The Effect of Self-efficacy, Emotional Support, and Informational Support on Sexual Behavior among Adolescents

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Background: Sexual behavior in adolescents is a complex concept influenced by developmental processes regarding sexual maturity and reproduction. Around 33.3% of girls and 34.5% of boys started dating when they were 15. Even adolescents have had sexual intercourse before the age of 15 years. Objective: This study aimed to examine self-efficacy, emotional support, and informational support on sexual behavior in adolescents. Method: This research used a cross-sectional approach. This study amounted to 54 respondents with a simple random sampling technique. The analysis bivariate was used the Spearman rank test, and the multivariate analysis used ordinal logistic regression. Result: The results of the Spearman test on self-efficacy obtained p value = 0.000 <0.05, emotional support p = 0.000 <0.05, and informational support p = 0.035 > 0.05. These results show a significant relationship between self-efficacy and emotional support with sexual behavior. Ordinal logistic regression multivariate test obtained self-efficacy p value = 0.000 with (Exp (B) (118) mean that adolescents who have high self-efficacy would have an influence on sexual behavior by 11.8 times higher. Conclusion: This study has an effect of self-efficacy on sexual behavior in adolescents. Recommendation: Future researchers need to add other factors related to adolescent sexual behavior and expand the scope of research locations so that the causes of childish sexual behavior are more comprehensive.

Keywords: self-efficacy, Emotional support, informational support, sexual behavior, adolescents

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INTRODUCTION

Sexual behavior is individual behavior carried out to fulfill one of the basic needs, precisely sexual needs. Sexual behavior in adolescents is a complex concept influenced by developmental processes in several parts (1). Adolescents are defined as the transition period from childhood to adulthood. According to WHO (2014), adolescents are between 10 and 19 years (2). Adolescents are aged 10-24 years and unmarried (3).

Significant changes in adolescence, namely in terms of sexual maturity and reproduction, especially those related to changes in cognitive, emotional, and social functions. Several factors influence sexual behavior in adolescents besides sexual maturity, namely, self-confidence, closeness to parents, peers, environment, and adolescent memory to consider experiences that have occurred before (1). The impact of these factors, adolescents can practice negative sexual behavior (4). In the world, more than 3,000 adolescents die daily, with a total of 1.2 million deaths yearly. One of the causes of death in adolescents is due to risky sexual behavior (5).

Sexual behavior among adolescents follows a fairly consistent sequence, from holding hands, kissing, touching breasts, touching the genitals while still wearing clothes, touching the genitals directly, and oral sex to penetration of the penis and vagina (1). Based on data from the Indonesia Demographic and Health Surveys (2017) indicate that the age of first dating ranges from 15 to 17 years (55% of girls and 44% of boys) (6). Approximately 33.3% of female and 34.5% of male adolescents started dating when they were 15 (7). Several things adolescents do when dating is; the majority of adolescents hold hands (64% of girls and 75% of boys), hug (17% of girls and 33% of boys), kiss (30% of girls and 50% of boys), and petting (5% of girls and 22% of boys) (6).

Around 14.55% of adolescents have had sexual intercourse. The average age for first sexual intercourse was 15.62-20.7 years (8). In Indonesia, adolescents aged 15-19 had sexual experience (4%). At the age of 15-19, the percentage of adolescents who had sexual experience for the first time (59% female adolescents and 74% male adolescents). In addition, the highest percentage of having ever had sexual intercourse at 17, around 19% (6). Another study reported that around 6.9% of male and 3.8% of female adolescents had sexual intercourse in the last 12 months. Even adolescents have their first sexual experience before age 15 (72.7% of boys and 90.3% of girls), and around 60% of sexually active adolescent boys and girls have more than one sexual partner (9).

Early sexual behavior will also cause a higher risk, especially for female adolescents (10). At that age, adolescents do not yet have adequate life skills and are at risk of unhealthy behavior, including premarital sex. Premarital sex in adolescents is at risk of unwanted pregnancies and transmission of Sexually Transmitted Diseases (STDs) (7). Early sexual activity can also lead to increased unwanted pregnancies or infections (10). Unwanted pregnancies in developed countries will end in abortion. Approximately 55% (52-60) of unwanted pregnancies in developing countries also end in abortion (11).

Around 12% of women in Indonesia have unwanted pregnancies, and 7% of men report having partnered with unwanted pregnancies. Pregnancy in adolescents is a significant health problem, especially related to high levels of morbidity and mortality in both mother and baby. Pregnancy and childbirth at a young age also have a negative impact on educational attainment because young girls can lead to dropping out of school (6). According to the Indonesia Demographic and Health Surveys (2017), around 7% of women aged 15-19 have given birth (6).

Several reasons adolescents have had sexual intercourse are because they love each other (47%), are curious (30%), just happened (16%), are forced by a partner, and are influenced by friends (3% each) (6). Adolescent girls who have sexual intercourse earlier liable not to use contraception, so they have a higher risk of getting Sexually Transmitted Diseases (STDs) and cervical cancer (12). Around 4.8% of adolescents had ever experienced sexually transmitted diseases, including vaginitis (16%),
rashes (12%), papillomas (8%), urinary tract infections (8%), irritation (4%), and herpes (4%) (13). Based on these data, it was found that there was a lack of understanding adolescents about healthy life skills, the risks of sexual relations, and the ability to refuse unwanted relationships (7).

Further research is needed because, so far, the research that has been going on is still looking at knowledge, age, the role of parents, the role of peers, and self-esteem in sexual behavior (14,15,16). No one has researched how self-efficacy, emotional support, and informational support can influence sexual behavior in adolescents. Self-efficacy is a person's belief in his ability to carry out the behavior needed to achieve specific goals. Self-efficacy reflects confidence in one's ability to control motivation, social environment, and particular behaviors (17,18). Emotional support allows adolescents to make wrong decisions because of the immaturity of the cognitive domain, especially for making decisions in sexual behavior, such as; sending pictures of yourself without wearing clothes to other people (1). Furthermore, informational support refers to messages that contain knowledge and facts, such as suggestions or feedback about actions or behavior (19).

**OBJECTIVE**

This study aimed to examine the effect of self-efficacy, emotional support, and informational support on sexual behavior in adolescents.

**METHOD**

**Design**

This research used a retrospective cohort study cross-sectional approach. The retrospective research method, namely observing past events, aims to find factors related to the causes (20).

**Sample, sample size, & sampling technique**

The population was students at the Department of Midwifery, University of Borneo Tarakan. Samples were taken using the sample random sampling formula. The sample in this study was 54 students.

**The instrument for data collection**

The instruments used in this study were self-efficacy questionnaires, emotional support questionnaires, informational support questionnaires, and sexual behavior questionnaires. The questionnaire in this study used a Likert scale with points from 1 to 4. Favorable statement scale point 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree. Unfavorable statement scale point 1 = Strongly Agree, 2 = Agree, 3 = Disagree, 4 = Strongly Disagree. The validity test used the Pearson correlation technique, and reliability was done with the results of Cronbach's Alpha > 0.7.

**Data collection process**

Researchers have carried out the distribution of online questionnaires. The research was conducted by distributing questionnaires with Google Forms. Data were collected from September to October 2021.

**Data analysis**

Analysis for this study was used to determine the relationship between the independent and dependent variables. The bivariate analysis technique used the Spearman test. Furthermore, the bivariate test will be followed by a multivariate test. Multivariate analysis was used to determine which variable is the most dominant related to the dependent variable and to find the most influential factor. The multivariate analysis technique used an ordinal logistic regression test. Ordinal logistic regression is a statistical method for analyzing the dependent variable with an ordinal scale of two or more categories.

**RESULTS**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;18 years</td>
<td>3</td>
<td>5.6%</td>
</tr>
<tr>
<td>18-20 years</td>
<td>44</td>
<td>81.5%</td>
</tr>
<tr>
<td>21-≤24 years</td>
<td>7</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Self-Efficacy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not sure</td>
<td>8</td>
<td>14.8%</td>
</tr>
<tr>
<td>Sure enough</td>
<td>29</td>
<td>53.7%</td>
</tr>
<tr>
<td>Feel confident</td>
<td>17</td>
<td>31.5%</td>
</tr>
<tr>
<td><strong>Emotional Support</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>7</td>
<td>13%</td>
</tr>
</tbody>
</table>
Table 1 showed the majority of respondents aged 18-20 years were 44 respondents (81.5%). The self-efficacy of most adolescents, sure enough, amounts to 29 respondents (53.7%). Emotional support for most adolescents is medium, amounting to 31 respondents (57.4%), and informational support for adolescents, the majority, is medium, amounting to 28 respondents (51.9%).

The Relationship Between Self-efficacy, Emotional Support, and Informational Support with Sexual Behavior Adolescents

The results of analyzing the relationship between self-efficacy, emotional support, and informational support with sexual behavior adolescents can be seen in Table 2. below:

Table 2. Relationship Between Self-efficacy, Emotional Support, and Informational Support with Sexual Behavior Adolescents

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>se</th>
<th>p-value</th>
<th>Correlation coefficient</th>
<th>p-value</th>
<th>Correlation coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>5.103</td>
<td>.960</td>
<td>.000</td>
<td>.878*</td>
<td>.000</td>
<td>.513*</td>
<td>.000</td>
</tr>
<tr>
<td>Emotional support</td>
<td>.706</td>
<td>.913</td>
<td>.599</td>
<td>.913</td>
<td>.439</td>
<td>.599</td>
<td>.439</td>
</tr>
<tr>
<td>Informational support</td>
<td>-.041</td>
<td>.867</td>
<td>.002</td>
<td>.288*</td>
<td>.962</td>
<td>1.741</td>
<td>.962</td>
</tr>
</tbody>
</table>

Based on Table 3, the results show a significant effect on sexual behavior is self-efficacy with a p-value of 0.000 <0.05. This means self-efficacy is the most influenced sexual behavior with (Exp (B) (118). Therefore adolescents who have high self-efficacy have an influence on sexual behavior by 11.8 times compared to adolescents who have less self-efficacy.

Discussion

The Relationship Between Self-efficacy, Emotional Support, and Informational Support with Sexual Behavior Adolescents

Spearman test results show a p-value of 0.000, indicating a significant relationship between self-efficacy and sexual behavior in adolescents. Self-efficacy shows an individual's belief in his ability to control specific motivations, social environment, and behavior (17, 18). Palacios (2015, 2019) revealed in his research that this self-efficacy is not only to avoid risky sexual behavior but also to avoid consuming cigarettes and alcohol (13, 21).

In addition, self-efficacy can also increase an individual ability to avoid unprotected sexual

The Effect of Self-efficacy, Emotional Support, and Informational Support on Sexual Behavior Adolescents

The results of testing the effect of self-efficacy, emotional support, and informational support on sexual behavior can be seen in Table 3. below:

Table 3. The Effect of Self-efficacy, Emotional Support, and Informational Support on Sexual Behavior Adolescents

<table>
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<td>1.741</td>
<td>.962</td>
</tr>
</tbody>
</table>

The correlation coefficient between emotional support and sexual behavior is 0.513, which indicates that the correlation is moderate.

Table 2. The results show no significant relationship between informational support and sexual behavior in adolescents, with a p-value of 0.035 > 0.05. The correlation coefficient between informational support and sexual behavior is 0.288, indicating a moderate correlation.

Discussion

The Relationship Between Self-efficacy, Emotional Support, and Informational Support with Sexual Behavior Adolescents

Spearman test results show a p-value of 0.000, indicating a significant relationship between self-efficacy and sexual behavior in adolescents. Self-efficacy shows an individual's belief in his ability to control specific motivations, social environment, and behavior (17, 18). Palacios (2015, 2019) revealed in his research that this self-efficacy is not only to avoid risky sexual behavior but also to avoid consuming cigarettes and alcohol (13, 21).

In addition, self-efficacy can also increase an individual ability to avoid unprotected sexual
behavior (condoms) and prevent alcohol consumption (21). Self-efficacy has a significant influence and a positive relationship related to safe (protected) sexual behavior. The results indicate self-efficacy in rejecting risky sexual behavior to form safe sex behavior (using contraception) (22). This is interpreted as a form of assertiveness and individual confidence to communicate with partners regarding using condoms during sexual intercourse (23).

Spearman test results show a p-value of 0.000, indicating a significant relationship between emotional support and sexual behavior. This is supported by research from Wang et al. (2012), which states that emotional support from the family also affects the risk of dropping out of school (24). Risk factors for adolescent decision-making are influenced by adolescents' ability to regulate their emotions (25). There are 5 points in generating emotions where individuals can use a strategic approach to managing emotions. These 5 points include situation selection, situation modification, distribution of attention, cognitive change, and response modulation. This approach affects emotional responses, so it will also affect behavior (26).

Even though this ability to regulate emotions can lead to healthy sexual experiences, it is still possible to lead to risky sexual behavior. This is because the cognitive aspects of adolescents are immature, causing inappropriate decision-making, for example, believing sexual behavior is only limited to penetration of the penis and vagina, even though kissing, oral sex, and petting are also included in risky sexual behavior (1,6). The ability to regulate poor emotions will result in more risky sexual behavior (25). Adolescents who have sexual intercourse have a negative influence compared to adolescents who do not have sexual intercourse (27).

Spearman test results show a p-value of 0.035, so there is no significant relationship between informational support and sexual behavior. The findings are supported by a previous study which states that informational support does not affect commitment to online health groups because the information is only short-term (24). It was consistent with another study state that so far, information about sexuality and reproductive health has only been limited to the dangers and risks of premarital sex seen from a moral and religious perspective because other information is considered taboo to be given to adolescents (28). A study conducted from Nisaa and Arifah also shows that most of the information accessed by adolescents (93%) is only about adolescent reproductive health (29).

Adolescents generally use the internet and social media to find information related to reproductive health (29). According to Luder et al. (2011), information related to pornography that adolescents can still access online is not associated with risky sexual behavior. Exposure to pornography does not influence risky sexual behavior among adolescents (30). No evidence supported the hypothesis that pornography consumption is related to sexual behavior but instead to preexisting sexual behavior (31).

The Effect of Self-efficacy, Emotional Support, and Informational Support on Sexual Behavior Adolescents

The results of the multivariate test found that what significantly influenced sexual behavior was the self-efficacy factor, with a p-value of 0.000. The results (Exp (B) (118) mean that adolescents who have high self-efficacy will influence sexual behavior 11.8 times higher than those who have less self-efficacy, following the results of Palacios' research (2019), which states that adolescents who have high self-efficacy will not engage in unwanted sexual intercourse, in contrast to adolescents who have low self-efficacy (13). Research from Tomasevic et al. (2022) also shows that female adolescents not involved in unwanted sexual relations have more self-efficacy (32).

Other studies have shown a relationship between self-efficacy and various sexual behaviors during adolescence. This self-efficacy is related to the ability to negotiate sexual relations and resist peer pressure to engage in unwanted sexual relations, for example, stay away from risky sexual behavior and say "no" to unwanted sex and say "yes" to desired activities. Low self-efficacy will make it difficult for adolescents to create boundaries for desired and unwanted behavior because they cannot express their opinions (33).

Other studies prove low adolescent self-efficacy can cause unwanted sexual intercourse (34). Among adolescents who had sexual
intercourse, around 24.2% were reported to have unwanted sexual intercourse (13.1% of adolescents had one time, and 11.1% had more than one time). The reasons for adolescents to have unwanted sexual intercourse are because of the desire to please their partner, the influence of alcohol, pressure from their partner, their partner has spent a lot of money traveling or buying something, and some adolescents do not reveal the reasons (13).

**Conclusion**

Based on the results of a study, there is a relationship between self-efficacy and emotional support in sexual behavior adolescents. There is no relationship between informational help with sexual behavior in adolescents. There is an effect of self-efficacy on sexual behavior in adolescents.

**Acknowledgment**

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**REFERENCES**


12. Lara LAS, Abdo CHN. Age at Time of Initial Sexual Intercourse and Health of Adolescent Girls. Journal of Pediatric and Adolescent


17. Bandura A. Self-efficacy in changing societies. United Kingdom. USA: Cambridge University Press. 1995


31. Wright, P. J. Pornography and Sexual Behavior: Do Sexual Attitudes Mediate or
