

THE RELATIONSHIP BETWEEN FAMILY CHARACTERISTICS IN THE IMPLEMENTATION OF BASIC FEEDING RULES IN CHILDREN AGED 24-36 MONTHS IN KEDUNGMUNDU VILLAGE, SEMARANG CITY

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Abstract: Basic feeding rules are the basic rules for the feeding practice. Basic feeding rules consist of assigning the feeding schedule, the duration of eating, and the conducive environment for eating. However, children from 1-3 years which is the golden age growth period, still face several growth and development problems, one of these factors comes from the family. As the closest party to the children, the family is considered inadequate to play their optimal role as a motivator, facilitator, and educator. This study aims to analyze to analyze there is a relationship between family structure and application basic feeding rules in children aged 24-36 months in Kedungmundu Village. This research used 68 samples of children aged 24-36 months, taken by purposive sampling method. The study was quantitative research with a cross-sectional approach. The instrument used was a family characteristics questionnaire that has been analyzed for its validity and reliability. In this research, bivariate analysis was conducted. The Chi-Square correlation test was used to all independent variables other than age with basic feeding rules were applied. Meanwhile, the T-Test was used to the age of children when basic feeding rules were applied. The results showed 76.5% of respondents applied basic feeding rules and there was a significant relationship between income, parental education, family completeness with basic feeding rules. And there no significant relationship between races, food cultures, children, and child's age with the application of basic feeding rules. There is no significant relationship between certain races, food cultures, children, and child's age with application of basic feeding rules. Instead, applying basic feeding rules, there is a relationship between family income, parental education, and family structure.

Keywords: basic feeding rules, family structure

Introduction

Nutrition is crucial during the child's growth period. Giving good nutrition in the first three years of life will stimulate the optimal growth and development of the children. The age of the first three years is the golden age phase. Attention to providing nutrition at this time significantly affects human life in the future. Toddlers will experience growth and development, especially in language, cognitive and emotional functions. (Mashita Prilina Yusmar, 2014)

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Basic feeding rules are the basic rules for the feeding practice. Basic feeding rules consist of assigning the feeding schedule, the duration of eating, and the conducive environment for eating. Basic feeding rules also discuss feeding methods, feeding portions, and proper feeding sequences. By implementing optimal basic feeding rules in children, it can help the nutritional needs and growth of children according to their age. Adequacy of nutrition and food for children is a major indicator in assessing nutritional health in a country and in developing human resources as an indicator of the success of nation-building. (Saidah et al., 2020; Sjarif Damayanti et al., 2014)

The application of basic feeding rules in improving the nutritional status of children is correlated with the function of the family as a motivator, educator and facilitator in providing a good diet for children. Problems with children's eating patterns can arise due to problems in the family such as knowledge and education in health, family culture, family income, and incomplete family structure. The family should be an important part in fulfilling nutrition for children, fellow family members provide mutual support in feeding children so that they can benefit from various types of interventions for growth and development, so it is important for families to understand the role of proper feeding guidelines such as basic feeding rules. (Istiqomah et al., 2018; Keperawatan Muhammadiyah et al., 2020; Pratiwi, 2017)

Kedungmundu Village is one of the strategic villages in Tembalang District. Kedungmundu Village has a population of toddlers between the ages of 0-4 years as many as 912 children, spread across nine RWs in Kedungmundu Village. Data obtained from the Semarang Health Office in Tembalang District in June 2022 there were 109 cases of stunting in children, especially in the Kedungmundu Village there were 10 cases of stunting of the children. Based on a preliminary study in the same month in the Kedungmundu Village, there were 3 toddlers affected by malnutrition cases due to eating and digestion issues. From the data that has been described on the demographics of strategic areas, there were potential toddler populations with stunting and malnutrition cases. The researchers are interested in conducting research on the relationship of family characteristics to the application of basic feeding rules in children aged 24-36 months in the Kedungmundu Village, Semarang. This research gave understanding and encourage families with 24-36 months old children to apply basic feeding rules so children will get optimal nutrition for development and growth and help reduce malnutrition issue. (Pratiwi, 2017)

Based on this, the authors are interested in researching "The Relationship between Family Characteristics and the Implementation of Basic Feeding Rules in Children Aged 24-36 Months in Kedungmundu Village, Semarang City in 2022".

Objectives

Identifying relation between race / ethnicity, family income, family education, family culture, family structure, child , and child age to the application of basic feeding rules of the families in the Kedungmundu Village.

Analyzing the relationship between race/ethnicity, family income, education, culture, family structure, sex, and age of the children in the implementation of basic feeding rules in children aged 24-36 months.

Substances and Methods

Substances

Definition of Basic Feeding Rules

Basic feeding rules are the basic rules for feeding practices. It was first designed by Professor George Washington at the University School of Medicine. The rules for eating in the basic feeding rules are related to three components, namely feeding scheduling, environment, and procedures. These rules are made so that children learn to feel the correct eating signals from these rules. The role of family and parents plays a vital role because children can imitate the eating habits of their parents. (Mashita Prilina Yusmar, 2014) ,(Munjidah Annif et al., 2020)

Factors influencing the application of basic feeding rules.

Parents Factors

a. Knowledge

Knowledge is a result of curiosity through sensory processes, especially in the eyes and ears for certain objects. Knowledge is an important domain in the formation of open behavior. Knowledge is influenced by formal education factors and has close relation between them. Mother's knowledge about feeding patterns for toddlers consists of the frequency of meals the toddler eats in a day, the composition of the food that is usually given by the mother to the toddler, the type and frequency of snacks (snacks) given, and the pattern of food distribution in the family. (Rizka Humaira et al., 2019)

b. Parenting Style

Parenting style is a series of attitudes shown by parents to children to create an emotional climate that surrounds parental interactions that are communicated to children and creates an emotional atmosphere in which parental behavior is expressed. The study of the effect of parenting on child relies on four parents' prototypes. It was developed by Baumrind nearly four decades ago. These parenting models include authoritative, permissive, and authoritarian parenting styles as well as total disengagement. These four factors can be applied when feeding children. (Chumairoh et al., 2021)

Family Factors

a. Race/Ethnicity

Race is a similarity on biological lines such as heredity or genetics. Besides, ethnicity is a social unit that can differentiate on the similarity of a person's origins so that they can be categorized in the status of the group into which they are included. (Munjidah Annif et al., 2020; von Ash et al., 2022)

In general, the ethnicity of the Indonesian population is determined based on a paternalistic line (father/male). For example, the Javanese and the Batakese. In this case, men of the Batak tribe will give offspring who are also of the Batak ethnicity. Even so, there are several ethnic groups in

Indonesia that determined by the maternal line (mother/woman) such as the Minangkabau tribe.(von Ash et al., 2022)

Food is closely related to ethnicity. Each ethnic group has its own special food. Indonesia has various ethnicities, each ethnicity has its own special food and some ethnic foods are quite famous. Not all traditional foods are popular and familiar, even for their own ethnicity. Food is an icon of the people's cultural excellence. The more varied the food is known to the public, the higher the appreciation of the local community. The wider the distribution of the market area of the food, indicating the quality of the food is recognized by the community. Europeans prefer to eat soft foods, tropical Africans like to eat chewed foods, such as meat and rice-eating areas in Asia, and a granule-formed rice for steaming or boiling.(Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional., 2003)

b. Family Income

Family income is the amount of income received by community members as a result of completing a job and making changes in household finances. Family income is the total real income of all household members which is used to meet both collective and individual needs in the household. This income can be assessed at the regional minimum wage or can be assessed at the district/city minimum wage. (Putri, 2021)

The income measure used for the level of family welfare is from work. The amount of income will describe the family economy in society which is categorized into three groups, low, medium, and high income. A family generally consists of husband, wife, and children. The larger the number of family members, the more labor available to earn income.(Putri, 2021)

c. Education

Education is an effort to foster and develop the human behavior both spiritually and physically. There are also some experts who interpret education as a process of changing the attitudes and behavior of a person or group of people in maturing through teaching and training. With education we can be more mature because education has a very positive impact on us and also can eradicate illiteracy and will provide skills, mental abilities, and so on.(Anggara, 2021)

In this study, education which is associated with knowledge, will affect the selection of food ingredients and fulfillment of nutritional needs. The principle of someone with low education is usually "the important thing is to be full" so that the portion of food sources of carbohydrates is more than that of other food groups. Conversely, mothers who have higher education tend to choose food sources of protein and will try to balance it with other nutritional needs.(MURTI, 2023)

d. Culture

Culture is a pattern of meaning embedded in historically transmitted symbols, a system of inherited conceptions expressed in symbolic forms by which people communicate, survive and develop their knowledge of life and attitudes towards it. (Alamsyah et al., 2017)

These eating habits are formed by patterned behavior of course related to culture. In this study, it consists of what is believed about food that is prohibited or taboo and what food can be consumed by a group of people. Foster and Anderson also mentioned that basically the differences that occur in each culture regarding food are different. According to the research, food is a cultural concept, something that is eaten through cultural validation. It means that food as a cultural concept has a broad meaning, related with beliefs, taboos, rules and so on that exist in a community group.(Afnis et al., 2018)

Various cultural systems assign different roles and values to food, for example certain food ingredients by a community's culture may be considered taboo for consumption for certain sacred reasons or the cultural system associated therein. Besides that, there are certain types of food whose existence is valued from an economic and social point of view, but because they have an important role in the food dishes at certain celebrations related to certain community beliefs, these food dishes are not allowed to be consumed by that group of people.(Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional., 2003)

e. Family Structure

The family structure is a collection of two or more individuals that are bound by marital ties, because of blood relations or adoption, live in one household are interconnected with each other in their role of creating and maintaining culture.

According to Nadirawati, the type of family is divided based on family members, namely:

a. The Nuclear Family is a family consisting of a husband, wife and children from both biological and adoption reasons who live together in one house. This type of family includes families who do not have children or families who adopt children.

b. The Extended Family, which is a family consisting of three generations who live together in one house, for example the nuclear family with uncles, aunts, and grandparents.

c. Single parent family is a family consisting of one parent (father or mother) with children. This usually occurs because of divorce, death or because of abandonment because it violates the law of marriage.

d. Commuter Family, namely that both parents (husband and wife) work in different cities, but one of these cities is a place to live and those who work outside the city can gather with family members on weekends, months, or at certain times. (Arlus et al., 2017)

The role of family members within the scope of the family such as father, mother, and children have their own role. The father as the leader of the family has a role as a breadwinner, educator, protector, provider of a sense of security for all family members and as a member of a particular community or social group. Mothers act as housekeepers, caregivers and educators of children, protectors of the family, as additional breadwinners for the family and also as members of the community or certain social groups. Meanwhile, children act as psychosocial actors according to their physical, mental, social, and spiritual development.(Sjarif Damayanti et al., 2014)

Children Factors

a. Sex

In feeding children, sex has an important factor in providing parental approaches and habits in giving portions, side dishes, and so on. In research conducted by Bouthlal showed that the sex of the children can influence the mother's food choices because the calorie content of food for boys is higher than for girls and the difference in extra calories comes from unhealthy food categories.(Ibrahim et al., 2021)

b. Age

Age is the period of time since a person's existence and can be measured using a unit of time in terms of chronology. Normal individuals can be seen with the same degree of anatomical and physiological development. Age is also the length of time to live or exist (since birth).

Age in the process of giving food to children influences the preferred food, portions, and nutritional needs that must be obtained. Provision of additional food is needed, especially for babies over the age of six months who already need additional nutritious food.

Difficulty in consuming breast milk at the age of six months and over, the baby's need for food can not only fully met with breast milk, but babies also need additional food that can support their growth. The next phenomenon regarding age at feeding in today's society is still found in pre-school aged children who have difficulty eating. This is supported by the results of the observations of researchers at the research site that found that many preschool-age children like to consume snacks so that children feel full when it is time to eat.(Chumairoh et al., 2021)

Methods

This research is quantitative with a cross-sectional approach. The instrument used was a family characteristics questionnaire consisting of a race/ethnic questionnaire, a family income questionnaire, a parental education questionnaire, a family structure questionnaire, a culture questionnaire, a basic feeding rules questionnaire, and a sex and age questionnaire, which has been tested for validity and reliability. Bivariate analysis of race/ethnicity, family income, parental education, family structure, culture, and of the child using the basic feeding rules was conducted with the Chi-Square correlation test. Meanwhile, bivariate analysis of the child's age applied the basic feeding rules using the T-test. There are 68 children aged 24-36 months in the Kedungmundu Village, Semarang City, who were taken by purposive sampling.

Results and Discussion

Results

A. Univariate Test Results

Tabel 4.1 Univariate Description of Research

No	Variables	Frequency	Percentage
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1.	Race/Ethnicity	68	100%
	Javanese	62	91,2%
	Chinese	3	4,4%
	Sundanese	3	4,4%
2.	Family income	68	100%
	Exceeded Semarang Minimum Wage in 2022 (\geq 2.835.021,29)	49	72,9%
	Below Semarang Minimum Wage in 2022 ($<$ 2.835.021,29)	19	27,9%
3.	Parents' education	68	100%
	High school	27	39,7%
	University	41	60,3%
4.	Family structure	68	100%
	Complete	55	80,9%
	Incomplete	13	19,1%
5.	Culture	68	100%
	Supported	38	55,9%
	Unsupported	30	44,1%
	The application of basic feeding rules	68	100%
6.	Applied	52	76,5%
	Unapplied	16	23,5%
	Children's sex	68	100%
7.	Male	36	52,9%
	Female	32	47,1%
	Children's age	68	100%
8.	24 months	8	11,8%
	25 months	5	7,4%
	26 months	6	8,8%
	27 months	2	2,9%
	28 months	2	2,9%
	29 months	1	1,5%
	30 months	8	11,8%
	31 months	8	11,8%
	32 months	6	8,8%
	33 months	3	4,4%
	34 months	2	2,9%
	35 months	5	7,4%
	36 months	12	17,6%

Based on Table. 4.1 In the ethnic/racial univariate test table, most are Javanese 52 respondents (76.3%), income above the UMK 49 respondents (72.1%), education of parents of higher education

61 respondents (60.3%), family structure 55 respondents (80.9%), culture supports 38 respondents (58.9%), sex 36 respondents (53%), and the results of the bivariate analysis show a relationship between family income variables.

B. Bivariate Test Results

Table 4.2 Bivariate Test of Family Structure Variable Results with the Application of Basic Feeding Rules

Variables	The Application of Basic Feeding Rules		P Value	95% CI ± SD (Min-Max)	Odd Ratio
	Applied	%			
1.Race/Ethnicity			0,624	0,181-0,196	0,000
Javanese	46	67,7%	16	23,5%	
Chinese	3	4,4%	0	0%	
Sundanese	3	4,4%	0	0%	
Total	52	76,5%	16	23,5%	
2.Family Income*			0,009	0,004-0,007	5,400
Exceeded Semarang Minimum Wage in 2022 (≥ 2.835.021,29)	42	61,8%	7	10,3%	
Below Semarang Minimum Wage in 2022 (< 2.835.021,29)	10	14,7%	9	13,2%	
Total	52	76,5%	16	23,5%	
3.Parents' education*			0,003	0,001-0,002	0,135
High school	15	22,1%	12	17,6%	
University	37	54,4%	4	5,9%	
Total	52	76,5%	16	23,5%	
4.Family structure*			0,009	0,005-0,009	5,963
Complete	46	67,7%	9	13,2%	
Incomplete	6	8,8%	7	10,3%	
Total	52	76,5%	16	23,5%	
5.Culture*			0,748	0,569-0,588	0,700
Supported	28	41,2%	10	14,7%	
Unsupported	24	35,3%	6	8,8%	
Total	52	76,5%	16	23,5%	
6. Children's sex*			0,555	0,404-0,423	0,600
Male	26	38,25%	10	14,7%	
Female	26	38,25%	6	8,8%	

Total	52	38,25 %	16	23,5%			
7.Children's age **		76,5%					
Children's age (months)	52		16	23,5%	0,994	-2,398-	0,308
Total	52	76,5%	16	23,5%		2,147	
		76,5%					

Notes

*: Bivariate test using Chi-square method

** : Bivariate test using T- test method.

Based on Table. 4.2. In the bivariate analysis result table, there is a significant relationship between family income variables and the application of basic feeding rules (p-value = 0.004), parental education variables with the application of basic feeding rules, this is indicated by the value (p-value = 0.001), family structure variables with the application of basic feeding rules, this is indicated by the value (p-value = 0.004). In the table 4.2 it can be concluded that there is also no significant relationship between race/ethnic variables and the application of basic feeding rules (p-value = 0.624), cultural variables with the application of the basic feeding rules got a value (p-value 0.748), the variable of the child with the application of basic feeding rules got a value (p-value 0.555), and the child's age variable with the application of basic feeding rules got a value (p-value 0.994).

Discussion

Based on the statistical test using the Chi-Square test, a P-value of 0.624 ($p > 0.05$) was obtained. The results showed that there was no significant relationship between race or ethnicity and the implementation of basic feeding rules. Research conducted by John Worobeya in 2013 showed that there was no significant relationship between race/ethnicity and child feeding practices. His research used a sample of children from Hispanic and white races. The results indicated that although there were differences between mothers' feeding style, they did not affect children's weight. Another reason there was no relationship between race and feeding practice after research was conducted is because there was no dominant race in carrying out restrictions and pressure on feeding practices. The two races tended to put low pressure on their children in feeding practices so that there is no dominant race in putting pressure on their children to eat. (Worobey et al., 2013)

Based on statistical tests, the p-value was 0.009 ($p < 0.05$), and there was a significant relationship between parents' income and the application of basic feeding rules. Based on the value of the good ratio of family income with the application of basic feeding rules is 5.4 times. Families with high economic income can provide healthy and nutritious types of food aligns with the research conducted by Laila et al in 2020 in which the research found significant results between parents' income and eating patterns in children with a p-value of 0.000 or < 0.05 . In this study, 11 parents who had a local minimum wage with a good and sufficient diet had 36.7%, the 17 respondents had enough or 56.7%, and parents who had an income below the local minimum wage with a poor child's diet as many as 18 respondents or 45% of the total respondents under UMR 43. The similar results also shown in research conducted by Tondang (2017) where there was a significant relationship between family income and eating patterns in children. It also stated that the level of household income affects the

purchasing power of food and the toddlers feeding pattern. High family income can meet the availability of food in the household so that nutrients will be fulfilled in the family. Conversely, the availability of food in the household tends to be insufficient if the parents' income is low. This causes the fulfillment of nutrients in the family to be less efficient and has an impact on poor child growth.(Tondang, 2017)

In the statistical test that has been carried out, the result is a p-value of 0.003 ($P < 0.05$). Based on the p-value, it can be concluded that there is a significant relationship between parents' recent education and the application of basic feeding rules. In a study conducted by Scalonni et al 2018, there was a relationship between the educational status of parents and good children's dietary behavior. In the United States, babies come from mothers who have a low level of education, or who come from non-Hispanic African-American descent. (compared to non-Hispanic Caucasians) had a higher consumption of sugar, fat, and protein, with a greater increase in body mass index (from 6 to 12 months of age) whereas children of mothers with higher education levels consumed more fruits and vegetables and are more likely to eat breakfast every day than children of mothers with a low educational level (Scaglioni et al., 2018). The results of this study are also in line with research conducted by Rodenburg et al in 2012. The study which conducted in the Netherlands found that children with middle and high-education parents consumed more fruits as much as 78% compared to children of parents who have low education 22% of the total respondents.(Rodenburg et al., 2012)

Marieke in her 2012 research argued that the level of education of parents of children is often associated with the intake of foods that are considered healthier such as milk, fruit, and vegetables. Those with a high educational background tend to have adequate nutritional knowledge compared to parents who are less educated so these parents try to provide good menus and eating rules for their children 46. Having a good educational background makes it easier for parents to access information about feeding their children. One example of their children is knowledge of basic feeding rules. A study conducted by Gita et al in 2023 found a significant relationship (P-value: 0.042) between mothers with knowledge of basic feeding rules and nutritional status in children. This research further strengthens the influence of parents' education on eating patterns and eating rules in children or basic feeding rules. (Meivita Dewi Purnamasari et al., 2023)

Based on the p-value = it is concluded that there is a significant relationship between family structure and the application of basic feeding rules. Based on the odds ratio value, the family structure with the application of basic feeding rules is 5.963 times.

Research conducted by Anna et al in 2020 found that there was a significant relationship between family completeness and eating patterns in children, where children who live with single mothers or are not married get a lower intake of vegetables and fruits compared to consumption in children in the complete family (father and mother). The explanation that can be concluded from this research is that children who have a single parent have more difficulty in terms of the cost of meeting their family needs because the source of family income is only obtained by one parent than the factor of having a single parent is the unavailability of much time due to outside responsibilities. rearing children, healthy eating habits may be more easily formed in families with complete parents.50 While fruits are ready to eat, vegetables often require time and preparation before they can be consumed. In single-parent families, where more responsibility is placed on one parent, the routine of preparing meals may be less achievable due to the business and other responsibilities of the parents.(Fismen et al., 2022)

In line with the research conducted by Scaglioni in 2018, there are differences in the way parents, both fathers and mothers, give eating habits to their children. According to this study, fathers generally tend to monitor children's food intake less and limit access to food. In this study, fathers also tend to provide something simple and instant like fast food because of its practicality. Meanwhile mothers tend to be more responsible for providing the food offered to their children. (Scaglioni et al., 2018)

The factors influencing a mother's decision about how much to feed her children and her motivations and goals for feeding and consumption are poorly understood. This is also influenced by the emotional nature of the mother who tends to be less stable when compared to the father. The mother tends to follow the children's preferences even though she can override the nutrition that the child gets. In essence, the parenting style of feeding the children to fathers and mothers individually is not good for children's development. Fathers who tend to serve instant food and mothers who are emotionally unstable will have a negative effect when viewed from the side of children who have single parents.(Scaglioni et al., 2018)

In the statistical tests that have been carried out, the results obtained are a p-value of 0.748 ($P > 0.05$). Based on the p-value, it can be concluded that there is no significant relationship between culture and the application of basic feeding rules. The culture of eating in children in this study is dominated by a culture of supporting eating in children and applying basic feeding rules. Meanwhile, for certain cultural restrictions, all respondents did not have specific rules for cooking and obtaining food. Based on the odd ratio, the value of eating culture in children with the application of basic feeding rules is 0.700 times.

Based on the results of previous research conducted by Kurniawaty on the relationship between abstinence and eating patterns in children, it was found that among 48 children who had abstinence, there are 23 children who had poor eating patterns, and 25 had good eating patterns. Meanwhile, among the 62 children who did not have any restrictions, there are 34 children had a bad diet (54.8%) and 28 children had a good diet (45.2%). These results indicate that there is no relationship between abstinence and children's eating habits because the p-value is 0.565 or > 0.05 . In a study conducted by Kurniawaty, the most frequent abstinences were foods that caused allergies, such as shrimp and eggs.(Kurniawaty, 2011)

Abstinence in consuming certain types of food can be influenced by cultural factors/beliefs. Abstinence based on belief generally contains symbols or advice that is considered good or bad which gradually becomes a habit/custom. Culture influences a person in determining what to eat, how to process, prepare and serve it and for whom and under what conditions the food is consumed.(Kurniawaty, 2011)

In this study, an assessment of the feeding culture to children was carried out with 68 respondents. There were 27 respondents were given with fast food. The reason parents allow their children to eat fast food is because of its practicality and loved by the children, but the parents also control the giving of fast food. Then from the data collected, it was found that 27 parents of children gave instant noodle to their children because of similar reason as its practicality and loved by children. However, there were parents who forbade their children to eat certain foods. From 68 respondents, there were 41

parents who forbade certain foods such as fast food, noodles, ice cream and candy. The parents thought that these foods should not be given to children aged 2-3 years. There were also parents who forbade their children from using certain food ingredients in their food such as shrimp and eggs because the child had an allergy to these foods. To replace protein in the food, parents of children used chicken or other food ingredients that did not cause allergies.

The author also found dietary restrictions that were classified as good for children, such as eating at regular hours and eating no more than 30 minutes and up, the authors noted that 5 parents followed certain eating rules. Some of the cultural abstinence above reinforce that there is no relationship between culture and basic feeding rules. It is because these abstinence actually lead to good things, even though there are parents who allow instant food such as fried chicken and instant noodles but not as many as parents who forbid these foods and parents of children provide strict control on these foods.

Based on the statistical test relationship using the Chi-Square test, a p-value of 0.555 or (> 0.05) was obtained. The p-value concluded that there was no significant relationship between the of the child and the application of basic feeding rules. Based on odds ratio, the value of in children's with the application of basic feeding rules is 0.600 times.

In a study conducted by Kurniawaty in 2011 showed that there was no significant relationship between sex and eating patterns in children with a value (P-value 0.328 or > 0.05). The results of the research explained that out of 68 children, there were 38 girls who had poor diet (55.9%), whereas among 42 children, there were 19 boys who had a poor diet. The study also explained that there was no relationship because the mother or children's parents did not differentiate feeding based on sex, parents tend to feed both boys and girls at the same age. This study also explains the influence of sex on children's preferences for food. It is found that the of children actually has an influence on their food choices. Boys tend to dislike foods containing vegetables, on the other hand girls prefer foods containing vegetables, so eating habits in boys tend to be worse than eating habits in girls⁴⁹. This is consistent with the results of this study where the most children who experienced bad implementation of basic feeding rules were male sex, namely 10 children or (14.8%).(Kurniawaty, 2011)

Based on the statistical test using the T-test, a P-value is 0.994 or (< 0.05). Based on the p-value can be concluded that there is no significant relationship between the age of the children and the application of basic feeding rules. Based on the odds ratio, the value in children's age with the application of basic feeding rules is 0.308 times.(Arfin, 2015)

In a study conducted by Zainul in 2015 showed that there was no relationship between the difference in the age of children and eating patterns. This is based on the age of 1-3 years, which are classified as passive consumers where the food consumed depends on what is served by the mother so that the focus point is it is not the age of the child that influences eating patterns but rather the mother's role in determining her child's daily diet. At this age, children's curiosity is very high, so mothers should be able to take advantage of this opportunity to introduce foods that vary in taste, color, and texture. In this study it was also explained that the ages between 1-3 years experience a transition in food selection and eating habits.

Because preferences for food are formed early in life, therefore it is very important for mothers to provide good food references for their children because at the age of 1-3 years children learn to know flavors and start choosing the food they like. Diet tends to be different at the age of 4-5 years because children are already classified as active consumers, that they begin to choose the food they like so that the food chosen by the children depends on the children's taste in food. The role of the mother as a food provider is not as significant as in the passive consumer age. When the children does not like certain foods, parents have to replacing the food with the similar nutritional content or modifying the appearance so it become more attractive for children.(Arfin, 2015)

Conclusion

There is a relationship between family income variables and the application of basic feeding rules shown by the p-value = 0.009. Because the p-value <0.05, there is a relationship between income and the application of basic feeding rules in children aged 24-36 months in Kedungmundu Village, Semarang City.

There is a relationship between parents' education variables and the application of basic feeding rules shown by the p-value = 0.003. Because the p-value <0.05, there is a relationship between parents' education and the application of basic feeding rules in children aged 24-36 months in Kedungmundu Village, Semarang City.

There is a relationship between family structure variables and the application of basic feeding rules shown by the p-value = 0.009. Because the p-value <0.05, there is a relationship between family structure and the application of basic feeding rules in children aged 24-36 months in Kedungmundu Village, Semarang City.

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**KOMISI ETIK PENELITIAN KESEHATAN
FAKULTAS KEDOKTERAN
UNIVERSITAS MUHAMMADIYAH SEMARANG**

**KETERANGAN KELAIKAN ETIK
(ETHICAL CLEARANCE)
No.: 086 / EC / KEPK-FK / UNIMUS / 2022**

Komisi Etik Penelitian Kesehatan Fakultas Kedokteran Universitas Muhammadiyah Semarang setelah membaca dan menelaah usulan penelitian dengan judul:

Faktor Risiko *Feeding Difficulty* pada Anak Usia 24- 36 Bulan; Mixed Method Studi

Nama Peneliti Utama : Hema Dewi Anggraheny
Nama Anggota Peneliti : 1. Atana Zatu Yumni;
2. Hernady Zulfan Raihansyah;
3. Hafizha Sahda Aisy;
4. Amalia Kusuma Ayuning Azmi
Tanggal disetujui : 3 November 2022
Berlaku sampai : 2 November 2023
Lokasi Penelitian : Kelurahan Kedungmundu

Dengan ini menyatakan bahwa usulan penelitian tersebut diatas telah memenuhi persyaratan etik penelitian. Oleh karena itu Komisi Etik memberikan rekomendasi dan persetujuan untuk dilaksanakan dengan memperhatikan prinsip-prinsip etik.

Semarang, 4 November 2022

Komisi Etik Penelitian Kesehatan
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