

The relationship of feeding complementary food for breast milk (mp asi) to children aged 0-24 months with the incidence of diarrhea in the work area of Pematang Raya Puskesmas, Simalungun district

Mustarduddin¹, Almazhia Mahliza²

^{1,2}Efarina University

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ABSTRACT

Diarrheal disease in Indonesia is a major public health problem. This is due to the high diarrhea morbidity rate which causes many deaths, especially in toddlers. In Indonesia it was reported as a whole in 2006 it was estimated that diarrhea morbidity rates increased by 423 per 1000 population at all ages with a total of 10,980 cases and 277 deaths under five. In 2008, in Indonesia there were around 40 million episodes of diarrhea in toddlers per year with the death of 200,000-400,000 toddlers (Soebagyo, 2008). The purpose of this study was to determine the relationship between the provision of complementary feeding (MP ASI) in children aged 0-24 months with the incidence of diarrhea in the working area of the Pematang Raya Health Center, Simalungun Regency in 2017. The research design was an observational study using a comparative case design. (case control study). Based on the results of bivariate analysis with the chi-square statistical test on the types of complementary foods, it shows that p value = 0.025 where the p count is greater than the p table of 0.05 ($p > 0.05$), this indicates that there is a relationship between the types of complementary foods in children aged 0-24 months with the incidence of diarrhea, with an OR value of 0.359. It is hoped that it will be used as input material in planning diarrhea disease prevention policies, preparing health plans, and evaluating health programs, especially in preventing diarrheal diseases related to complementary feeding of breast milk.

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Corresponding Author:

Mustarduddin,
Efarina University

Jl. Pendeta J. Wismar Saragih, Bane, Kec. Siantar Utara, Kota Pematang Siantar, Sumatera Utara 21143,
Indonesia

Email: mustarduddin@gmail.com

INTRODUCTION

Diarrheal disease in Indonesia is a major public health problem. This is due to the high diarrhea morbidity rate which causes many deaths, especially in toddlers. In Indonesia it was reported as a whole in 2006 it was estimated that the morbidity rate of diarrhea increased by 423 per 1000

population at all ages with a total of 10,980 cases and 277 deaths under five children. -400,000 toddlers (Soebagyo, 2008).

Pematang Raya District is one of 31 sub-districts in Simalungun Regency. Based on data from the Pematang Raya Health Center with diarrhea sufferers in 2014, overall diarrhea sufferers reached 215 sufferers, while cases of diarrhea in toddlers according to the age category less than one year reached 29 toddlers (13.4%) and at the age of 0-2 years reached 83 toddlers (38.6%). In 2015, there were 409 cases of diarrhea in infants, while cases of diarrhea in infants under the age category of less than one year reached 54 infants (13.2%) and at the age of 0-2 years reached 151 infants (36.9%). In 2016, total diarrhea cases reached 326, while cases of diarrhea in toddlers according to the age category less than one year reached 54 toddlers (16.5%), and at the age of 0-2 years it increased to 145 toddlers (44.4%).

The increasing age of the baby results in an increase in nutritional needs. When a baby enters the age of six months and over, some nutritional elements such as carbohydrates, protein and some vitamins and minerals contained in breast milk or formula milk are no longer sufficient, therefore after the age of six months the baby needs to start given MP ASI so that the nutritional needs of infants or children are met. In giving MP-ASI, what needs to be considered is the age of giving MP-ASI, the frequency of giving MP-ASI, the portion in giving MP-ASI, the type of MP-ASI, and the method of giving MP-ASI in the early stages. baby nutrition. but also stimulates eating skills and stimulates self-confidence in infants (Depkes RI, 2007).

Complementary feeding is one of the factors that influence the incidence of diarrhea. Contaminated, stale and toxic foods, as well as too much fat, raw and undercooked usually trigger diarrhea in infants and children. Apart from these factors, transmission of diarrhea usually occurs through glasses, plates or spoons that are not clean or contaminated with germs. Several behavioral factors also influence the incidence of diarrhea in infants and children, for example the behavior of not washing hands thoroughly before and after eating, not boiling water to drink, and food that has expired and is contaminated with parasites. Diarrheal disease is usually easily transmitted to infants and children due to the application of improper lifestyles and the provision of healthy food to infants and children (Widjaja, 2002).

Based on the background above, the authors are interested in further researching the relationship between complementary feeding (MP ASI) in children aged 0-24 months with the incidence of diarrhea in the working area of the Pematang Raya Health Center, Simalungun Regency, 2017.

Formulation of the problem, Is there a relationship between giving complementary feeding (MP ASI) to children aged 0-24 months with the incidence of diarrhea in the working area of the Pematang Raya Health Center, Simalungun Regency, 2017?

RESEARCH METHOD

Research design

The research design is an observational study using a case *control study*. According to Murti (2006), a case-control study which is also called a *Case Comparison Study*, *Case Reference Study* or *Retrospective Study* is an observational analytical epidemiological study that examines the relationship between certain effects (which can be diseases or health conditions) and certain risk factors.

Place and time of research

The location of this research was carried out in the working area of the Pematang Raya Health Center, Simalungun Regency. The research was conducted in August 2017.

RESULTS AND DISCUSSIONS

The relationship between the age of giving complementary feeding (MP ASI) to children aged 0-24 months with the incidence of diarrhea in the working area of the Pematang Raya Health Center, Simalungun Regency, 2017

Before giving complementary foods to children, you should pay attention to the age of the child whether they are ready to be given complementary foods or not. According to the Ministry of Health of the Republic of Indonesia (2007), the appropriate age for giving complementary food to breast milk when it is first given is when the child is more than 6 months old, with the aim that the child does not experience infection or digestive disorders due to viruses or bacteria. The results of the bivariate analysis showed that the value of $p = 0.633$ ($p > 0.05$) with an OR of 1.256 was not statistically significant.

Thus, the age of giving complementary feeding to children aged 0-24 months has no relationship with the incidence of diarrhea and is not a risk factor for the occurrence of diarrhea, but the possibility of having a risk of exposure to diarrhea in the non-diarrhea group is 1.256 times.

Based on the results of the interviews in this study, it was shown that many mothers gave complementary foods to their children at the wrong age, resulting in many children getting diarrhea. This is evidenced in the results of research which explains that the age at which MP ASI is given for the first time is at most the age of 0 to six months.

The relationship between the portion of complementary feeding for ASI (MP ASI) in children aged 0-24 months with the incidence of diarrhea in the working area of the Pematang Raya Health Center, Simalungun Regency, 2017

In providing complementary foods, you must always pay attention to the accuracy in each portion or the number of doses. The results of the bivariate analysis showed an OR value of 1.788 and $p=0.284$ which was not statistically significant. Based on the results of interviews in this study, it was found that many mothers gave MP ASI to their children in portions that were not appropriate for the child's age. Many mothers still think that the portion in giving MP-ASI has no effect on the incidence of diarrhea, even though the results of bivariate analysis show that there is no relationship between the portion of MP-ASI giving and the incidence of diarrhea. This is still a risk for exposure to diarrhea, because the results of the study indicate that there is a possible risk of exposure to diarrhea.

The relationship between the type of complementary feeding for ASI (MP ASI) in children aged 0-24 months with the incidence of diarrhea in the working area of the Pematang Raya Health Center, Simalungun Regency, 2017

The results of the bivariate analysis showed an OR value of 0.359 and $p=0.025$ which was statistically significant. Thus, the type of complementary food for ASI in children aged 0-24 months is related to the incidence of diarrhea and is a risk factor for diarrhea. Based on the results of interviews in this study, it was found that many mothers gave the right type of MP ASI to their children. although the results of the bivariate analysis explained that there was a relationship between the type of MP ASI and the incidence of diarrhea. This is because there may be influences from other factors that cause diarrhea. These factors may be the frequency of giving MP ASI that is not appropriate, and the method of administration that does not meet health requirements .

The relationship between how to provide complementary food for ASI (MP ASI) to children aged 0-24 months with the incidence of diarrhea in the working area of the Pematang Raya Health Center, Simalungun Regency, 2017

The results of the bivariate analysis showed an OR value of 3.273 and $p=0.017$ which was statistically significant. Thus, the method of giving complementary feeding in this study has a relationship and is a risk factor for diarrhea. Children who are given MP-ASI in an inappropriate

way have a risk of getting diarrhea by 3.273 times compared to those who are given MP-ASI properly.

Based on the results of interviews in the study, it was found that there were still many mothers who gave MP-ASI to their children by not meeting the health requirements, resulting in many children getting diarrhea. This is evidenced in the results of research which explain that the method of giving MP-ASI to children is still mostly given in the wrong way or does not meet health requirements.

CONCLUSION

There is no relationship between the age of giving complementary feeding (MP ASI) to children aged 0-24 months with the incidence of diarrhea in the working area of the Pematang Raya Health Center, Simalungun Regency, 2017. There is no relationship between the portion of complementary feeding for ASI (MP ASI) in children aged 0-24 months with the incidence of diarrhea in the working area of the Pematang Raya Health Center, Simalungun Regency, 2017. There is a relationship between the type of complementary feeding (MP ASI) in children aged 0-24 months with the incidence of diarrhea in the working area of the Pematang Raya Health Center, Simalungun Regency, 2017. There is a relationship between the method of giving complementary feeding (MP ASI) to children aged 0-24 months with the incidence of diarrhea in the working area of the Pematang Raya Health Center, Simalungun Regency, 2017.

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