

# PENGARUH TEMAN DAN HUBUNGANNYA DENGAN RISIKO GANGGUAN MAKAN PADA REMAJA

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## Abstrak

Prevalensi gangguan makan pada remaja cenderung meningkat di seluruh dunia, termasuk Indonesia. Beberapa faktor, seperti media massa, pengaruh teman sebaya dan citra tubuh dikaitkan dengan gangguan makan. Tujuan dari penelitian ini adalah untuk mengetahui hubungan pengaruh teman sebaya dengan gangguan makan pada remaja. Penelitian ini menggunakan desain cross sectional dengan teknik pengambilan sampel simple random sampling pada siswa SMA di kota Padang. Data dikumpulkan melalui pengisian kuesioner online yang diberikan kepada 250 peserta. Studi tersebut menemukan bahwa 24,4% remaja memiliki risiko gangguan makan. Pengaruh teman sebaya berhubungan dengan gangguan makan pada remaja ( $p$  value  $< 0,05$ ). Remaja dengan pengaruh teman sebaya berisiko 2,519 kali mengalami gangguan makan dibandingkan tanpa pengaruh teman sebaya. Media massa, akses internet dan citra tubuh tidak memiliki hubungan dengan gangguan makan pada remaja. Temuan dari penelitian ini menunjukkan bahwa tenaga kesehatan profesional sebaiknya bekerja sama dengan institusi sekolah dalam pendidikan kesehatan untuk mencegah gangguan makan di kalangan remaja.

**Kata kunci:** Peran Teman Sebaya, Gangguan Makan, Remaja

## PEER INFLUENCES AND ITS ASSOCIATION WITH THE RISK OF EATING DISORDERS AMONG ADOLESCENTS

## Abstract

The prevalence of eating disorder among adolescents tend to increase worldwide, including in Indonesia. Some factors, such as mass media, peer influences, and body image, were associated with eating disorders. The study aims to determine the association of peer influences with eating disorders among adolescents. This study used a cross-sectional design that utilized a simple random sampling technique among senior high school students in Padang city. Data were collected through self-administration, and online questionnaires were given to 250 participants. The study found that 24.4% of adolescents risk eating disorders. Peer influences associated with eating disorders among adolescents ( $p$ -value  $< 0.05$ ). Adolescents with peer influences had a risk of 2.519 times being eating disorders compared with no peer influences. Mass media, internet access, and body image had no association with eating disorders among adolescents. The current findings suggest that health care professionals should cooperate with school institutions on health education to prevent eating disorders among adolescents.

**Keywords:** Peer Influences, Eating Disorders, Adolescents**✉ Korespondensi Penulis:**

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## Introduction

The eating disorder was a severe medical condition that occurred among adolescent girls. The situation will impact the health, including the risk of mortality among the girls. Bulimia nervosa and binge eating disorder, two eating disorder types, are associated with the complication of the condition, such as laxative abuse and vomiting. The eating disorder was also decreased health-related quality of life regarding physical, psychological, and social functioning and well-being. Some studies have shown the risk of anorexia nervosa, another eating disorder, to die from any causes. <sup>(1-3)</sup>

Based on previous studies, eating disorder cases were higher among women than men. Several factors have been associated with eating disorders among adolescent girls. Eating disorder eating behavior tends to increase due to psychological, biological, and environmental-social factors during adolescence, including body image. <sup>(4-6)</sup> Although genetic epidemiology of eating disorders has emerged with force in the past decade; environmental risk factors have received the bulk of research and clinical attention. <sup>(7)</sup> In particular, sociocultural influences, such as unrealistically thin media images, have been hypothesized to promote disordered eating and body dissatisfaction on the causal pathway to eating disorders. <sup>(4)</sup> Meta-analysis study from Y. Quiles Marcos et al. (2012) identified that peers and family influence dieting behavior, body dissatisfaction, and bulimic symptoms among adolescent girls and boys. <sup>(8)</sup> Peer influences have a role according to the perception of body image, specifically among girls. However, it is clear that, although virtually all women are exposed to these sociocultural influences, only a tiny proportion develop clinical eating disorders.

According to the previous studies, we are interested in studying peer influences and other factors associated with eating disorders among girls.

## Methods

A cross-sectional design study was carried out to describe the prevalence of eating disorders and factors related to eating disorders

among girl adolescents. The study collected the data of schoolgirls in the three selected schools in Padang. The sample was counted through Lemeshow's formula. A simple random sampling of (250) students is chosen through the probability approach.

Primary and secondary data were collected in this study. Using standardized questionnaires, this study identified factors related to eating disorders, such as body image, mass media, and peer influences sent through social media because of the pandemic COVID-19. The eating disorder was collected by an eating attitude test consisting of 26 questions. Body image was categorized into two categories; it was negative and positive. We studied internet media which adolescents frequently accessed. Then, we divided it into two categories, rare and always. We categorized peer influences into yes and no influences in daily adolescent life.

The SPSS program analyzed the data to present descriptive statistics such as frequency, percentage, and bivariate results. A Chi-square test was used to determine the factors associated with eating disorders among girls. The test's significance is examined by a p-value less than 0.05 with a 95% confidence interval. There is also showed Prevalence Risk (PR) of the association of two variables.

Before collecting the data, researcher got the permission from Public Health Faculty, Andalas University and national education institution in Padang. All respondent in this study was given informed consent before collecting the data to get their permission.

## Results

A total of 250 girl adolescents participated in the present study. The study found that 24.4% of girls' adolescents risk eating disorders. Respondents have aged around 15 until 16 years old. According to parents' characteristics, education, and working, more than half graduated from junior and senior high school (52,4%). And then, there was a little higher percentage of fathers who work as government employees (34,8%) (Table 1). By using the chi-square test, bivariate analysis was

conducted to determine factors related to eating disorders among girl's adolescents (table 2)

**Table 1. Characteristics Parent's Respondent**

Characteristics Respondent	f	%
<b>Education</b>		
Not graduated elementary school	18	7,2
Graduated junior & senior high school	131	52,4
Graduated diploma or universities	101	40,4
<b>Working</b>		
Farmers	82	32,8
Traders	81	32,4
Government employees	87	34,8

**Table 2. Variables Related to Eating Disorder**

Variables	Risk of ED (%)	No-Risk of ED (%)	P-value (PR)
<b>Body image</b>			
Negative	27.1	72.9	0.424
Positive	22.0	78.0	0.757 (0.424-1.349)
<b>Mass Media (Internet)</b>			
Always	28.3	71.7	0.314
Rare	21.9	78.1	1.410 (0.787-2.527)
<b>Peer influences</b>			
Yes	35.1	64.9	0.003*
No	17.6	82.4	2.519 (1.398-4.538)

Eating disorders are higher among girls with negative body image (27.1%) than girls with positive body image (22.0%). Besides, eating disorders are higher among girls with more access to the internet (28.3%) than girls with rare access to the internet (21.9%). The result also identified that percentage of eating disorders is higher among girls with have peer influences (35.1%) than girls with no have peer influences (17.6%).

The result showed that peer influences are associated with eating disorders with a p-value of 0.003 statistically. However, body image and mass media internet have no association with an eating disorder. An adolescent with peer influences is at risk of 2.519 times an eating disorder than an adolescent who does not have peer influences

(PR 1.398-4.538). According to the result, as we know that adolescents have more characteristics of communication with their friends than family.

## Discussion

This study found that eating disorder incidence among girls adolescents is almost one-third. This finding is not different from Nihaya's finding in Jordania. That study found that eating disorder was 29.4% among girls, and it was statistically higher among girls than boys. <sup>(9)</sup> Respondent's age was around 15 and 16 years old in the study. Another study stated the importance of early intervention to address eating disorder symptoms at a young age. That study found a higher level of eating disorder symptoms at nine years of age was the most potent risk factor for a higher level of signs at a later age, starting at 12 years old. <sup>(5, 10)</sup>

The finding identified that peer influences have a significant association with an eating disorder. The result of the study in line with Nihaya A. Alsheyab study (2018) and Y. Quiles Marcos, et al (2012). Nihaya A. Alsheyab determined that peer pressure was significantly related to disordered eating than normal eating behavior. As we know, adolescents are more frequently friends than family, including how they discuss appearance and body weight. Previous studies explained that adolescents who reported engaging in body comparison and body weight with their peers and ideas and thoughts in mind would be more accepted and famous if they were thinner. It is linked with the perception of the ideal beauty in their community. Then, this factor could have influenced body dissatisfaction and unhealthy eating behavior performed among adolescents. <sup>(9)</sup>

Body image and mass media are not related to eating disorders in the present study. The result was supported by a study by Elizabeth H. Blodgett Salafia et al. in 2015. The study found that adolescents without eating disorders had thought the media was the leading cause of eating disorders. In contrast, adolescents with eating disorders were not taught about the media's impact on eating disorders. Additionally, while all adolescents highly endorsed psychological/emotional problems, there was a noticeable stigma about eat-

ing disorders among adolescents without eating disorders. <sup>(5)</sup>The mass media's role regarding eating disorders was not in line with other studies. The study of Alicia Chung in the year 2021 found that mass media, mainly social media influenced healthful eating behavior and unhealthy eating behavior of adolescents. However, mass media, specifically online media platforms as accessible channels, such as Instagram and Facebook, were the most popular among adolescents, which we could use for eating disorder relapse prevention among young age. <sup>(11)</sup>

The present study has strengths and limitations. The study's strength was the random selection and a large number of samples, making the sample more representative. Besides that, the study was conducted through an online survey, reducing the risk of missing data and faster collecting the data. However, the limitation of the study is that this is a self-reported questionnaire through an online survey. The subjectivity of participants in answering the questions could affect the result of the study. However, the finding only describes adolescents' eating behavior, especially girls, and its related factors. So It needs more studies to establish the causality of eating disorders among adolescents with better design studies.

### Conclusion

Eating disorders occurred among girls adolescents related to peer influences, which found to have a risk 2.519 times than girls adolescents with no peer influences. Nutrition education should be done to increase the nutrition knowledge of adolescents through specific strategies by coordination with schools and health institutions, besides using social media platforms.

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