Perception of Body Image Related to Nutritional Status of Young Women in Pontianak City During the Covid-19 Pandemic

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ABSTRACT

Covid 19 is a pandemic disease experienced throughout the world. This pandemic causes limitations on activities outside the home so it will impact the health and mentality of adolescents. Adolescent girls are in a period of transition from children to adults. Adolescence is an age that is very vulnerable to nutritional problems, this is caused by a lack of self-confidence, lifestyle, and lack of knowledge of balanced nutrition. Often, young women feel dissatisfied with their body shape, so they go on a diet to get the desired body shape. This study aimed to determine the relationship between body image and nutritional status in young women during the Covid 19 pandemic in Pontianak City. This research is an observational study with a cross-sectional design chosen randomly and then the Pontianak Health Polytechnic, Stikes Yarsi, and Aisyiyah Polytechnic were selected. The sample in the study was 102 female students using sampling using proportional random sampling. Data collection was carried out in March-April 2022. The data collection technique measured the waist-hip ratio (RLPP) and used a figure rating scale questionnaire with a Cronbach alpha of 0.85. Then the data were analyzed using the chi-square test with a 95% confidence level. The results of this study indicate that 76 respondents (74.5%) have a negative body image and 26 respondents (25.5%) have a positive body image, while the nutritional status of young women 74 respondents (72.5%) obese and 28 respondents (27.5%) were not obese. The chi-square test results were obtained with p = 0.00 (p <0.05). This shows a relationship between body image and the nutritional status of young women in Pontianak City during the Covid 19 pandemic. Young women who experience nutritional status obesity tend to have a negative body image compared to young women whose nutritional status is not obese tend to have a positive body image.

Keyword:
Body Image
Nutritional Status
Young women

Kata kunci:
Body Image
Status Gizi
Remaja putri

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sampling. Pengambilan data dilakukan di bulan maret-april 2022. Teknik pengumpulan data menggunakan perangkat lengkap panggul (RLPP) dan menggunakan kuesioner figure rating scale dengan alpha cronbach sebesar 0,85. Kemudian data dianalisis menggunakan uji chi-square dengan tingkat kepercayaan 95%. Hasil dari penelitian ini menunjukkan bahwa sebanyak 76 responden (74.5%) mempunyai body image negatif dan 26 responden (25.5%) memiliki body image positif, sedangkan status gizi pada remaja putri sebanyak 74 responden (72.5%) obesitas dan 28 responden (27.5%) tidak obesitas. Hasil dari uji chi-square diperoleh dengan nilai p=0,00 (p<0,05). Hal tersebut menunjukkan bahwa ada hubungan body image dengan status gizi remaja putri di Kota Pontianak selama masa pandemi covid 19. Remaja putri yang mengalami status gizi obesitas cenderung memiliki body image negatif dibandingkan remaja putri yang status gizinya tidak obesitas cenderung memiliki body image positif.

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INTRODUCTION

Covid 19 is a worldwide phenomenon caused by the SARS-CoV-2 virus (Shereen et al., 2020). This virus is characterized by acute respiratory disorders such as fever, cough, and shortness of breath (Irani Thevarajan et al., 2020). Covid 19 causes limitations in activities on a large scale which can result in changes in daily activities (Robertson et al., 2021). Restrictions on activities during a pandemic can affect various aspects of life such as eating habits, physical, economic and social activity, food insecurity, and obesity (Anyanwu et al., 2022).

Young women are very vulnerable to experiencing nutritional problems such as malnutrition and obesity (Ubro et al., 2017). Adolescence is a period of transition from childhood to adulthood and is experiencing hormonal and social changes (Das et al., 2017). Women tend to be overweight because women have a higher proportion of fat than men (Adhi et al., 2020).

The problem of malnutrition and obesity in adolescents is still increasing. The highest prevalence of obesity for adolescent girls in ASEAN countries with an age range of >18 years is highest in Cambodia at 50.20% and the lowest is in Vietnam at 2.53% (Ni et al., 2021). In Indonesia, 28% of young women aged >18 years are obese (Harbuwono et al., 2018). The results of the 2018 Riskesdas data show that the prevalence of obesity in young girls aged > 18 years is 29.3% and for the province of West Kalimantan the prevalence of obesity in young women is 23.3%. Pontianak city is one of the cities in West Kalimantan province which has a prevalence of obesity nutritional status of 32.50%.

Nutritional status is a measure of meeting one’s nutritional needs (Suparisa et al., 2016). Optimal nutritional status can support a person’s life for physical growth, ability to work and study, and can avoid viral infections (Berg et al., 2018; (Panthi et al., 2020). One method that can measure a person’s nutritional status is the Waist-hip ratio (RLPP). Measurement of the waist-hip circumference is anthropometry consisting of waist circumference and hip circumference and then carried out by comparing them.

Body image is one of the factors that influence the nutritional status of young women (Ramos-Jiménez, 2017). Teenagers who have a negative body image will do anything to get the desired body shape (Sept 2019). Dissatisfaction with body shape is a complex problem for adolescents and can even cause frustration, reduce self-confidence, create an inaccurate self-concept, and also cause them to lack self-esteem (Urbańska & Dziurawiec, 2019). Research by Alipour et al. (2015) shows that negative body image is related to nutritional status with a p-value <0.05. The results of research by Mintem et al (2015) show that young women tend to have a negative body image compared to men. The Covid 19 pandemic, resulted in changes in the daily activities of adolescents (Rambing et al., 2021). The imposition of social restrictions during a pandemic has put young women in a bad situation for their health and mentality (Robertson et al., 2021). There is research by Phillipou et al (2020) shows that lockdown has an impact on eating habits and physical activity in the community.

Therefore this study aims to determine body image and nutritional status in young women during the Covid-19 pandemic in Pontianak City.

METHODS

This research is an observational study using a cross-sectional method conducted among young women. There were three campuses selected by random sampling, namely the Pontianak Ministry of Health Poltekkes, Stikes Yarsi Pontianak, and Aisyiyah Polytechnic. Sampling selection using the Proportional Random Sampling technique and obtained 102 samples. The sample was selected according to the inclusion criteria, namely young women aged > 18 years to 21 years, registered as university students, willing to be respondents, living with family (parents, aunts/uncles, grandparents, siblings), and exclusion criteria, namely female students, nutrition, illness ≤ 1 month, taking hormonal contraception, weight loss pills, following a special diet, consuming alcoholic beverages, having a history of metabolic diseases such as diabetes mellitus, coronary heart disease, and hypertension. Data collection for waist and hip circumference measurements was carried out with the assistance of enumerators who graduated with nutrition diplomas and the data collection process was carried out according to the applicable Covid 19 procedures. This research was approved by the Ethics Committee for Health Research, Faculty of Medicine, Universitas Sebelas Maret No: 19/UN27.06.11/KEP/EC/2022.

The data obtained includes general characteristics such as waist-hip ratio, age, transportation used daily, and sources of information obtained. Waist-hip circumference ratio (WHR) is used to determine nutritional status and body image data using a figure rating scale questionnaire with an alpha Cronbach’s of 0.8. The measurement of waist-hip
circumference ratio was divided into two categories, namely obesity > 0.80 cm and non-obese ≤ 0.80 cm while body image measurements were divided into two categories, namely positive and negative. Data were analyzed using the chi-square test with IBM 19 applications and a 95% confidence level.

RESULTS AND DISCUSSION

Table 1 shows the distribution of respondents based on the characteristics of young women. The majority of respondents are 19 years old (61.8%), and the most frequently used transportation is private vehicles (96.0%). Nutritional status of respondents who are obese (72.5%) and have a negative body image (74.5%). The duration of gadget use in young women is > 6 hours (74.5%) a day. Respondents get more information related to nutrition through social media (77.2%).

Table 2 shows that as many as 63 respondents (82.9%) had a negative body image with the nutritional status of obesity and a p-value of 0.00 (p <0.05) which indicated that there was a relationship between body image and nutritional status in young women in Pontianak city during the covid 19 pandemic.

Table 1. Distribution of respondents based on characteristics

<table>
<thead>
<tr>
<th>Characteristics of Respondents</th>
<th>(n)</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>63</td>
<td>61.8</td>
</tr>
<tr>
<td>20</td>
<td>35</td>
<td>34.3</td>
</tr>
<tr>
<td>21</td>
<td>4</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>Transportation used</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online Vehicles (Gojek)</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Private car</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>Private Motorcycles</td>
<td>98</td>
<td>96.0</td>
</tr>
<tr>
<td><strong>Nutritional status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obesity</td>
<td>74</td>
<td>72.5</td>
</tr>
<tr>
<td>Not Obese</td>
<td>28</td>
<td>27.5</td>
</tr>
<tr>
<td><strong>Body Image</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>26</td>
<td>25.5</td>
</tr>
<tr>
<td>Negative</td>
<td>76</td>
<td>74.5</td>
</tr>
<tr>
<td><strong>Gadget usage time for a day</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-6 Hours</td>
<td>26</td>
<td>25.5</td>
</tr>
<tr>
<td>&gt;6 hours</td>
<td>76</td>
<td>74.5</td>
</tr>
</tbody>
</table>

Table 2. Statistical test results for the relationship between body image and nutritional status in young women during the COVID-19 pandemic

<table>
<thead>
<tr>
<th>Research variable</th>
<th><strong>Nutritional status</strong></th>
<th><strong>Total</strong></th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Obesity</td>
<td>Not Obese</td>
<td></td>
</tr>
<tr>
<td><strong>Body Image</strong></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Negative</td>
<td>11</td>
<td>10.8</td>
<td>15</td>
</tr>
<tr>
<td>Positive</td>
<td>63</td>
<td>61.8</td>
<td>13</td>
</tr>
</tbody>
</table>

Respondents in this study were all female students of the Pontianak Ministry of Health Politekkes, Yarsi Pontianak, and Aisyiyah Polytechnic who had criteria that matched the inclusion and exclusion criteria. The age frequency distribution of respondents was 19 years old (61.8%), 20 years (34.3%), and 21 years (3.9%). According to the World Health Organization (2018), the age classification for late youth is 18-21 years old. Adolescence is often called a transitional period which is marked by growth and development from a physical and cognitive point of view which can affect body image (Wenas et al., 2022). Based on nutritional status as measured by the ratio of waist and hip circumference, it was found that 74 respondents (72.5%) had an obese nutritional status and a negative body image 76 respondents (74.5%). Body image can affect the nutritional status of respondents because someone who has a negative body image, consciously or unconsciously, will experience a crisis of confidence in their body shape (Hariyanti & Haryana, 2021). Young women often get information related to nutrition through social media as many as 79 respondents (77.2%) so that this can influence their knowledge of nutrition and can compare their body shape with other people.

Based on the results of the study showed that most of the respondent's nutritional status was obese. These findings are following Riskesdas data (2018) where nutritional problems are vulnerable to adolescents > 18 years of age which are dominated by overweight and obesity problems. Lack of knowledge about food preferences consumed daily (Wenas et al., 2022). This is also supported by research by Candramila et al. (2018) which shows that adolescents have preferences that are not good with a prevalence value of 15.07%.

Most young women prefer food that is high in energy and high in fat continuously (Abdella et al., 2019). The results of Eljamay's research (2019) show that 67% of young women often consume fast food and snacks as alternative foods to replace the main meal. Apart from food preferences, other factors affect a person's nutritional status, namely environmental factors, lifestyle, and heredity (Herdiyan, 2021).

Body Image is a person's perception of their body shape and assumes that a beautiful body appearance is the main factor for looking attractive to highlight (Hariyanti & Haryana, 2021). They think that a thin and slim body is ideal for women in evaluating their body shape and adjusted again with the anthropometric measurements that had been carried out.

The results of bivariate analysis using the chi square test found that there was a relationship between body image and nutritional status in young women during the Covid 19 pandemic with a p value <0.05. This is supported by the research of Maya et al (2022) which shows that there is a relationship between body image and the nutritional status of adolescents in Pekanbaru during the Covid-19 pandemic with a p-value. value 0.00. Dissatisfaction with body shape where young women always think their bodies look less...
attractive and make wrong efforts to achieve the ideal body shape can affect their nutritional status. Inappropriate body shapes can cause anxiety in young women so young women will avoid meal times, food choices, and inappropriate food processing (Prayogi et al., 2021). During the Covid-19 pandemic, young women often used gadgets longer than before the pandemic (Rahni et al., 2022). According to Isnaeni’s research (2021) during the Covid-19 pandemic, teenagers more often opened Tiktok, WhatsApp, Zoom, Shopee, Instagram, and YouTube applications which could affect the mindset and pressure on teenagers to look more attractive. If this is allowed to continue, it can affect eating habits and mindset in young women.

**RESEARCH LIMITATIONS**

What factors influenced the nutritional status of young women during the Pandemic covid 19. Researchers also experienced problems when giving questionnaires directly to prevent the spread of the virus so that it was carried out following applicable health protocols.

**CONCLUSIONS AND RECOMMENDATIONS**

The results of this study indicate that there is a relationship between body image and the nutritional status of young women in the city of Pontianak during the Covid 19 pandemic. The increasing dissatisfaction with body shape in young women, the nutritional status is increasing abnormal, and young women will experience nutritional problems in the next life. Dissatisfaction with a person's body shape can cause anxiety for the individual which in the end the young woman will change her eating habits and mindset. During the Covid 19 pandemic, the respondents had changes in activities such as always skipping meals and knowing and choosing healthy foods for daily consumption. Young women who already know their nutritional status are expected not to compare their body shape with other people and have knowledge related to nutrition so they can choose and process food properly.

**ETHICAL CLEARANCE**

Research Ethics Committee of the Faculty of Medicine, Universitas Sebelas Maret (No:19/UN27.06.11/KEP/EC/2022)

**Funding Statement**

No funding was received to conduct this research.

**Conflict of Interest Statement**

Nothing found

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