

Original Research Article

Comparative Analysis of Knowledge, Attitudes and Balanced Nutrition Practices in Urban and Rural High School Students in Pinrang Regency

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Abstract: Nutrition is an important issue for school students in cities and villages. In terms of determining what to consume, it influences knowledge of attitudes and practices in choosing foods and applies patterns that are under the general information of balanced nutrition. This study aims to determine the comparison of knowledge, attitudes, and practices of balanced nutrition in urban high school students with rural high school students in Pinrang Regency 2017. The type of research in this study is a comparative study that is a study comparing the state of one or more variables in two or more samples is different, with the number of respondents 45 respondents in urban high schools and the number of respondents in rural high schools 45 respondents determined using accidental sampling. Based on the results of research conducted showed that for the knowledge variable with a value of $p = 1,000$ where ($p > 0.1$), for the attitude variable with a value of $p = 0.822$ where ($p > 0.1$), and for the practice variable with a value of $p = 0.925$ where ($p > 0.1$) this shows that there is no difference in knowledge, attitudes, and practices of balanced nutrition between urban high school students and rural high school students means the null hypothesis (H_0) is accepted so that there is no difference in knowledge, attitudes, and practice of balanced nutrition between urban high school students and rural high school students in Pinrang Regency. Teenage eating behaviors in both cities and villages need to be improved with the assistance of parents and the school because all students have not been eating well according to the general message of balanced nutrition.

Keywords: Knowledge, Attitude, Practice, Balanced Nutrition.

INTRODUCTION

Teenagers are human resources for future development. To improve the quality of human resources, many factors must be considered, such as food (nutritional factors), health, education, information, technology, and others [1]. Teenagers are human resources for future development. Adolescent group is considered as a period in life that is nutritionally need to be considered for three reasons, namely in adolescence there is a change in energy needs and a very large nutrient due to rapid physical growth and development. Changes in lifestyle and eating habits that affect intake and needs nutrients, as well as groups that have special nutritional needs, for example, teens who are actively exercising and over-dieting [2].

Nutrition problems that are often faced by adolescents are multiple, namely lack of nutrition and over nutrition. Besides, anemia is also another problem for adolescents due to inappropriate nutrition. In Indonesia, based on the 2010 Riskesdas data, it is known that the prevalence of adolescents aged 13-15 years who have obese body weight is 2.9 percent in boys and 2 percent in girls.

From the 2010 Riskesdas data, the prevalence of adolescents aged 13-15 years who have lean body weight is 12.4 percent in men and 7.7 percent in women. Another problem related to adolescent nutrition is nutritional anemia due to iron deficiency. Changes in lifestyle that lead to modernity and western-style lifestyles are often found in big cities in

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Indonesia. Prosperity and ease of life lead to a lifestyle of less activity which greatly decreases work or physical activity [3, 4].

Increased community prosperity followed by an increase in education can change lifestyles and eating patterns, from traditional eating patterns to practical and ready-to-eat food patterns that can lead to unbalanced nutritional quality. This is especially evident in big cities in Indonesia. Food if it is not consumed rationally is easy to cause excess calorie intake which will lead to excess weight. The results of a study conducted by Dasuki [5], stated that nutritional status as measured by BMI according to age showed that adolescents in urban and rural areas showed nutritional status of more than 50%, 80% of adolescents in urban areas and 93% in rural areas.

The main key to maintaining a healthy body is to maintain a balanced nutritional status, meaning that all nutrients needed by the body must be fulfilled appropriately. This means that the balance between the needs and consumption of nutrients cannot be equalized by everyone, because it is influenced by various factors both physical and environmental. Balanced nutrition is a variety of food ingredients that contain elements of nutrients needed by the body, both quality, and quantity. Each food can complement each other in the nutrients it contains.

A person's level of nutritional knowledge influences attitudes and behaviors in choosing food, which determines whether or not someone easily understands the nutritional content of the food consumed [6]. Good nutritional knowledge is expected to affect good food consumption so that it can lead to good nutritional status. Adolescent nutrition knowledge is the ability to determine information about food needs and food value in daily life. Nutrition knowledge is very influential on attitudes and behaviors in choosing food, especially in choosing the right foods, nutritionally balanced and provides the basis for good and correct nutritional behavior, which involves one's eating habits.

Based on the background, this study aims to determine the differences in knowledge, attitudes, and practices of balanced nutrition in urban high school students with rural high school students in Pinrang Regency in 2017.

METHODS

This type of research in this study is a comparative study that is a study comparing the state of one or more variables in two or more different samples, or two different times [7]. The population in this study were all students of class XI of SMA N 1 Pinrang as many as 641 students and students of class XI of SMA N 5 Pinrang as many as 259 students. This research was conducted in two schools namely SMA N 1 Pinrang with SMA N 5 Pinrang, conducted on August 24, 2017, to September 24, 2017, the sample in this study were 45 people in each school. The sampling technique used was accidental sampling. This sampling technique is also called a coincidence sampling technique. Types of primary and secondary data collection. Primary data is collected scientifically by using a questionnaire or questionnaire data collection method. Data were analyzed using the Independent-Samples T-Test with a significance level (α) = 0.1.

RESULTS

This study aims to describe the comparison of knowledge, attitudes, and practices of balanced nutrition in urban high school students with rural high school students. The results were obtained through the distribution of questionnaires containing questions about knowledge, attitudes, and practice. The data obtained is processed first to simplify the data collected, and present it in a good and neat arrangement, then proceed with the stages of data editing, data coding, data tabulation, and data entry using the SPSS 22 program.

Table-1: Distribution of Respondents in the Variables of Knowledge, Attitudes and Balanced Nutrition Practices in Urban High School Students and Students with Rural High School Students in Pinrang District

Variable	n		Percent (%)	
	Urban High School	Rural High School	Urban High School	Rural High School
Knowledge				
Enough	31	26	68.9	57.8
Less	14	19	31.1	42.2
Attitude				
Positive	25	19	55.6	42.2
Negative	20	26	44.4	57.8
Practice				
Enough	42	36	93.3	80.0
Less	3	9	6.7	20.0

Source: Primary Data

Table-1 shows that students based on balanced nutrition knowledge with sufficient knowledge in urban high school were 31 respondents (68.9%) while in rural high school there were 26 respondents (57.8%). And for the lack of knowledge in urban high schools as many as 14 respondents (31.1%) while the lack of knowledge in rural high schools as many as 19 respondents (42.2%). Based on balanced nutritional attitudes with positive attitudes in city SMA as many as 25 respondents (55.6%) while in rural high schools as many as 19 respondents (42.2%). And for negative attitudes in urban high schools were 20 respondents (44.4%) while negative attitudes in rural high schools were 26 respondents (57.8%). Based on the practice of balanced nutrition with adequate practice in urban high school as many as 42 respondents (93.3%) while in rural high schools as many as 36 respondents (80.0%). And for the lack of knowledge in urban high school as many as 3 respondents (6.7%) while the lack of knowledge in high school villages as much as 9 respondents (20.0%).

Table-2: Distribution of Respondents by Middle Value of Urban High School Students and Students with Rural High School Students in Pinrang Regency

Variable	School Information	Mean	Median	Highest Score	Lowest Score	Range
Knowledge	Urban High School	7.24	7.00	10	4	6
	Rural High School	7.24	7.00	10	4	6
Attitude	Urban High School	9.56	10.00	13	5	8
	Rural High School	9.47	10.00	13	5	8
Practice	Urban High School	5.44	5.00	8	2	6
	Rural High School	5.42	5.00	9	2	7

Source: Primary Data

Table-3: Comparison of Balanced Nutrition Knowledge, Attitudes and Practices in Urban High School Students and Students with Rural High School Students in Pinrang District

Variable	Levene's Test for Equality of Variances		T-test for Equality of Means	
	F	Sig.	T	Sig. (2-tailed)
Knowledge Score				
Equal variances assumed	0.181	0.672	0.000	1.000
Equal variances not assumed			0.000	1.000
Attitude Score				
Equal variances assumed	0.071	0.791	0.226	0.822
Equal variances not assumed			0.226	0.822
Practice Score				
Equal variances assumed	0.035	0.851	0.060	0.925
Equal variances not assumed			0.060	0.925

Source: Primary Data

In Table-3 explains that the calculated F value on the Levene's Test for Equality of Variance is = 0.181 with a value of $p = 0.672$, it can be concluded that the variance of the two groups is homogeneous. T-value in the table obtained the same value that is 0.000 because of homogeneous variance. The p-value obtained in the table is (Sig 2-tailed) = 1.000 ($p > 0.1$). So, there is no difference between balanced nutrition knowledge between urban high school students and rural high school students. The attitude comparison explains that the calculated F value on the Levene's Test for Equality of Variances is = 0.071 with a value of $p = 0.791$, so it can be concluded that the variance of the two groups is homogeneous. T-value in the table obtained the same value that is 0.226 because of homogeneous variance. The p-value obtained in the table is (Sig 2-tailed) = 0.822 ($p > 0.1$). So, there is no difference between balanced nutrition between urban high school students and rural high school students. A comparison of practice variables explains that the calculated F value on the Levene's Test for Equality of Variances is = 0.035 with a value of $p = 0.851$, so it can be concluded that the variance of the two groups is homogeneous. T-value in the table obtained the same value that is 0.060 because of homogeneous variance. The p-value obtained in the table is (Sig 2-tailed) = 0.925 ($p > 0.1$). So, there is no difference between balanced nutrition practices between urban high school students and rural high school students.

DISCUSSION

Knowledge about nutrition and errors in choosing food affect nutritional status. Nutrition knowledge is expected to influence good food consumption so that it can lead to good nutritional status [8]. Nutrition knowledge is one of the factors that can affect the amount and type of food a person consumes. Nutrition knowledge can help someone to use food properly. However, misconceptions about food needs and food value are common. Lack of knowledge about nutrition or lack of ability to apply nutrition and food knowledge in daily life can cause nutritional disorders [9]. In this study, respondents were given questions of knowledge about balanced nutrition with answered right or wrong, to measure the extent of the respondent's ability to answer questions about balanced nutrition. Table-1 shows that students

based on balanced nutrition knowledge with sufficient knowledge in urban high school were 31 respondents (68.9%) while in rural high school there were 26 respondents (57.8%). And for the lack of knowledge in urban high schools as many as 14 respondents (31.1%) while the lack of knowledge in rural high schools by 19 respondents (42.2%).

Table-3 shows that based on the Independent Sample T-test statistic obtained p-value is (Sig 2-tailed) = 1,000 ($p > 0.1$). So, there is no difference between balanced nutrition knowledge between urban high school students and rural high school students. From the results of the study respondents of urban and rural high school students alike do not really understand what balanced nutrition is more they know is "4 healthy 5 perfect" they are just "know" and they are not too interested to know more about what is balanced nutrition so causing their lack of knowledge about balanced nutrition. Nutrition knowledge plays an important role in the use of food. The higher one's nutritional knowledge, the more will take into account the type and amount of food selected for consumption. A person's level of nutritional knowledge influences attitudes and behaviors in choosing food, which determines whether or not someone easily understands the benefits of the nutritional content of the food consumed. This shows that unhealthy eating patterns in adolescents at this time in the city and the village, occur due to lack of nutritional knowledge due to the delivery of health information provided incorrectly and inappropriately. Especially at this time, adolescents are experiencing a period of searching for identity and identity by imitating the behavior of someone who is a role model for them.

This is in line with research by Vilda Ana Veria Setyawati, Maryani Setyawati [10]. Show that there is no difference in the nutritional knowledge of adolescent girls in urban and rural areas. The results of the Independent Sample T-Test statistic test with a significance level (α) = 0.1 where the value of $p > 0.1$. According to Nahed Thabet Mohamed (2016) more than half of rural students and more than two-thirds of urban students aged 16 <17 years. There were no statistically significant differences between the total scores of rural students' knowledge and their socio-demographic characteristics, also between the knowledge of urban students and their social class.

When seen, city teenagers actually have enough more knowledge. So dismissing the notion that rural youth have less access to information than urban teenagers. Rapid technological advances today have changed the lives of people in all regions. The increasingly sophisticated technology offers a variety of conveniences and new lifestyles that sometimes just leave the old traditional patterns. Humans today are dependent on TV, radio, newspapers, and also the internet, as evidenced by the proliferation of internet cafes both in big cities and small towns. With a relatively low cost, the world can be explored in front of the monitor. City and village adolescents have easy access to information through social media. Social media is a vehicle for communication or information exchange that has been patterned in the social life of a community. Thus the results of the research conducted showed that there was no difference between the knowledge of urban high school students and rural high school students. This occurs in the lack of attention of students towards implementing balanced nutrition.

The issue of nutritional status is closely related to aspects of attitudes and behaviors that do not support healthy lifestyles so that it influences attitudes and behaviors for food choices. This is what is needed to improve the nutritional status, especially adolescents to the needs of nutrients. Attitudes describe someone's likes or dislikes towards objects. Attitudes make someone approach or stay away from other people or other objects. Attitude is a readiness to react to objects in a particular environment as an appreciation of objects.

A person's attitude can be formed with the existence of social interactions that can influence each other between individuals. The attitude of children in choosing food can be formed because of the influence of their knowledge, culture, other people who are considered important, the mass media, institutions where children go to school and emotional factors from within individuals [11]. Attitudes toward food are largely influenced by the experiences and responses shown by other people to food since childhood. The experience gained is felt pleasant or vice versa, so that each individual can have a like or dislike attitude towards food. Adolescent attitudes in choosing food in this case, the response is very agreed, agree, disagree, strongly disagree with respondents to the statements, both positive and negative statements about balanced nutrition. Table-1 shows that students based on balanced nutritional attitudes with positive attitudes in urban high school were 25 respondents (55.6%) while in rural high school there were 19 respondents (42.2%). And for negative attitudes in urban high schools were 20 respondents (44.4%) while negative attitudes in rural high schools were 26 respondents (57.8%). After the homogeneity test is done, it is a test to find out whether the data distribution is the same or not. The results obtained are homogeneous (the same) so even though there are differences seen in the data, after passing the homogeneity test the results are the same data distribution. Table-3 shows that based on the Independent Sample T-test statistic obtained p-value is (Sig 2-tailed) = 0.822 ($p > 0.1$). So, there is no difference between balanced nutrition between urban high school students and rural high school students. This study shows that there is no difference between balanced nutrition attitudes between urban high school students and rural high school students so that one of the causes of nutritional problems and changes in eating habits in adolescents is low nutritional knowledge and is seen in wrong eating habits.

This is not in line with research conducted by Emilia [12]. The results of the t-test showed a significant difference ($p < 0.05$) attitudes about balanced eating patterns. These results are not in line with research that there is no difference in balanced nutrition attitudes of urban high school students and rural high school students. Adolescent attitudes become a tendency to take action in choosing food and health, with the signs to like or dislike certain foods. A positive attitude towards food might not automatically affect the condition of a child's nutritional status to be positive, but a negative attitude to health can have a negative impact on his behavior including one of his nutritional status conditions.

An attitude has not automatically manifested in an action. Practice occurs after someone knows the stimulus or health object, then conducts an assessment or opinion of what is known, and then he will carry out and practice what he already knows. The higher level of knowledge a person will tend to choose inexpensive foods with a higher nutritional value according to the type of food available and eating habits since childhood so that their nutritional needs are met [13]. Nutrition knowledge determines or shapes practice directly. The practice is one's response to a stimulus (stimulus). Assessment of adolescent nutritional behavior is needed to know current knowledge, attitudes, and nutritional practices and to change nutritional behavior towards better and can prevent the cause of degenerative diseases. In this study, respondents were given practical questions about balanced nutrition with answered right or wrong, to measure the extent of the respondent's ability to answer questions about balanced nutrition practice.

Table-1 shows that students based on balanced nutrition practice with adequate practice in urban high school were 42 respondents (93.3%) while in rural high school there were 36 respondents (80.0%). And for the lack of knowledge in urban high school as many as 3 respondents (6.7%) while the lack of knowledge in high school villages as much as 9 respondents (20.0%). Table-3 shows that based on the Independent Sample T-test statistic obtained p-value is (Sig 2-tailed) = 0.925 ($p > 0.1$). So, there is no difference between balanced nutrition practices between urban high school students and rural high school students. This study shows that there is no difference between balanced nutrition attitudes between urban high school students and rural high school students. Assessment of nutritional behavior in adolescents provides important information about adolescent nutritional behavior and its implications for health, so it is expected to play a role in efforts to improve their diets. This is not in line with the study conducted by Emilia [12]. The results of the t-test showed a significant difference ($p < 0.05$) of practices regarding balanced eating patterns. These results are not in line with research that there is no difference in balanced nutrition practice in urban high school students and rural high school students. Adolescent eating behavior is a behavior, which can be seen and observed, which is carried out by adolescents in order to meet the needs of eating which is a basic physiological need. This is a reaction to the stimulus that comes from within himself and also from outside himself. So, it can be said that eating behavior becomes a necessity to show its existence as a living creature and as a basis for interacting with others. Bad eating behavior that is often done by adolescents includes not eating, especially breakfast or breakfast, the fondness of eating snacks and confectionery and soft drinks. Snacks are generally consumed in the afternoon after coming home from school, fast food is very popular, both those directly purchased or food brought from the home of modern food is consumed as part of a lifestyle.

CONCLUSION

Based on the results of research and discussion on the comparison of knowledge, attitudes, and practices of balanced nutrition in urban high school students with rural high school students in Pinrang Regency in 2017 it can be concluded that there is no difference in balanced nutrition knowledge between urban high school students and rural high school students, there is no differences in balanced nutrition attitudes between urban high school students and rural high school students and there is no difference in balanced nutrition practice between urban high school students and rural high school students.

SUGGESTION

Based on the presentation of the results of the data analysis, discussion and distribution of the above conclusions, the suggestions proposed in this study are as follows: Adolescent and village adolescent eating behaviors need to be improved with the assistance of parents and the school because all students have not adopted eating behavior good according to the general message of balanced nutrition.

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