019)

Morbidity experienced by toddlers can be influenced by several factors such as mother characteristics, sun exposure, nutritional status, history of exclusive breastfeeding and immunization status. (Suharwati et al, 2015)

Exclusive breastfeeding has a great contribution to the development and endurance of children. Children who are given exclusive breastfeeding will grow and develop optimally and will not get sick easily. This is in accordance with several studies and global facts. The global study "The Lancet Breastfeeding Series", 2016 has proven 1) Exclusive breastfeeding reduces the mortality rate due to infection by 88% in infants aged less than 3 months, 2) A total of 31.36% (82%) of 37.94% sick children , because they do not receive exclusive breastfeeding. Investments in

prevention of LBW, stunting and increasing IMD and exclusive breastfeeding contribute to reducing the risk of obesity and chronic disease (Patal, 2013) (Kemenkes, 2018)

According to WHO / UNICEF, the gold standard for feeding infants and children is 1) doing Early Initiation of Breastfeeding (IMD) immediately after birth for a minimum of 1 hour; 2) exclusive breastfeeding from birth to 6 months of age; 3) starting at the age of 6 months the baby will receive nutritious complementary foods (complementary foods) according to their growth and development needs; and 4) continue to breastfeed the child until the age of 24 months or more (Kemenkes, 2018)

In Riskesdas 2018, the proportion of infants who are exclusively breastfed is calculated using the formula for the number of children aged 0-5 months who only receive breastfeeding, are not given other food or drinks, including water (except medicines and vitamins, or mineral drops, expressed breastfeeding.) in the last 24 hours divided by the number of babies aged 0-5 months. Exclusive breastfeeding from the time the baby is born is best done in order to get colostrum, which is yellowish breastfeeding that comes out on the first to the third day when the mother starts breastfeeding. Colostrum is high in protein, rich in anti-infective substances, and can increase the body's immune system (Kemenkes, 2018).

The results of research by Indah et al (2017) found that babies who received exclusive breastfeeding were still experiencing ISPA, namely 37.9%. This can be due to other factors that can affect the incidence of ISPA in infants. Trisnawati and Khasanah (2013) explain that there are other factors that can cause the incidence of ISPA in babies, such as unhealthy house conditions and the presence of family members smoking in the house, so that environmental conditions also greatly affect the incidence of ISPA in infants (Nurhayati, 2017).

The general objective of this study was to analyze the relationship between exclusive breastfeeding history and morbidity in infants aged 1-14 months in the city of Sukabumi

2. METHODS

This research is part of a grant from Unpad Lecturer Competency Research by Dr. Meita Dhamayanti, dr., SpAK., M.Kes and tiim. Where this research uses a descriptive approach with cross sectional method or cross-sectional. The data sources used were primary data from questionnaires and secondary data from the Unpad Lecturer Competency Research grant by Dr. Meita Dhamayanti, dr., SpAK., M.Kes and the team. The population in this study were all babies in the city of Sukabumi who were part of the research grant, totaling 71 respondents. Sampling

was done by total sampling. The analytical test performed was Fisher's test because it did not meet the chi square requirements.

3. RESULT

1. Univariate Analysis

The results of the study regarding the frequency distribution of exclusive breastfeeding history and morbidity in infants aged 1-14 months in the Sukabumi City area can be seen from tables 1 and 2.

Table 1. Frequency Distribution of Exclusive Breastfeeding History and Characteristics in Infants 1-14 Months Ages in the City of Sukabumi

VARiable	N	%
Exclusive Breastfeeding		
Yes	65	91.55
No	6	8.45
Gender		
male	31	43,70
female	40	56,30
Age		
0-6 months	0	0
7-13 months	71	100

Based on the results of table 1, it is found that almost all respondents have implemented exclusive breastfeeding amounted to 91.55%

Table 2 Distribution of Frequency of Morbidity in Infants 1-14 Months Ages in the City of Sukabumi

Type of Morbidity	Yes		No		Total
	N	%	n	%	
ISPA	57	80.28	14	19.72	100
Diarrhea	15	21.13	56	78.87	100
Fever	64	90.14	7	9.86	100
Seizures	1	1.41	70	98.59	100
Pneumonia	1	1.41	70	98.59	100

Based on the results of table 2, it is found that the most common type of morbidity is fever with a magnitude of 90.14%

2. Bivariate Analysis

Table 3. Relationship of History of Exclusive Breastfeeding to Morbidity in Infants Age 1- 14 Months in the City of Sukabumi

Type of Morbidity	Exclusive Breastfeeding		NoExclusive Breastfeeding		p (Fisher)
	N	%	n	%	
ISPA					1,000
Yes	52	80,00	13	20,00	
No	5	83,30	1	16,70	
Diarrhea					1,000
Yes	14	21,50	51	78,50	
No	1	16,70	5	83,30	
Fever					0,477
Yes	59	90,80	6	9,20	
No	5	83,30	1	16,70	
Seizures					1,000
Yes	1	1,50	64	98,50	
No	0	0	6	100	
Pneumonia					1,000
Yes	1	1,50	64	98,50	
No	0	0	6	100	

Based on table 3, there are several results, namely the history of exclusive breastfeeding with a number of 59 respondents that has no relationship with fever morbidity of 0.477.

4. DISCUSSION

The results of the study in table 1 explain that the coverage of exclusive breastfeeding in the area of Sukabumi City is already good, where most respondents give their children exclusively breastfeeding. The success of the coverage of exclusive breastfeeding in the area of Sukabumi City is an achievement of breastfeeding mothers, health workers, cadres, and researchers from the RKDU grant, Dr. Meita and the team that previously included research from pregnant women to their children now aged 2 years. So that mothers have received information about the importance of exclusive breastfeeding for babies aged 0-6 months along with the important role of the family to support mothers giving exclusive breastfeeding. We hope that the research team wants to reach 100%, but there are still some mothers who cannot provide Exclusive breastfeeding.

Several studies state that there are several factors that influence exclusive breastfeeding. Mogre, Dery and Gaa (2016) state that maternal education, knowledge of

exclusive breastfeeding and maternal attitudes are factors that influence exclusive breastfeeding. Liben et al (2016) stated that early breastfeeding initiation, maternal occupation, and postpartum education influence exclusive breastfeeding.

Maternal pregnancy status also affects exclusive breastfeeding. Mothers with planned pregnancies are more likely to provide exclusive breastfeeding than mothers with unplanned pregnancies (Yilmaz et al, 2016). Exclusive breastfeeding is also influenced by the mother's perception of the experience of giving birth (Colledge, 2011).) and mother's perceptions about breastfeeding (Arlinda, Saparwati, and Afriyani, 2013). In particular, Astuti (2012) also revealed that the perception of adolescent mothers on the benefits of breastfeeding and problems in breastfeeding have an effect on breastfeeding. The reasons for teenage mothers not to continue exclusive breastfeeding are because they feel that breastfeeding is not enough and the reasons for work (Jara et al, 2015). The same thing was also expressed by Tucker, Wilson, and Samandari (2011) that the reasons for teenage mothers not to provide exclusive breastfeeding include work reasons, feeling that the baby is less satisfied with only breastfeeding, blistered nipples and feeling tired with household duties. Another factor that affects exclusive breastfeeding is family support (Cristiana, 2016). Ida (2012) also revealed that family support, support for health facilities and personnel, and husband's support are factors related to exclusive breastfeeding.

In Riskesdas 2018, the proportion of infants who are exclusively breastfed is calculated using the formula for the number of children aged 0-5 months who only receive breastfeeding, are not given other food or drinks, including water (except medicines and vitamins, or mineral drops, expressed breastfeeding.) in the last 24 hours divided by the number of babies aged 0-5 months.

Exclusive breastfeeding from the time the baby is born is best done in order to get colostrum, which is yellowish breastfeeding that comes out on the first to the third day when the mother starts breastfeeding. Colostrum is high in protein, rich in anti-infective substances, and can increase the baby's immune system. Judging from its age, it is known that the older the baby is, the smaller the proportion of babies who were only breastfed in the last 24 hours. There is no significant difference between male and female babies in terms of exclusive breastfeeding. When viewed from the area of residence, it can be seen that the proportion of babies who are exclusively breastfed is higher in rural areas than in urban areas, 76.6 percent and 72.7 percent, respectively. (Kemenkes, 2019)

Table 2 explains that the morbidity in infants is dominated by fever, fever and diarrhea. Based on the 2014 National Socio-Economic Survey and 2013 Basic Health Research, there are 5 types of diseases or problems that are usually experienced by infants and toddlers, namely

diarrhea, ARI, fever, cough (common cold), and pneumonia. The five types of diseases have contributed to the morbidity rate in infants, where the morbidity rate is one of the indicators that determines the degree of public health. Recently, the incidence of diphtheria has begun to reappear as an Extraordinary Event (KLB). Factors that influence infant and toddler morbidity are maternal characteristics, sun exposure, exclusive breastfeeding and immunization status. During toddlerhood, children are susceptible to fever. Fever is the body's response when white blood cells carry out their duties to attack the incoming viruses or bacteria. Based on the Socio-Economic Social Survey (2014), fever ranks third in the complaints that are often experienced by toddlers, namely (53.90%).

Fever in toddlers can be caused because the toddler's body is very vulnerable to viruses and bacteria. Mothers with the knowledge of how to raise good children will pay more attention to their children's health from various aspects such as environmental conditions and the food consumed by their children, so that virus and bacterial attacks can be prevented (Budi F, 2017). Then for the discussion in table 3 states that exclusive breastfeeding has no relationship with morbidity in infants aged 1-14 months in the area of Sukabumi City. The results of the study also explained that there were 3 types of morbidity with the highest levels, namely fever, ISPA and diarrhea. This is in line with Mulyati H's research (2018) that the types of diseases most often suffered by respondents are fever, ISPA, and diarrhea.

The results also showed that infants who received exclusive breastfeeding still experienced ARI, namely 37.9%. This can be due to other factors that can affect the incidence of ISPA in infants. Trisnawati and Khasanah (2013) explain that there are other factors that can cause the incidence of ISPA in infants, such as unhealthy house conditions and the presence of family members who smoke in the house, so that environmental conditions also greatly affect the incidence of ISPA in infants.

The absence of a relationship between the history of exclusive breastfeeding and the incidence of diarrhea in this study is in line with research conducted by Risnanda 1. (2013) and Nurhayati I (2017) which explains that there is no relationship between breastfeeding status and the incidence of diarrhea in infants. This could be because the incidence of diarrhea in infants can be influenced by several factors. According to the theory of Purwanti (2004), explaining that the cause of diarrhea in infants can be caused by several factors, one of which is the fact that the baby or the individual is the presence of infection either inside or outside the baby. even outside the digestive tract be it bacterial, viral or parasitic infections

Fever is a body condition characterized by an increase in temperature. The increase in temperature is divided into two, namely an increase in normal and abnormal temperature. An

increase in normal body temperature, for example when a child is active, doesn't drink enough, or is anxious. Meanwhile, an abnormal temperature increase is caused by a disease. Various diseases usually begin with an increase in body temperature. (Marwan, 2017)

Fever is the most common case that causes parents to bring their children to health services and sometimes causes panic in parents. In general, fever is a symptom that accompanies an infectious disease (Marwan, 2017).

Breastfeeding contains many antibodies which play an important role in maintaining the body's resistance, especially in protecting babies from allergies and infections, including those that occur in the digestive tract. However, it does not mean that babies who are exclusively breastfed can avoid 100% of coughs and colds.

In addition to the fact that their immune system is still relatively weak compared to adults, there are many factors that can make babies more susceptible to coughs and colds, including having a history of allergies, or a family history of allergies, sanitation, ventilation, and environmental lighting. living in a poorly maintained environment, living in a densely populated environment, making it easy for other people to catch a cough or cold, humid weather or transition seasons, which often make it easier for viruses to survive longer, wrong breastfeeding methods, for example using a pacifier or breastfeeding while lying down, this can increase the risk of aspiration which can lead to pneumonia (inflammation of the lung parenchyma), having problems with immunity, for example due to heart problems, HIV/AIDS, taking steroids, autoimmune disorders, and so on.

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