MEDIA EXPOSURE, FAMILY EATING PATTERN, FRUIT AND VEGETABLE CONSUMPTION AMONG ADOLESCENTS IN THE COVID-19 PANDEMIC

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ABSTRACT

The Covid-19 virus entered Indonesia in early March until now the case is uncertain, full of uncertainty and rapid changes occur and there is no definite cure for the virus attack. The existence of the COVID-19 pandemic has caused lifestyle changes in students such as online learning conditions, limiting mobilization and activities at home with family, and triggering teenagers to interact more with mass media and electronics. Students as late teens towards early adulthood need healthy, balanced nutrition such as consuming fruits and vegetables for energy needs in carrying out their activities as students completing solid assignments and lectures and also increasing immunity for their physical and psychological health to face the covid 19 outbreak so that cognitive distortion does not occur. To identify media exposure, family diet, and consumption of fruits and vegetables in adolescents during the covid-19 pandemic. This research method is quantitative with a cross sectional approach. Data was collected using a questionnaire (google form) and media zoom. The research sample was taken using a proportionate stratified random sampling technique. The subjects in this study were 239 students of Health at Muhammadiyah University of East Kalimantan. Based on the results of the study, it was found that there was a significant relationship between media exposure and fruit and vegetable consumption in students (p value = 0.000 < = 0.05), as well as the results of the analysis between family eating patterns and fruit and vegetable consumption in University Health students. Muhammadiyah East Kalimantan found a significant relationship (p value: 0.000 < 0.05). Based on the results of the study, it can be concluded that respondents who have the majority of fruit and vegetable consumption habits are better because apart from media exposure and family eating patterns, individual factors are also influenced (taste preferences), social networks (support from parents and friends), physical environment (eg availability and accessibility, attractiveness and price of food products), and macro environment (eg media and advertising).

Keywords: adolescent; COVID-19; family eating pattern, fruit and vegetarian consumption; media exposure

INTRODUCTION

The covid_19 virus that entered Indonesia in early March 2020 until now the case is uncertain, full of uncertainty and rapid changes occur and there is no definite cure for the virus attack. Standard recommendations to prevent the spread of infections that occur are to cultivate a clean and healthy lifestyle, namely, washing hands regularly, wearing masks and applying cough and sneezing etiquette, avoiding direct contact with anyone showing symptoms of respiratory diseases such as coughing and sneezing, not smoking, do physical activity and eat fruits and vegetables. The outbreak of the COVID-19 pandemic has also

caused lifestyle changes in students such as online learning conditions, limiting mobilization and carrying out activities at home with family, and triggering teenagers to interact more with mass and electronic media. Adolescence is the period of a child's life that develops into an adult. Adolescence is often marked by transitions and changes.

Students as part of a group of late teens, where there is an increase in independence to be able to determine and choose healthy food patterns, especially in terms of fruit and vegetable consumption. In their busy lives as a student in college completing assignments and lectures, teenagers are often faced with making decisions to eat healthy food or vice versa, so that students have a tendency to choose whatever food is available without caring about their health.(Masnina, 2016). For adolescents and adults it is recommended to consume fruit and vegetables as much as 400-600 grams per person per day, with a portion of vegetables around two-thirds of the recommended amount of consumption (Kemenkes, 2014).

BPS Susenas report (2016), all provinces in Indonesia consumption of fruit and vegetables are still below the national average consumption of 173 grams per capita a day, East Kalimantan is included in one of the provinces in Indonesia that consumes fruits and vegetables below the average. The results of the latest 2018 basic health research stated that the proportion of fruit and vegetable consumption was less than 5 portions in the population aged >5 years, which was 95.5% (Rikerdas, 2018).

Doing a healthy lifestyle is a way that can be done to increase immunity such as eating lots of fruits and vegetables, because by consuming fruits and vegetables, a person does not get sick easily if they consume more of these 2 types of food (Amalia, Irwan, & Hiola, 2020). The habit of consuming fruits and vegetables needs to be cultivated because the benefits obtained from behavior on health status are quite large, increase body resistance and prevent disease. Prevention of the spread of the Covid-19 virus can also be done by increasing the body's immune system such as healthy living habits of consuming fruits and vegetables. Facing the COVID-19 case, which changes very quickly, is full of very high uncertainty, ambiguous, uncertain situations and mental health problems caused after Covid, we need attention. Optimizing physical and mental health in adolescents so that cognitive distortions do not occur, not science, not truth or belief. Adolescents are not only equipped with science and technology and psychology but are also no less important to maintain immunity and increase adolescent body resistance to support the achievement of good health. physically, mentally and socially.

According to Masnina (2017), teenagers as the younger generation need to be formed to have a strong personality for optimal work productivity in building the nation and state. Facing their life in the future, teenagers need to have great confidence and hope in order to be able to rise from difficult conditions, such as the current condition of the corona virus attack. Students as late teens to early adulthood need healthy, balanced nutrition such as the habit of consuming fruits and vegetables for energy needs in carrying out their activities as students completing solid assignments and lectures and also increasing immunity for their physical and psychological health to face the covid 19 outbreak so that distortion does not occur. cognitive.

METHODS
This study is a quantitative study with a cross sectional analytical design to analyze the factors of media exposure, family diet and consumption of fruits and vegetables in adolescents. The population in this study were teenagers who were health students at the Muhammadiyah University of East Kalimantan, class of 2018, total 596 students, consisting of 6 health study

programs covering 140 Bachelor in Nursing students, 102 Diploma in Nursing students, 140 Bachelor in Pharmacy students, and Bachelor in Public Health 166 students, 39 students Bachelor in Environmental Health, and Diploma in Environmental Health 9 students. The sampling technique was proportional stratified random sampling and used the Slovin formula, and a sample of 239 respondents was obtained.

RESULTS

Table 1.
Distribution of Respondents by Gender, Age and Pocket Money (n=239)

Characteristics/Categories	f	%
Gender		
Male	54	22.6
Female	185	77.4
Age		
20 years	70	29.3
21 years	169	70.7
Pocket money		
<Rp. 500.000,-	131	54.8
≥Rp. 500.000,-	108	45.2

Table 1, total data is obtained from 239 respondents based on age, namely the age category of 21 years, as many as 169 people (70.7%), based on gender, the data is mostly female, which is 185 people (77.4%) and based on pocket money, the results show that most of them have money. pocket less than 500,000 as many as 131 (54.8%).

Table 2.
Frequency Distribution Based on Independent Variables of Media Exposure, Family Diet, and Dependent Variables Consumption of Fruits and Vegetables (n=239)

Variable	f	%
Media exposure		
Good	163	68.2
Less	76	31.8
Family eating pattern		
Good	128	53.6
Poor	111	46.4
Fruit and Vegetable Consumption:		
Enough	62	25.9
Less	177	74.1

* Enough if the consumption of vegetables and fruit 400 grams every day
  Less if consumption of vegetables and fruit < 400 grams per day

Table 2 the results of mass media exposure from 239 respondents were mostly media exposure both about fruits and vegetables, namely 163 students (68.2%) while those who were less exposed to media about fruits and vegetables were 76 students (31.8%), pattern data family eating in the table above shows as many as 128 respondents (53.6%) with good family eating habits and as many as 111 respondents (46.4%) with poor family eating habits.
Furthermore, the dependent variable data above shows sufficient fruit and vegetable consumption as many as 62 respondents (25.9%) and less fruit and vegetable consumption as many as 177 respondents (74.1%).

Table 3.
Analysis of Mass Media Exposure, Family Eating Patterns with Fruit and Vegetable
Consumption (n=239)

Independent Variable	Fruit and vegetable consumption				Total		P Value
	Enough		Less				
	f	%	f	%	f	%	
Media Exposure							
Good	62	38	101	62	163	100	0.000
Less	0	0	76	100	76	100	
Family eating pattern							
Good	62	48.43	66	51.56	128	100	
Poor	0	0	111	100	111	100	0.000

Based on Table 6. it was found that of the 239 students who were well exposed to mass media with sufficient fruit and vegetable consumption, 62 students (38%), and respondents who were less exposed to mass media did not consume enough fruit and vegetables as many as 76 students (100%).Based on the table above, from a total of 239 respondents, it was found that good family eating habits with sufficient fruit and vegetable consumption were 62 respondents (48.43%) and there were no respondents with poor family eating habits who consumed sufficient fruit and vegetables. For good family eating habits that consume less fruit and vegetables as many as 66 respondents (51.56%) and poor family eating habits as many as 111 respondents (100%). According to the results of statistical tests using the test, it was found that there was a significant relationship between media exposure and fruit and vegetable consumption in students (p value = $0.000 <= 0.05$), as well as the results of the analysis between family eating patterns and fruit and vegetable consumption in University Health students. Muhammadiyah East Kalimantan found a significant relationship (p value: $0.000 < 0.05$)

DISCUSSION
Students are teenagers who are going through a transitional period from school to college that they have chosen to acquire certain skills with an initial age of entering college around 18 years old and are currently in the important process of healthy dealing with adult life. According to Richard, Kattelmann and Ren(Mclean-Meyinsse, Harris, Taylor, & Gager, 2013) efforts should be made to help students develop better eating habits. The age group of 18-24 years is a group that is in good health status, it is necessary to consider the diet that develops during college which will have a lifelong impact on health and well-being.

The habit of consuming vegetables and fruit in students is determined by internal factors such as knowledge, and environmental factors including family habits, peers, access to fruit and vegetables and exposure to information media. Deliens, Clarys, De Bourdeaudhuij, & Deforche, (2014) who reported that the determinants of eating behavior in students in Belgium were influenced by individual factors (taste preferences), social networks (support from parents and friends), physical environment (eg availability of and accessibility, attractiveness and price of food products), and the macro environment (eg media and advertising).

The results of the Research on Consumption of Fruits and Vegetables in Adolescents at the Muhammadiyah University of East Kalimantan found that most of the students did not

consume enough fruits and vegetables (74.1%). The average consumption of fruit and vegetables in students is only 285.8 grams/day, this shows that the daily consumption of vegetables and fruits in adolescents is not as recommended by WHO, which is as much as 400 grams per day. This is in line with previous research on 134 respondents of Stikes Muhammadiyah Samarinda students, where the largest proportion was in the category of low fruit and vegetable consumption, which was 93.3% (Masnina, 2016). Another study conducted by (Hidayati, 2017) from the results of his research that the consumption of fruits and vegetables in the respondents was relatively low with an average of in the control group (381.36 grams/day) and in the case group (114.29 grams/day). day). Of course, these results are still very less in accordance with the recommendations of the World Health Organization (WHO), which is as much as 400 grams/day. In fact, consuming enough fruits and vegetables can support growth and development, prevent cancer and prevent infectious diseases such as the case of covid 19. This virus attacks the body when the immune system in the body weakens.

The content in fruits and vegetables can also act as antioxidants or antidote to bad compounds in the body. Fruits and vegetables have many benefits when consumed, one of which is to improve the immune system in the body. From a study entitled Analysis of Clinical Symptoms and Immune Improvement to Prevent Covid-19 Disease (Amalia et al., 2020) explains that consuming fruits and vegetables during a pandemic like now can increase immunity in the body, where the immune system plays a role in fight and kill foreign objects such as bacteria and viruses that enter the body.

Adolescents experience rapid development and growth of physical, psychological and intellectual. Rapid growth will affect the nutritional needs they consume. Agree with (Susianto, 2010., Wulansari, 2009, and Santrock, 2003 in Muna, 2019) which states that adolescents who experience rapid and rapid growth require high nutrition and are usually affected by the environment of family, school and peers who can become The influence of eating habits includes the type of food consumed. So in that case it is necessary to pay attention to the eating patterns of teenagers because their culture and experiences as teenagers will be able to carry over into adulthood.

The results of statistical tests using Spearman Rank between mass media exposure and fruit and vegetable consumption in health students at Muhammadiyah University of East Kalimantan obtained a p-value of 0.000 (<0.05), it can be concluded that there is a significant relationship between mass media exposure and consumption fruit and vegetables. This is in line with the results of Farisa's research (2012) which states that there is a significant relationship between mass media exposure and fruit and vegetable consumption. Mass media is a tool that can be used by many people (mass). Utilize media techniques to assist youth in evaluating marketing and advertising messages. Mass media exposure has a great influence on the selection of fruit and vegetable consumption of adolescents (Rasmussen et al., 2006). Then there is a significant relationship between family eating habits and fruit and vegetable consumption with a p value of 0.000 < value = 0.05, which means Ho is rejected. Judging from the closeness of the relationship between the independent and dependent variables, the correlation coefficient value is 0.551, which means that the relationship between the two variables has a strong relationship and the direction of the relationship between the two variables is unidirectional.

The research that has been done is the same as several other studies, namely research from (Fibrihirzani, 2012) which shows that there is a significant relationship between parental

habits and fruit and vegetable consumption with a p-value of 0.000 with an odds ratio for parents' habits of 7.577, in terms of This means that respondents who have parents with positive habits have a 7.577 times greater chance of consuming fruits and vegetables compared to the habits of parents who have negative habits and also research conducted (Muna, 2019) there is a relationship between parental support and consumption of fruit and vegetables. vegetables with a p-value of 0.001. Parents who have good habits related to fruit and vegetable consumption will be followed by their children. Eating habits are initially formed from parents, especially when the child is still a toddler. Unhealthy family eating habits will carry over into adolescence (Hafiza, Utami, & Niriyah, 2020). The family acts as a role model in setting an example for children such as being a role model in consuming fruits and vegetables. Eating habits in families who consume vegetables every day are followed by the habits of children who consume vegetables every (Saifah, Sahar, Tadulako, & Indonesia, 2019).

Family is the initial influence in determining one's habits in terms of habits such as eating habits, good family eating habits will bring good eating habits and vice versa, poor family eating habits will bring bad eating habits. This is in line with the statement (Gardjito, Murdiajati., Anton Djuwardi., 2019) Eating habits are not something that is easy to change. Changing eating habits is difficult. Changing eating habits starts from yourself to your family. Mother is an important factor in changing eating habits supported by the head of the family. Families who have developed an eating pattern with the same menu and the same type of food will have eating habits with the same taste. The influence if the food preferences of parents given to their children can be a factor that determines their child's behavior (Gracia, 2014 in Sianturi, 2018).

CONCLUSIONS
Based on the results of the study, it can be concluded that respondents who have the majority of fruit and vegetable consumption habits are better because apart from media exposure and family eating patterns, individual factors are also influenced (taste preferences), social networks (support from parents and friends), physical environment (eg availability and accessibility, attractiveness and price of food products), and macro environment (eg media and advertising).

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