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Non-Exclusive Breastfeeding on Nutritional Status Infant In Ranotana Weru Community Health Centers

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Abstract: Malnutrition is still a major concern on global. The 0-6 months for infant is very important period for development.So Exclusive Breastfeeding is main factor for optimalize that growth. The aim of this study was to analyze non exclusive breastfeeding and nutritional status infant. This study was an observational analytic study with a cross sectional study design carried out in Ranotana Weru community health centers. This research was conducted from February to April 2022. The number of samples is 34 infants aged 0–6 months. The frequency of infant who received complementary food earlier (non exclusive breastfeeding) were 70.59% and 66.67% malnutritional status. This study also showed an association between the non exclusive breastfeeding with nutritional status boundary value (*p* value = 0.02). 0-6 months infant who non-exclusive breastfeeding is significantly correlated with nutritional status.

Keywords: Breastfeeding, Nutritional Status, Complementary Food.

Introduction

Infant the ages 0 - 24 months are at high nutritional risk, which affects their growth and development so optimum nutrition is breastmilk. Breastfeeding provides optimal nutrition for the infant as well as strengthen the bond between mother and their infant. Exclusive breastfeeding is a practice recommended for infants aged 0 to 6 months of birth in which the infant only recieves breast milk without any additional food or drink. (INFODATIN, 2014)

Nutritional problem in Indonesia still a concern, there are under weight, stunting, wasting, and micronutrient deficiency. Data from National Health Basic Research 2018 reported that the prevalence of underweight (17,8%), stunting (30,8%), dan wasting (10,24%). according to WHO standards, prevalence rate of stunting in indonesia still above 20%. (RISKESDAS, 2018). There are several factors that cause stunting in children. One of them is because the mother does not exclusive breastfeeding, and gives complementary foods earlier. (Lamid A & januarini, 2015)

Data from Ranotana Weru community health centers 2020 reported percentage infant who received exclusive breastfeeding is (37,1%) and infant who received non exclusive breastfeeding is (62,8%). The number is decreased compared to 2021 that (30,95%) and percentage has not reached Indonesian strategic target that 40%. Problems of nutrition are impacting to his cognitive disabilities and behavior deceleration, Therefore, this study tried to describe how relationship between non ekslusif breastfeeding on nutrition status infant,

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Literature Review

WHO recommends an infant to be exclusively breastfed for the first six months of life, then begin nutritionally adequate, safe, and appropriately-fed complementary foods from six to 24 months in order to meet the evolving needs of the growing infant. Between the ages of 6 and 23 months – the complementary feeding period – breastfeeding and access to a diverse range of nutritious foods provide children with the essential nutrients, vitamins, and minerals they need to develop to their full physical and cognitive potential, with benefits that endure well into adulthood. (Victora, 2010) The complementary feeding period is also a critical opportunity to prevent all forms of childhood malnutrition, including stunting, wasting, micronutrient deficiencies, overweight, obesity and diet-related non-communicable diseases. In addition, lifelong food preferences, tastes and habits are often established in childhood. (Aguayo, 2016)

According to the baby's digestive function, providing Complementary food should be done gradually in quantity, quality, and variation. The digestive ability of food other than breast milk in the digestive tract of infants aged 0-6 months is still not optimal, so babies who are given solid food are at risk of experiencing diarrhea or constipation. (Septikasari, 2018). At 0-6 months, the baby's intestines are still open. Babies begin to produce antibodies (IgA) when they reach six months of age; this is because, at that age, the closure of the baby's intestine has begun to complete. If babies under six months old have been given Complementary Food, they are at risk of experiencing intestinal intussusception or invagination, a condition in which a segment of the intestine enters another part of the intestine. (Hegar, 2017)

When children are given Early Complementary Food, they will consume breast milk in more minor quantities, so children can experience nutritional problems because balanced nutritional intake contained in breast milk is not obtained (Nassar, 2017) . According to Rasuke (2021) Showed that Majority of the children (91.2%) were given soft/semi-solid/solid foods before six months of age at age 0–1 month was statistically significantly associated with higher risks of wasting and underweight (Rachel Masuke, 2021). Several factors can influence mothers giving Early Complementary Food to their children, including insufficient knowledge about Complementary Food, low educational history, socio-culture that encourages giving Early Complementary Food, progressive marketing of baby food manufacturers, working mothers, and lack of support from health workers (Septikasari, 2018).

Based on this statement we need to measure nutritional status.. Assessment of children's nutritional status is conducted by comparing the results of measurements of weight and length/height with the Child Anthropometric Standards. The classification of nutritional status assessment based on the Anthropometric Index according to the nutritional status category in the WHO Child Growth Standards for children aged 0-5 years and The WHO Reference 2007 for children 5-18 years. Anthropometry is a method used to assess the size, proportion, and composition of the human body. While the Child Anthropometry Standard is a collection of data on size, proportion, body composition as a reference for assessing the nutritional status and growth trends of children. (Kementrian kesehatan, 2020)

Methodology

This research uses quantitative methods with a correlational study type with a crosssectional design. The research was conducted to find the relationship between the independent variables, early complementary feeding (non exclusive breastfeeding) , with the dependent variables, nutritional status in children aged 0-6 months. The population in this study were 229 children (6-24 months) based on data obtained from Ranotana Weru community health centers. The total sample in this study were 34 infants (0-6 months), who were recruited using

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the purposive sampling technique. Before participating in this study, all participants were determined based on inclusion and exclusion criteria. The inclusion criteria of this study were infants 0-6 months of age; infants should be located in Ranotana Weru community health centers. The exclusion criteria were children who suffered from sick, children with congenital abnormalities and defects, children with a history of severe infections such as COVID19, HIV/AIDS, and Pneumonia. The research process was carried out from January 2022- Februari 2022.

The data of respondent demographics were collected using a sociodemographic questionnaire, and anthropometric data were collected using children's weight scales and length boards. The sociodemographic questionnaire identified characteristics of parents such as age, education, occupation, the history of Complementary food, the age of children is started to be given Complementary food, type of Early Complementary Food given to children, and identified characteristics of children such as age, gender, body weight, body length, and weight-for-height z-score (WHZ). Anthropometric data were collected using children's weight scales and length boards. The data collected through the questioners and measurement of the children's weight and length were coded and entered into SPSS. This study employed descriptive and correlational data analyses with Chi-square test

Prosedure were conducted by take all children who participated in this study were recruited from Ranotana Weru community health centers. Children information was obtained from their parents—subjects who agreed to participate filled the informed consent. Parents were informed that the collected information would be kept confidential and that the questionnaire was anonymous. The researcher gave a sociodemographic questionnaire for attaining the demographic data of respondents. To measure the height of children, we lay the child on her back without a pillow (supination), straighten the knee until the stick on the table (the position of the extension), then align the top of the head and lower leg (foot perpendicular to the measuring table) then measure following the scale shown. Meanwhile, to measure the weight of children, we were put the children on the baby's weight scale, making sure the scale needle is at 0, asking the mother to put their child on the scale in a supination position; the researcher has ensured that footwear, pampers, jackets, and other items that have weight have been removed.

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Findings & Discussion

Tabel.1 *Social Characteristics of the Sample*

Characteristic	No. of respondents (%)
Age	
< 20 Years	3 (8.82)
20-35 Years	28 (82.36)
>35 Years	3 (8.82)
Educational level	
Elementary school	- (0)
Junior high school	3 (8.82)
Senior high school	24 (70.59)
Bachelor's degree	7 (20.59)
Occupation	
State Civil Apparaturs	4 (11.77)
Enterpreneur	7 (20.59)
Housewife	23 (60.64)

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Infant's age	
1 month	6 (17,64)
2 month	11 (32,35)
3 month	9 (26,47)
4 month	4 (11,77)
5 month	4 (11,77)
The history of giving CF	
Early Complementary Food	24 (70,59)
Not Early Complementary Food	10 (29,41)
Nutritional status	
Normal	17 (50.0)
Abnormal	17 (50.0)

Table 2 the Relationship of Complmentary Food with Nutritional Status to infants (0-6 Months)

Complementary Food	Nutritional status		Total	p- value
	Normal	Abnormal		
Early Complementary Food	8 (33.33)	16 (66.67)	24(100)	0.002
Not Early Complementary Food	9 (90.00)	1 (10.00)	10 (100)	

Based on table 1, it can be seen that the characteristics of the parents in this study are that most parents who participated in this study were in 20-35 years as many as 28 people (82.36%) and 23 (60.64) as a housewife. The most recent educational level was senior high school as many as 24 people (70.59). Most of the infant who participated in this study were aged 0-5 months as many as 11 infant (32,35%). it is found that as many as 24 respondents (70.59%) were given Early Complementary Food during the first six months of a baby's life. it can be seen that normal and abnormal nutritional status are equivalent with total 17 infants 50%.

Tabel 2 showed The results of the analysis of the relationship between Complementary Food and nutritional status of children aged 0-6 months in Ranotana weru community health center by using chi-square obtained p-value 0.002< 0.05, so that it can be concluded that the alternative hypothesis (Ha) failed to be rejected or there was a relationship between Early Complementary Food with nutritional status of children aged 0-6 months.

Our findings showed that most of infants who get early complementary food are get nutrition problem. The factor is the digestive ability of food other than breast milk in the digestive tract of infants aged 0-6 months is still not optimal and the secretion of polysaccharide enzymes (amylase, maltase, and sucrase), which functions to break down carbohydrates in the first three months of a baby's life, has not been secreted optimally, as well as the lipase enzyme, which functions to break down fat into fatty acids is not secreted optimally (Wahyuni, 2018). According to Qanit et al. (2020), when babies are introduced to Early Complementary Food, it could be that the baby has a diet that does not match the energy needs of his body and will have an impact on nutritional status.

According to (Rachel Masuke, 2021) The main reason for the these high proportion of inappropriate age of introducing complementary food could be the mothers' perception that breast milk is insufficient for a child's growth. Therefore, health education to mothers is essential in promoting appropriate age of introduction of complementary feeding especially during the ante and post-natal period (Arikpo D, 2018). Our findings also showed that the most recent educational level was senior high school, and part of infants as responden get exclusive breastfeeding. Mother

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with intermediate education has a enough ability to receive information and enough knowledge as well. The level of education is closely related to the mother's understanding of important information that needs to be done to improve the welfare and health of both mother and child.

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