

The Relationship Of Binge-Watching And Snacking Frequency With The Incidence Of Obesity In FKM USU Students In 2024

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ABSTRAK

Salah satu permasalahan kesehatan saat ini adalah kondisi kelebihan gizi yang telah menjadi epidemi global baik di negara maju maupun berkembang. Keadaan status gizi lebih terbagi menjadi dua pengertian yaitu kelebihan berat badan dan obesitas yang dapat terjadi pada berbagai kelompok umur, terutama pada kelompok usia remaja. Hal yang paling penting adalah timbulnya obesitas lebih banyak ditentukan oleh terlalu banyak makan dan terlalu sedikit aktivitas fisik atau kedua-duanya. Kegiatan bingewatch termasuk dalam gaya hidup sedentary dan ngemil yang dilakukan secara terus menerus dapat menyebabkan masukan energi berlebih dan pada akhirnya berdampak pada obesitas yang merupakan faktor risiko utama berbagai penyakit tidak menular. Tujuan penelitian ini adalah untuk mengetahui hubungan frekuensi binge-watching dan snacking dengan kejadian obesitas pada mahasiswa FKM USU tahun 2024. Jenis penelitian yang digunakan, penelitian kuantitatif dan survey analitik untuk mengetahui hubungan antar variabel dengan cross- pendekatan bagian. Populasi dalam penelitian ini adalah mahasiswa aktif S1 FKM USU yang berjumlah 108 orang yang termasuk dalam kategori binge-watching dimana seluruh populasi menjadi subjek penelitian. Data dikumpulkan menggunakan The Binge-Watching Addiction Questionnaire (BWAQ) dan Food Frequency Questionnaire (FFQ) kemudian dianalisis menggunakan uji chi-square. Hasil penelitian ini menunjukkan bahwa terdapat hubungan antara binge-watching dengan kejadian obesitas dengan $p\text{-value} = 0,001 < \alpha = 0,05$ dan terdapat hubungan antara frekuensi ngemil dengan kejadian obesitas dengan $p\text{-value} = 0,001 < \alpha = 0,05$. Diharapkan pihak universitas dan fakultas dalam rangka kampus sehat dapat memberikan layanan pemeriksaan kesehatan gratis kepada mahasiswa melalui POSBINDU PTM dan memberdayakan mahasiswa sebagai kader kesehatan di setiap fakultas sebagai sarana deteksi dini dan edukasi bagi mahasiswa.

Kata kunci. Binge-watching, ngemil, obesitas, pelajar.

ABSTRACT

One of the health problems at this time is the condition of overnutrition which has become a global epidemic in both developed and developing countries. The state of overnutrition status is divided into two terms, namely overweight and obesity which can occur in various age groups, especially in adolescent age groups. The most noteworthy thing is that the onset of obesity is more determined by too much food and too little physical activity or both. Binge-watching activities are included in a sedentary lifestyle and snacking that is carried out continuously can cause excessive energy input and ultimately have an impact on obesity which is a major risk factor for various non-communicable diseases. The purpose of this study was to determine the relationship between binge-watching and snacking frequency with the incidence of obesity in FKM USU students in 2024. The type of research used, quantitative research and analytical survey to find the relationship between variables with a cross-sectional approach. The population in this study were 108 active undergraduate students of FKM USU who were included in the category of binge-watching where the entire population became the research subject. Data were collected using The Binge-Watching Addiction Questionnaire (BWAQ) and Food Frequency Questionnaire (FFQ) and then analyzed using the chi-square test. The results of this study indicate that there is a relationship between binge-watching with the incidence of obesity with $p\text{-value} = 0.001 < \alpha = 0.05$ and there is a relationship between snacking frequency with the incidence of obesity with $p\text{-value} = 0.001 < \alpha = 0.05$. It is hoped that the university and the faculty, in the framework of a healthy campus, can provide free health check services to students through POSBINDU PTM and empower students as health cadres in each faculty as a means of early detection and education for students.

Keywords. Binge-watching, snacking, obesity, students.

I. PENDAHULUAN

1. Latar Belakang

World Health Organization (WHO, 2021) defines obesity as the accumulation of excess fat that can interfere with health. This occurs because the calorie intake is higher than the calories used. Misnadiarly (2007) states that manifestations that are often found in obesity are various non-communicable diseases (NCDs), such as, heart failure, coronary artery disease, and diabetes mellitus. Obesity is also associated with various direct health complications, such as hypertension; metabolic and musculoskeletal disorders ; orthopedic conditions and sleep disorders; psychosocial and developmental disorders, such as bullying by peers; feelings of inferiority and can reduce academic achievement. (United Nations International Children's Emergency Fund (UNICEF) Indonesia, 2022).. WHO data from 1980 shows a more than twofold increase in obesity cases worldwide. The prevalence of adolescent obesity cases in 1990 increased from 4.2% to 6.7% in 2010. In 2014, there were more than 600 million cases of obesity in the world in the population aged 18 years and over. Obesity as one of the risk factors for non-communicable diseases is a health problem that is commonly found in Indonesia and continues to increase. In the age group of 18 years and over, the prevalence of overweight in 2013 was 11.5% and became 13.6% in 2018, while the prevalence of obesity in the age group of 18 years and over in 2013 was 14.8% to 21.8% in 2018. (Indonesian Ministry of Health, 2018). Results Riskesdas (2018) also shows that North Sumatra Province has the seventh highest number of obesity cases with 25.8%. This figure increased from the previous year, which was 17% in 2013. In 2022, based on news written by Tarigan (2023) according to the Head of the Non-Communicable Disease and Mental Health Team of the Medan City Health Office, there were 17,328 cases of obesity where a *sedentary lifestyle* contributed as one of the causes of the high number of cases. This sedentary lifestyle refers to several activities including the habit of watching for a long duration and it is often found recently among students is *binge-watching*. Merikivi et al. (2020) defined *binge-watching* as the practice of watching more than one episode of the same video series content in a single sitting at a user's own pace and time. This distinguishes it from watching television on a schedule. *Binge-watching* is directly linked to low levels of physical activity and is classified as sedentary. In research conducted by Populix (2020) in Indonesia on the use of *Video on Demand* (VoD) among 3,423 respondents, 52% of respondents stated that they enjoyed *binge-watching*. Another factor affecting overnutrition status is the frequency of snacking. Snacks are light foods consumed between main meals. Generally, snacks are consumed approximately 2-3 hours between main meals, namely at 10 am and 4 pm. Marpaung (2015) in Ariansyah (2022) said overweight and obesity can occur due to excess consumption of food with high energy sources without being followed by sufficient activity. Based on *The state of snacking* survey conducted by *Mondelez International* in 2020, stated that 60% of respondents from Indonesia snacked more than the previous year. FKM USU is one of the health faculties that is closely related to the discussion of health behavior, promotion efforts, and disease prevention efforts. Based on research conducted by Tambak (2020) at FKM USU regarding factors associated with the incidence of obesity, shows that there is a significant relationship between family / parental history, *fast food* consumption, and physical activity with the incidence of obesity and the results obtained that of 290 students in the 2019 school year, 8.6% were obese and in students in the 2018 school year, as many as 7.6%. Based on the background description above, the researcher wants to know how FKM USU students are in terms of *binge-watching* and snacking frequency and their relationship with the incidence of obesity. The purpose of this study was to determine the relationship of *binge-watching* and snacking frequency with the incidence of obesity in FKM USU students in 2024.

2. Problem Formulation

The formulation of the problem in this research is the results of research regarding The Relationship Of Binge-Watching And Snacking Frequency With The Incidence Of Obesity In FKM USU Students In 2024.

3. Research Objectives

The aim of this research is to obtain research data regarding The Relationship Of Binge-Watching And Snacking Frequency With The Incidence Of Obesity In FKM USU Students In 2024.

4. Benefit Of Research

The benefit of this research is the application and implementation of research results regarding The Relationship Of Binge-Watching And Snacking Frequency With The Incidence Of Obesity In FKM USU Students In 2024..

II. METHODS

This type of research is quantitative research with the approach method used is *cross sectional*. The population in this study were all active undergraduate students of FKM USU who fall into the category of *binge-watching*, namely students who have watched dramas or TV series for at least two episodes and approximately one hour in one sitting. Based on the questionnaire distributed online, the population amounted to 108 students. The sampling technique used was a *total sampling* technique where the entire population was used as a sample. Data were collected through interviews using *The Binge-Watching Addiction Questionnaire (BWAQ)* and *Food Frequency Questionnaire (FFQ)* questionnaires which were then categorized based on the average value of the sum of the scores of each respondent and anthropometric data obtained through measurements using a weight weighing aid and height measurements using a microtoise. Data were analyzed univariately and bivariately. Univariate analysis was used to obtain the results of the study in the form of frequency distribution of respondent characteristics, independent variables, namely *binge-watching* and snacking frequency and the dependent variable, namely the incidence of obesity. while bivariate analysis was used to determine the relationship between independent variables, namely the relationship between *binge-watching* and snacking frequency with the dependent variable, namely the incidence of obesity in FKM USU students using the *chi square* test at the CI confidence level of 95%.

III. RESULT

Table 1. Characteristics of Respondents (n=108)

Characteristics	Total	Percentage
Age		
17 years old	1	0,9
18 years old	9	8,3
19 years old	29	26,9
20 years	26	24,1
21 years old	32	29,6
22 years old	8	7,4
23 years old	3	2,8
Gender		
Male	8	7,4
Female	100	92,6
Binge-watching		
Trouble	21	19,4

Medium	31	28,7
No Problem	56	51,9
Snacking frequency		
Rare (< 209)	48	44,4
Frequent (\geq 209)	60	55,6
Incidence of obesity		
Not Obese	82	75,9
Obesity	26	24,1

Based on research on 108 samples, in table 1 it is known that of the total respondents the most dominant respondents were respondents aged 21 years as many as 32 respondents (29.6%) and the least age of respondents was respondents aged 17 years as many as 1 respondent (0.9%). It is also known that respondents who are male are 8 respondents (7.4%) and female respondents are 100 respondents (92.6%). The distribution of *binge-watching* after being categorized as seen in Table 1 shows that out of 108 respondents, 21 respondents (19.4%) were in the problematic *binge-watching* category, 31 respondents (28.7%) were in the moderate *binge-watching* category, and 56 respondents (51.9%) were in the non-problematic *binge-watching* category. The frequency distribution of snacking after being categorized as seen in table 1 shows that out of 108 respondents, 48 respondents (44.4%) were included in the category of snacking rarely and 60 respondents (55.6%) were included in the category of snacking often. The frequency distribution of obesity incidence in FKM USU students after being categorized as seen in table 1 shows that out of 108 respondents, 82 respondents (75.9%) were in the non-obese category and 26 respondents (21.4%) were in the obese category. The results of the analysis of binge watching and snacking frequency with the incidence of obesity were further analyzed statistically with the *chi square* test shown in table 2 below:

The Relationship of *Binge-Watching* with the Incidence of Obesity

Table 2. Chi Square Test Results of *Binge-Watching* with Obesity Outcome

<i>Binge-watching</i>	Incidence of Obesity				Total		<i>P. Value</i>
	Not Obese		Obesity		n	%	
	n	%	n	%			
Trouble	4	19,0	17	81,0	21	100	0,001
Medium	26	83,9	5	16,1	31	100	
No Problem	52	92,9	4	7,1	56	100	

Based on the data in table 2, the results of data analysis using the chi-square test showed that the $p\text{-value} = 0.001 < \alpha = 0.05$, meaning that H_a is accepted and H_0 is rejected. It can be concluded that there is a relationship between *binge-watching* and the incidence of obesity in FKM USU students in 2024. Based on the results of the study contained in table 2, it also shows that respondents with problematic *binge-watching* categories, as many as 17 respondents (81.0%) of whom were obese. Then for respondents with moderate *binge-watching* category, 5 respondents (16.1%) of them were obese. In respondents with a non-problematic *binge-watching* category, as many as 4 respondents (7.1%) were obese.

Relationship between Snacking Frequency and the Incidence of Obesity

Table 2. Chi Square Test Results of Snacking Frequency with Obesity Outcome

Snacking Frequency	Incidence of Obesity		Total	<i>P. Value</i>
	Not Obese	Obesity		

	n	%	n	%	n	%	
Rare	44	91,7	4	8,3	48	100	0,001
Often	38	63,3	22	36,7	60	100	

Based on the data in table 3, showing the results of data analysis using the chi-square test, the $p\text{-value} = 0.001 < \alpha = 0.05$ means H_a is accepted and H_0 is rejected. It can be concluded that there is a relationship between snacking frequency and the incidence of obesity in FKM USU students in 2024. Based on the results of the study contained in table 2, it also shows that respondents with frequent snacking categories who are obese are 22 respondents (36.7%) and respondents with rare snacking categories who are obese are 4 respondents (8.3%).

Table 4. Results of Cross-Tabulation Analysis of Binge-Watching and Snacking Frequency

<i>Binge-watching</i>	Snacking Frequency				Total	
	Rare		Often		n	%
	n	%	n	%		
Trouble	2	9,5	19	90,5	21	100
Medium	15	48,4	16	51,6	31	100
No Problem	31	55,4	25	44,6	56	100

Based on the data in table 4, the results show that respondents with problematic binge-watching categories, as many as 19 respondents (90.5%) are included in the frequent snacking category and as many as 2 respondents (9.5%) are included in the rare snacking category. Then for the moderate binge-watching category, as many as 16 respondents (51.6%) were in the frequent snacking category and as many as 15 respondents (48.4%) were in the rare snacking category. In the non-problematic binge-watching category out of a total of 56 respondents, 25 respondents (44.6%) were in the frequent snacking category and 31 other respondents (55.4%) were in the rare snacking category.

IV. CONCLUSION

Based on the results of **the** study, it can be concluded that most students are 21 years old with a total of 32 students (29.6%); based on gender, most students are female with a total of 100 people (92.6%). Students do *binge-watching with* problematic categories, as many as 21 students (19.4%); most of the snacking frequency of students fall into the frequent snacking category, as many as 60 students (55.6%); and students fall into the obese category as many as 26 students (21.4%). There is a relationship between *binge-watching* and the incidence of obesity in FKM USU students in 2024 with $p\text{ value} = 0.001 < \alpha = 0.05$ and there is a relationship between snacking frequency and the incidence of obesity in FKM USU students in 2024 with $p\text{ value} = 0.001 < \alpha = 0.05$. For the university, in the framework of a healthy campus, it is recommended that it can create or provide free health check services to students through the Integrated Development Post for Non-Communicable Diseases (POSBINDU PTM) and empower students as health cadres in each faculty. This is done as a means of early detection and education about non-communicable diseases in students. For students, it is recommended that they can further increase awareness to reduce the habit of often consuming high-calorie snacks, such as chocolate, fried foods, junk food, soft drinks, and some of them and are more advised to regulate their diet properly and replace high-calorie snacks with healthy snacks such as fruits, vegetables, and grains.

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