

THE RELATIONSHIP BETWEEN PERSONAL CHARACTERISTICS, SELF-ESTEEM AND DEPRESSION AMONG SEVENTH GRADE STUDENTS OF JUNIOR HIGH SCHOOLS, TANJUNGPINANG DISTRICT, INDONESIA

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ABSTRACT:

Background: Depression is a mental disorder that can happen in everyone. It also appears in the seventh grade students who are approximately 12-13 years old, because they are facing major changes including physical development, emotional development and social-cultural changes. The main purpose of this study was to characterize the relationship between personal characteristics, self-esteem and depression among seventh grade students in junior high schools.

Methods: A descriptive correlation design was employed involving 335 participants by cluster random sampling at Tanjungpinang, Riau, Indonesia. Rosenberg Self-Esteem Scale and Beck Inventory Depression-II were used as the instruments. Data was analyzed by using descriptive statistics, chi-square and Pearson Product-Moment Correlation Coefficient.

Results: The study showed that there were statistically significant relationships between personal characteristics (family history of depression, marital status of parent, school performance), self-esteem and depression respectively ($\chi^2 = .120, p < .003$; $\chi^2 = 8.306, p < .004$; $\chi^2 = 12.09, p < .002, r = -.268, p < .000$).

Conclusion: These findings indicated that family history of depression, marital status of parent and school performance could be considered in depression prevention. Further intervention to promote self-esteem is recommended to prevent depression in junior high schools.

Keywords: Personal characteristics, Self-esteem, Depression, Indonesia

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INTRODUCTION

Depression is a common mental disorder and predicted to be in the first place of mental illness globally by 2030 [1]. The World Federation for Mental Health (WFMH) [2] has estimated that 350 million people suffer from depressive disorders. According to this data, depression could happen in everyone, including 20% of individuals aged 10 to 19 years old. It is estimated worldwide that one of every 13 adolescents suffers from major depression. In addition, 7% of adolescents with depression attempt suicide and the prevalence of depression is 2% in school aged children and increase to 8% in

adolescents [3]. Therefore, the prevalence and impact of depression is high during adolescence.

Depression could impact adolescents in several ways and the most serious problem is suicide. Depression has been reported as a primary predictor of suicidal intention [4]. The clinical symptoms of adolescent and childhood depression vary with developmental period. Overall, they are similar to those seen in adults [5]. In addition, the impact of depression leads to dissatisfaction achievement in school, and results in high risk behaviors such as smoking and drug use [6]. Recently, the impact of depression is more likely to appear in the seventh grade students who are approximately 12-13 years old [7]. Based on Philip and Kim [8] the development of early adolescence includes a critical

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period because of massive physical changes and simultaneously struggles with a sense of identity. This could lead the seventh grade students being more likely to develop depression. In addition, seventh grade students have just transitioned from elementary school to junior high school, which has greater social complexity [9]. These situations may link to new friends or more difficult academic schoolwork. According to Cash [10], 12 year-old boys are more likely to suffer from depression than girls during adolescence, which increases of high organizational testosterone during this period. However, 13 year-old girls could experience depressive symptoms more frequent than boys [11], because of change of body image and the first menstruations. Consequently, identifying the factors influencing depression in the seventh grade student is important in order to prevent serious problems during teenage years.

According to the World Health Organization in 2012 [1], there are many factors influencing depression in adolescents. A family history of depression, as a genetic factor, may play a role in adolescent depression. In addition, marital status of parents was also a major contributing factor of depression in adolescents [1]. However, Park et al. [12] found that there were no associations between personal characteristics (household income, marital status) with depression. Overall, studies on family history of depression, marital status of parents, household income, parental education and school performance have reported mixed findings, underscoring the need for further research.

Self-esteem has a potential buffering effect on the onset of depressive symptoms [13]. Self-esteem continues to decline during adolescence, as self-esteem is related to body image and other problems associated with puberty and the transition from elementary school to junior high school [14]. However, an understanding of the relationship between self-esteem and depression has not been fully explored in early adolescence. Self-esteem in adolescents can influence psychological problems such as depression, because adolescents who have low self-esteem and perceive themselves in negative way, as being worthless and not being loved, are more likely to report a high level of depression symptoms. Meanwhile, lower self-esteem in adolescents has correlated with greater depression [15-17]. As a result, self-esteem is important to prevent depression in adolescents.

As a developing country, the numbers of people in Indonesia diagnosed with depression currently fluctuate. The Department of Health Republic of Indonesia [18] has stated that depression has been

predicted to affect 15% of every 1000 people by 2020. According to the Ministry of Public Health of Indonesia [19], depression at age 15 years and older was 11.6% in 2008 and has decreased 6.0% per 1000 people in 2013. The Riau Islands is one of the provinces in Indonesia with an adolescent population that has the potential for depression. The Department of Health Republic of Indonesia in 2008 [18] found that depression in adolescents is 5.7% out of every 1000 adolescents. However, the suicide rate in the Riau Islands has increased from 7 cases in 2012 to 17 cases in 2013 [20]. Five of the 17 cases involved adolescents and one in four cases of attempted suicide involved a student in elementary school [20]. Tanjungpinang is one of the districts in the Riau Islands where the number of adolescents is higher than in other sub-districts. The total population in Tanjungpinang is 230,380 and the number of adolescents is 27,570 [21]. Based on Departement Health of Tanjungpinang, 2008 [18], the incidence of depression in adolescents in this area was higher than other areas in the Riau Island.

There is a few studies of depression in students at Tanjungpinang. To fill the gaps, researcher purposes to determine relationship between personal characteristics, self-esteem and depression among the seventh grade students of junior high schools in Tanjungpinang, Indonesia. The findings of this study would provide a better understanding for community nurses regarding factors that are associated with depression. Consequently, further planning and interventions could be developed to help prevent depression among the seventh grade students in junior high schools.

MATERIAL AND METHOD

The descriptive correlation design was used for describing the status of the phenomena and the relationship among the phenomena at one point in time [22]. The data was collected once from the participants to investigate the relationships between personal characteristics, self-esteem and depression among the seventh grade students in junior high schools. Population of this study was 1,188 seventh grade students among 12 public junior high schools in Tanjungpinang district, Indonesia. The participants were selected by cluster sampling based up on the proportion in each sub district and school. From twelve junior high schools in Tanjungpinang district, six schools were randomly selected from each sub-district. Within the schools, data for the study was collected by using the random sampling technique.

To reduce the missing data, 10% was added to calculate sample size 359 students who were

Table 1 Distributions of variables (n=335)

Variables	Number	%
Personal characteristics		
Family history of depression		
Yes	20	6.0
No	315	94.0
Marital status of parents		
Single	40	11.9
Married	295	88.1
Household income		
Less than Rp 1.365.087	122	36.4
More Rp 1.365.087	213	63.6
Parent education		
Senior high school	212	63.3
Diploma	57	17.0
Bachelor degree	66	19.7
School performance		
Ordinary	108	32.2
Good	167	49.9
Excellent	60	17.9
Self-esteem		
Low self-esteem	31	9.3
High self-esteem	304	90.7
Mean: 20.99 SD : 3.78 Range: 11-29		
Depression		
Depressed	60	17.9
No depressed	275	82.1
Mean: 8.93 SD: 5.76 Range: 1-24		

selected from six public junior high schools in Tanjungpinang district by cluster random sampling. The inclusion criteria; 1) Participants were students studying in the seventh grade (age from 12 to 13 year old), 2) Participants were volunteers and also have been permitted by their parents or guardians, 3) Participants can read and write in Indonesian language, 4) Participants have no health problems including physical and no history of mental health problem. Initially, there were 14 participants excluded because they did not complete the questionnaire. The participants who answered the questions were 345. After checking the distribution of data, the outliers were found in which case these were deleted. The total sample in current study was 335.

There were three instruments employed in this study, personal characteristics, the Rosenberg Self-Esteem Scale (RSES), and Beck depression Inventory-II (BDI-II). The personal characteristics questionnaire was validated by three experts. The clarity of personal characteristics was 87.25%, and the relevant of the instrument was 100%.

RSES is an instrument with scores as the Likert scale. RSES was translated into Bahasa Indonesia by Anggoro and Wahyu [23]. The 10 items are answered by a four point scale ranging from strongly agree to strongly disagree [23]. In this study, the

instrument was tried out with 30 students who had the same inclusion criteria with the study sample. The internal consistency reliability of 30 students was .77. The last instrument is the BDI-II in the Bahasa Indonesia adapted from Ginting, et al. [24]. This instrument is a Likert scale, which consists of 21 items [24]. Each item is rated on a 4-point scale ranging from 0 to 3. The internal consistency reliability of 30 adolescents was .80.

Ethical consideration

The study is approval had been obtained from Borromarajanani College of Nursing NopparatVajira Review Board (No.38/2014). Further, permission was approved from the Board for national unity people protection (BNUPP) of Tanjungpinang, and Headmaster of junior high schools. Researcher discussed with teachers to select classes by random, and then the researcher recruited all students by providing an information sheet, an assent form for students and a consent form for students and parents and then wait for the permission from them. Students became a participant after obtaining a consent form from parents who were willing for their child to take part in this study. Then the participants signed the assent form. Data was collected after class because researchers wanted to minimize pressure from schools and the students could focus on the

Table 2 The relationship between personal characteristics (family history of depression, marital status of parents, household income, parental education, and school performance) and depression among the seventh grade students (n=335).

Variables	Depression		χ^2	p-value
	Depressed	No depressed		
Family history of depression			.120	.003
Yes	31	7		
No	6	143		
Marital status of parents:			8.306	.004
Single	10	14		
Married	27	136		
Household income			.043	.835
> Rp 1.365.087	13	50		
≥ Rp 1.365.087	24	100		
Parental education			5.014	.081
Senior high school	30	94		
Diploma	4	22		
Bachelor degree	37	34		
School performance			12.09	.002
Ordinary	15	34		
Good	20	74		
Excellent	2	42		

Table 3 Relationship between self-esteem and depression.

Variable	Depression	
	r	p-value
Self-esteem	-.268**	.000

questionnaires. After being collected, data was checked per item by the researcher to ensure that the participants completely answered the questionnaires.

Statistical analysis

For the data entry licensed Epi-data was used and licensed SPSS 16.0 was used for analyzing the data. Descriptive statistics were used to calculate frequency, mean, standard deviation, and percentage for describing the distribution. For analysis of relationship between family history of depression, marital status of parent, and depression, household income, parent education, and school performance were analyzed by using chi-square. This study also used Pearson correlation for analysis of relationships between self-esteem, and depression.

RESULTS

The numbers of participants have a family history of depression (6.0%). Most of marital status of parents was married (88.1%), family income was mostly ranged from more than RP 1.365.087 per month (63.6%). The majority of parent education was senior high schools (63.3%) and nearly half of participants have good school performance (49.9%), Table 1.

Moreover, marital status of seventh grade students was married and the majority of parent of seventh grade students were senior high schools. Moreover, the majority of participants rated self-

esteem at the high self-esteem 90.7% (\bar{x} = 20.99, SD= 3.78). The large number of participants were not depressed (82.1 %, \bar{x} = 8.93, SD = 5.76).

Table 2 showed that family history of depression, marital status of parents and school performance were significantly associated with depression among the seventh grade students. The variables that had statistically significant correlated depression among the seventh grade students were family history of depression (χ^2 = .120, p < .003), followed by marital status of parents (χ^2 = 8.306 p < .004), and school performance (χ^2 = 12.09., p < .002). However, there were no statistically significant relationships between marital status of parents, household income and depression among the seventh grade students.

Table 3, there was a negative significant relationship between self-esteem and depression (r = -.268, p < .01).

DISCUSSION

According to the findings, there was a positively significant relationship between family history of depression and depression. This indicates that the seventh grade students who did not have a family member with depression are less likely to suffer from depression. This is consistent with a previous that study that reported an association between a family history of depression and depression in children and adolescents [1]. A

possible reason to explain the result is because each person inherits a unique combination of genes from their mother and father, and certain combinations can predispose to a particular illness such as depression. As revealed in the previous study, a family history of mental disorders or depression is strongly related to an experience of depressive symptoms compared to others [25]. Parental depression is also linked to developmental, emotional, and mental health problems in offspring including a high risk for depression, and anxiety. In addition, students with a family history of depression are up to 2.5 times more likely to suffer from depression compared with those who have no family member with depression [26]. This finding was related to the numbers of seventh grade students that were living with family member with depression (6.0%). This finding is also similar to a report from the Department of Health [18] indicated incidence of depression are 15 years that affects is 5.7% out of every 1000 people in the Riau Islands. Therefore, a history of family depression is a key factor that increases the incidence of depression within this study.

With regard to marital status, there was significant negative relationship between marital status of parents and depression. This indicates that the seventh grade students with a single parent would be more likely to develop depression. This finding is consistent with the WHO, 2012 report that the marital status of one parent is one factor influencing depression [1]. A major influencing factor of depression in children and adolescents is from the dying or the divorce of parents, because children may feel guilty or sad if their parents get divorced and they believe that it their fault [27]. This could be explained though findings which divorce or separation of parents could lead to a decreasing of family support and it may be a traumatic stress for a child. According to Sakotous et al. [26], students whose parents were divorced were over 1.60 times more likely to suffer from depression compared to students whose parent were living together. Although, adolescents increasingly spend large amounts of time with peers outside their home, family relations appear to be more reliably associated with adolescent depressive symptomatology than peer relations [28]. Within the study, some of the seventh grade students who were living with single parent were abandoned by their parent (11.9%). This finding is similar to a report from the Bureau of Central Statistic [21] found that 12.37 % of 65.115 families in Tanjungpinang were comprised of a single parent. This result is also supported by the fact that most occupations are civil servants or

sailors. It can be seen that many women are more likely to choose as single parent rather than separate with their husband. Therefore, the seventh grade students who were neglected from their parents have unstable family status are more likely to develop depressive symptoms.

Regarding school performance, school performance was also negatively related to depression. In this study, school performance was defined as the academic performance of the seventh grade student. This means that the higher the seventh grade students' school academic performance, the lower the prevalence of depression. These finding is also consistent with the WHO study in 2012 [1] identified that school performance is one of cause of depression. This result is also consistent with Park et al., [12] who found that low academic achievement was highly associated with the experience of depression. A seventh grade student is a student who moved from elementary to junior high school. They may be likely to engage in depression due to the increasing of academic learning. Another way to explain it is that depression could impair cognitive functioning because the depressed adolescent concentrates on depressive thoughts and interpretations instead of actual tasks, or because depression directly blocks cognitive resources [29]. In addition, Bhatia and Bhatia [30] explained that adolescents acquired mild cases of depression due to school performance. In conclusion, school performance of the seventh grade student has a significant relationship with depression.

Self-esteem showed a significant negative relationship with depression. This means that if the seventh grade students who had lower self-esteem would be more likely increase their depression. This result is supported by the Vulnerability Model, that low self-esteem is a stable personality factor that predisposes a person to experience depression [13]. According to Orth and Robin [31], people with low self-esteem are more prone to both clinical levels of depression and milder forms of depression. Previous studies have revealed that low self-esteem is prospectively associated with depression [16, 17, 32]. A possible explanation is that adolescents, who have low self-esteem and negatively perceive themselves as being worthless, and not being loved, are more likely to report a higher level of depression symptoms than those who have high level of self-esteem. Therefore, the role of self-esteem in adolescents, in term of psychosocial development, is a vital component to prevent depression.

With regard to household income and parental education, there were not significantly related to depression. There was no significant relationship

between household income and depression. This finding is consistent with Joy and Hudes [33] who did not find a significant association between household income and depression. There are a number of issues that may be explained by this finding. This study also found that most household incomes were high Rp 1,365,087 per month (63.6%) and thus it could be explained that family income of students included a high household income [9, 21]. This result is also supported by the fact that most of occupations in Tanjungpinang are civil servant and sailors. Therefore, it is not surprising that this study did not find a relationship between household income and depression. Indonesian people have better coping strategies due to a variety factors including strong social network, religious and spiritual roots, and extended family support, these reduce the risk of depression compared with other populations [32]. Therefore, the results may indicate that a need for a support system is more accessible to individuals in lower-income households.

Moreover, there was no significant relationship between parental education and depression. A possible explanation is that depression in the seventh grade students is not influenced by the parent's education. The findings of this study were supported by Akhtar-Danesh and Landeen [34] who stated that there was not significant correlation between educational levels of parents and depression. In contrast, Sokratous et al., [26] found that parents with a higher education background put pressure on their children, and the parents may have a higher expectation for their children to follow in their academic footsteps. However, the finding in this study also showed that more than half of the parental education was at a senior high school, but they did not put additional academic pressure on their children because the parents in Tanjungpinang are more concerned with religious education than formal education [35].

CONCLUSION

Family history of depression, marital status of parents, school performance, and self-esteem were associated with depression among the seventh grade students while household income and parent education were not significantly related to depression. This finding could be used to develop a program of preventing depression for seventh grade students in Junior high school. Promoting self-esteem in schools would be recommended for health care providers who are responsible in the community.

LIMITATIONS

There were two limitations of the study. The first, limitation of the study was the collected data from the seventh grade students was done in limited time. The data was collected after the class, which was an inappropriate time because some students were more likely to go home. Therefore, it might result in incomplete questionnaires as a result. Second, the participants of this study consisted of the seventh grade students of public junior high schools in Tanjungpinang sub-district only. Therefore, the results of this study may not to explain student's depression in private junior high school, which have different characteristics.

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