COMPREHENSIVE HEALT CARE P-ISSN : 2580-7137

Characteristic Differences Of Children Obesity And Overweight In Coastal Areas And Mountains

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ABSTRAK

World Health Organization (WHO) in 2016 The rate of obesity in children in Indonesia was 11.5% and ranked 21st in the world. The purpose of this study was to find out the differences in characteristics of obese and overweight children in coastal and mountainous areas in Bulukumba District in 2018. The population in this study were obese and overweight children in 32 Bulukumba Junior High School, 18 Bulukumba Junior High School, and 14 Bulukumba Junior High School. The population in this study with the number of 423 respondents, the sample of this study were 71 respondents of the sampling technique used total sampling technique. This type of research is analytic research with a cross-sectional approach. The test used for differences in the characteristics of obese and overweight children in coastal and mountainous areas in Bulukumba Regency is the chi-square test with the results of the study that most of the students in high schools in the mountains who are obese are 17 respondents (44.7%) and those who are overweight (fat) 21 respondents (55.3). While most of the coastal areas were obese as many as 10 respondents (26.3%) and those who were overweight (fat) were 23 respondents (60.5%). The conclusion of this study is, "There are differences in the characteristics of obese and overweight children in the coastal and mountainous areas of Bulukumba District in 2018. The suggestions in this study can add library references and insights from students of Stikes Panrita Husada Bulukumba.

Keywords: Obesity and *Overweight*, Characteristics of Children

INTRODUCTION

Obesity and Overweight or overweight is a health problem which then decreases life expectancy or increases health problems, where a person's body of excess fat is accumulated in such a way as to have a detrimental impact on health. Measures obtained from the distribution of body weight in kilograms by the square of height in meters, are considered to suffer from obesity and overweight if the body mass index is more than 30 kg / m^2 (Andi Wicaksono, 2016).

According to the WHO (Global Nurition Report) 2016, the trend shows that the number will increase. The number of overweight children will increase to 70 million by 2025 if the trend continues. On the other hand, the country of Indonesia is also experiencing problems of over nutrition, in addition to experiencing problems of

malnutrition. The obesity rate for children in Indonesia is 11.5% and ranks 21st in the world.

The incidence of obesity in the province of South Sulawesi by sex who did the examination in 2015, the sex of men who did the examination (24.15%), and the sex of women who did the examination (26.63%), the total number of people who checked were (25.51 %). The results were categorized as obese in male sex (8.25%), and in female sex (9.66%), and the total number that was categorized as obese in the province of South Sulawesi was (9.44%) (District Health Office / City South Sulawesi, 2015).

Results from preliminary data collection from the mountain and coastal areas were conducted by researchers in March 2018 at SMPN 18 Bulukumba school, SMPN 14 Bulukumba in the mountainous region, SMPN 32 Bulukumba in the coastal area. From the three schools, information was obtained that the child was doing learning activities. The number of students in SMPN 18 Bulukumba class VII is 51 students, SMPN 14 Bulukumba class VII as many as 150 people, SMPN 32 Bulukumba class VII as many as 222 people. The total population of students and students from the mountainous region is 201 people, while the number of students and students from the population in the coastal area is 222 people.

The purpose of this study was to determine whether there are differences in the characteristics of obese and overweight children in the coastal and mountainous regions of Bulukumba Regency in 2018.

MATERIAL AND METHODS

The research design is a guide to conducting research, in which there is a research strategy, looking at the relationship between philosophical assumptions and certain methods, John W. Creswell in (Syamsuddin, Muriyati, Asnidar, & Sumarni, 2015).

This type of research used in this study is analytic research with cross sectional approach. The population is the whole object of the study or the object under study (Notoadmodjo, 2012). The population in this study was obtained from the coastal area of 32 Buukumba Junior High School and mountainous regions namely 14 Bulukumba Junior High School and 18 Grade VII Junior High School Bulukumba which were obese and overweight. The sampling technique in this study uses a nonprobality technique that is saturated sample or often referred to as total sampling. According to Sugiyono (2013: 124) total sampling is a technique for determining the sample by taking all members of the population as respondents or samples.

Research instruments or commonly called data collection tools. In making research instruments refer to the research variables, operational definitions and measurement scale of data that have been chosen with consideration (Suyanto, 2011). The research instruments used in this study are checklist and questionnaire using ordina and nominal measuring scales. Data were analyzed based on measuring scale and research objectives using computerized program software. Data were analyzed by: (1). Univariate Analysis is an analysis conducted to analyze variables. (2). Bivariate Analysis, Bivariate Test is an analysis carried out by more than two variables. The statistical test used is the chi-square test. This test aims to see whether there is a significant difference in proportion between the observed frequency distribution and the expected significance level of 0.05. If P-Value <0.05 means there is a significant difference (Ho is rejected) while P-Value> 0.05 means there is no significant difference (Ho is accepted).

RESULTS

Table 1. Distribution of Characteristics of Obesity and Overweight Respondents in Coastal and Mountain Areas

Charactheristic	Frequency	Percentage (%)
Gender		
Male	25	35.2
Female	46	100.2
Age		
11	3	4.2
12	28	43.7
13	26	80.3
14	9	93.0
15	5	100.0
Amount	**71**	**100.0**

Based on table 1 the frequency distribution of obesity and overweight (fat) as many as 71 respondents with the number of female gender as many as 46 respondents (100.2%), male gender as many as 25 respondents (35.2%). Meanwhile, the distribution based on the criteria of age of 11 years is 3 respondents (4.2%), age 12 years is 28 respondents (43.7%), age 13 years is 26 respondents (80.3%), age 14 years is 9 respondents (93%), and aged 15 years by 5 respondents (100%).

Table 2. Distribution of Obesity and Overweight Frequencies by BMI Category in the coastal and mountainous regions of Bulukumba

		The Region				Amount	
		Coastal		Mountain			
		N	%	N	%	F	%
IMT	*Obesity*	10	37.0	17	63.0	27	100.0
	Overweight	23	53.3	21	47.7	44	100.0
Amount		33	46.5	38	53.3	71	100.0

Based on table 1.2, the frequency distribution of obesity and overweight by region is the criteria of obesity on the coast by 10 respondents (37.0%), overweight on the coast by 23 respondents (53.3%). While the criteria for obesity in the mountains were 17 respondents (63.0%), overwight in the mountains were 21 respondents (47.7%)

Table 3. Distribution of Parental Education Frequencies in Coastal and Mountains Areas in Bulukumba Regency

		The Region				Total	
		Coastal		Pegunungan			
		N	%	N	%	F	%
Level Of Education	High	11	64.7	6	35.3	17	100.0
	Low	22	40.7	32	59.3	54	100.0
Amount		**33**	**46.5**	**38**	**53.5**	**71**	**100.0**

Based on table 3, the frequency distribution of areas with family education, namely in coastal areas with higher education totaling 11 respondents (64.7%), low education totaling 22 respondents (40.7%), while mountainous areas with higher education totaling 6 respondents (35.3%), education as many as 32 respondents (59.3%).

Table 4. Frequency Distribution of Obesity History in Coastal and Mountains Areas

		The Region				Total	
		Coastal		Mountain			
		N	%	N	%	F	%
History of obesity	Risky	25	61.0	16	39.0	41	100.0
	No risk	8	26.7	22	73.3	30	100.0
Amount		33	46.5	38	53.5	71	100.0

Based on table 4 the frequency distribution of areas with a family history of obesity, namely in coastal areas with a risk of 25 respondents (61.0%), no risk as much as 8 respondents (26.7%), while mountainous areas with a risk of 16 respondents (39.0%), no risk as many as respondents (73.3%).

Table 5. Frequency Distribution of Regions with Family Income in Mountainous and Coastal Areas

		The Region				Amount	
		Coastal		Mountain			
		N	%	N	%	F	%
Family income	High	24	60.0	16	40.0	40	100.0
	Low	9	29.0	22	71.00	31	100.0 100.0
Amount		**33**	**46.5**	**38**	**53.5**	**71**	**100.0**

Based on table 5 the frequency distribution of areas with family income, namely in coastal areas with high loading as many as 24 respondents (60.0%), low as many as 9 respondents (29.0%), while mountainous areas with high income as much as 16 respondents (40.0%), as low as 22 respondents (71.0%).

Table 6. Distribution of Differences in Parental Education with Obesity and Overweight in Mountainous and Coastal Areas

		IMT				Total		*P*
		Obesity		*Overweight*				
		N	%	N	%	F	%	
Level Of Education	High	11	64.7	6	35.3	17	100.0	**0.009**
	Low	16	29.6	38	70.4	54	100.0	
Amount		**27**	**46.5**	**44**	**53.5**	**71**	**100.0**	

Based on table 6. the frequency distribution of differences in the education of parents with obesity and overwight with higher education criteria with Obesity of 11 respondents (64.7%), low education of 16 respondents (29.6%), while higher education with Overweight of 6 respondents (35.3%), low education as many as 38 respondents (70.4%). Based on the results of the SPSS analysis using the chi-square test obtained ecpected count 0 cell results above 5 and the main test requirements are met, the p value is 0.009. So it can be concluded that there are significant differences between the education of parents with obesity and overweight in coastal and mountainous regions.

Table 7. The Distribution of Differences in Obesity History with Obesity and Overweight Events in Coastal and Mountainous Areas

		IMT				Amount		*P*
		Obesity		*Overweight*				
		N	%	N	%	F	%	
History of obesity	Risky	25	61.0	16	39.0	41	100.0	**0.000**
	No risk	2	6.7	28	93.3	30	100.0	
Amount		27	46.5	44	53.5	71	100.0	

Based on table 7, the frequency distribution of family history of obesity with obesity and overweight that is at risk criteria with obesity as many as 25 respondents (61.0%), not at risk as much as 2 respondents (6.7%), While the criteria of risk with overweight as many as 16 respondents (39.0%), 28 respondents (93.3%) were not at risk. Based on the results of the SPSS analysis using the chi-square test obtained ecpected count 0 cell results above 5 and the main test requirements are met, the p value is 0.000. So it can be concluded that there is a significant difference between a family history of obesity with obesity and overweight in the coastal and mountainous regions.

Table 8. Distribution of Family Income Differences with Obesity and Overweight in Mountainous and Coastal Areas

		IMT				Amount		*P*
		Obesity		*Overweight*				
		N	%	N	%	F	%	
Family Income	High	26	65.0	14	35.0	40	100.0	**0.000**
	Low	1	3.2	30	96.8	31	100.0	
Amount		**27**	**46.5**	**44**	**53.5**	**71**	**100.0**	

Based on table 1.8, the frequency distribution of differences in income of families with obesity and overweight are the criteria of high income with obesity by 26 respondents (65.0%), low education by 1 respondent (3.2%), while high income with overweight by 14 respondents (35.0%), low education as many as 30 respondents (96.8%). Based on the results of the SPSS analysis using the chi-square test obtained ecpected count 0 cell results above 5 and the main test requirements are met, the p value is 0.000. So it can be concluded that there is a significant relationship between differences in family income with obesity and overweight in coastal and mountainous regions.

DISCUSSION

This study shows that there are significant differences between obesity and overweight in the coastal and mountainous regions of Bulukumba Regency. Based on the results of the SPSS analysis using the chi-square test obtained ecpected count 0 cell results above 5 and the main test requirements are met, the p value is 0.009. So it can be concluded that there are significant differences between the education of parents with obesity and overweight in coastal and mountainous regions. obesity and overweight in coastal and mountainous regions. In line with theory The importance of adequate parent education and knowledge about nutrition is very influential on a child's growth

and development Parents who have an adequate educational background and understand nutrition will certainly pay more attention to food intake that will be given to children, because parents want to grow child development can be maximal and does not experience malnutrition which severely inhibits the growth and development of children (Lamijan: 2013). This research is in line with what was done (Agung Permana Eka Restu & Endang Sri Rahayu, 2016) said that parents have an important role so that their children can consume nutritious food and reduce the risk of malnutrition in children. where the research aims to determine the relationship between the level of education with the nutritional status of students.

Researchers assume the importance of adequate parent education and knowledge about nutrition is very influential on the growth and development of a child, because parents want the child's growth and development can be maximum and do not experience nutritional deficiencies that greatly inhibit the growth and development of children. Based on the results of the SPSS analysis using the chi-square test obtained ecpected count 0 cell results above 5 and the main test requirements are met, the p value is 0.000. So it can be concluded that there is a significant difference between a family history of obesity with obesity and overweight in the coastal and mountainous regions. In line with research According to (Ni Putu Lia Juliantini, 2015) obesity and overweight are caused by many factors, one of the predisposing factors for obesity in children is in parents, both from genetic factors and family environment that affect children. Genetic factors cause children more at risk of becoming obese.

Researchers assume that a parent's history of obesity is a factor in the occurrence of obesity and overweight in children this is caused due to genetic factors are reduced and eating habits, eating patterns of activity and this is because the average respondent who is obese and obese often consumes snacks like, crackers, sausages, chocolatos, better, and oily foods such as fried foods, nuggets, food, or ready-to-eat foods such as yellow rice, coconut milk, meatballs. Based on the results of the SPSS analysis using the chi-square test obtained ecpected count 0 cell results above 5 and the main test requirements are met, the p value is 0.000. So it can be concluded that there is a significant relationship between differences in family income with obesity and overweight in coastal and mountainous regions. In line with the socioeconomic theory of the family is a family situation seen from the education of parents, income of parents, work status of parents and number of family members. Social class and socioeconomic

status influence the prevalence of obesity and overweight (WHO, 2000). In line with research conducted by (Parengkuan, Mayulu, & Ponidjan, 2013) with analytical survey methods using a 136 sample case control design using chy-square test (x2) shows that there is a relationship between family income and the incidence of obesity in elementary school children in Manado city where the proportion of high-income families who have obese children is 55.9% and in the non-obese group is 25%.

Researchers assume that families with high incomes have a relationship with the incidence of obesity and overweight in children in coastal and mountainous regions.

CONCLUSIONS

Based on the results of the study above, it was concluded that, there are differences in the characteristics of obese and overweight children in the pesisr and mountainous regions of Bulukumba Regency in 2018. The suggestions in this study can add to library references and insights of Stikes Panrita Husada Bulukumba students

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