

Research Article

Mental and Emotional Disorders In Students During the COVID-19 Pandemic

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Abstract.

Changes in learning methods during the COVID-19 pandemic resulted in increased stress in students which had a negative impact on their mental health. Stress causes physiological responses, negative psychological reactions, maladaptive behaviour, mental confusion and frustration. An overload of stress also stimulates other mental health problems including anxiety, hopelessness or powerlessness, depression and lack of self-esteem. This study aimed to determine the mental and emotional disorders in students during the COVID-19 pandemic. This was a cross-sectional study. 153 senior high school students in Malang Indonesia were selected by the random sampling technique to participate in the study. The variable of mental emotional disorder was measured with the PSC-17 questionnaire. Data were analyzed using SPSS. The result of this study indicated that during the COVID-19 pandemic, students in Indonesia experienced internalizing disorders (83.25%), externalizing disorders (2.61%) and attention disorders (21.57%). There were only 15.69% of respondents who showed no indication of a disorder. The results showed that adolescents had mental health struggles, especially internalizing disorder symptoms such as anxiety, sadness, gloom, hopelessness and inferiority.

Keywords: COVID-19 pandemic, student, mental emotional disorder

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1. INTRODUCTION

The COVID-19 pandemic that has occurred since 2020 continues to grow and spread widely. The spread is also accompanied by increasingly diverse viral mutations and prolongs the pandemic. It was recorded that in February 2021 the number of confirmed cases of COVID-19 in the world was 105,394,301 million cases. Meanwhile, the number of deaths has now reached 2.3 million cases. In February 2021, the number of COVID-19 cases in Indonesia was 1,157,837 cases, with 31,556 deaths and 949,990 recovered patients (1).

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Education is a sector that has been significantly affected by the pandemic. The change of face-to-face learning methods directly to online which has been running for almost 1 year. According to many studies, changes in learning methods have an impact on the mental health of students and teachers. This problem occurs at all levels of education from elementary to tertiary education levels. The application of learning at home makes some students feel stressed, anxious and depressed. (2). Stress is a condition in which an individual is confronted with an obstacle or demand (3). Students often feel stressed because they have not been able to adapt to the COVID-19 pandemic (2).

Changes in educational methods require students and teachers to adapt to achieve the expected learning objectives. the limited use of technology is a problem that hinders the effectiveness of online learning methods. Limited mastery of information technology by teachers and students, inadequate facilities and infrastructure, limited internet access, unprepared budget provision (4). Another fact, online learning can affect students' mental problems, namely increased anxiety, fear, depression, insomnia caused by the impact of COVID-19 on education (5). Mental disorders in adolescents (10-19 years) are caused by physical, emotional, social changes. Poverty, abuse, or violence can also make youth vulnerable to mental health problems (6).

In the 2017 Global Burden of Disease study, the prevalence of mental health disorders in adolescents was 792 million or one in ten people globally (10.7%) (7). Based on Riskesdas 2018, stated that the prevalence of mental emotional disorders in people aged 15 years was 9.8% (an increase of 6% from 2013). The prevalence in East Java province in 2018 was 6.82%, while the prevalence of mental emotional disorders in Malang in 2013 was more than 10%. The Covid-19 pandemic can be a factor that increases the incidence of emotional disorders, especially in students. The prevalence of emotional disorders can greatly affect children's learning achievement in school. Children need social interaction as a development stimulus. Social restrictions have exacerbated isolation and loneliness in children and hindered such stimulation. So that emotional mental disorders can occur due to the COVID-19 Pandemic (8).

Stress causes physiological responses, negative psychological reactions, maladaptive behavioral, mind confusion and frustration. Over load of stress also stimulate other mental health problem, anxiety, hopeless or powerlessness, depression and lack of self esteem (9). Academic stress is one of the factors that affect the level of stress in students. Academic stress is caused by demands that arise when a person is in education, and occurs when students experience emotional tension when he fails to cope with these demands (10). Study load is the biggest academic factor that causes academic stress

(52%). Students are required to adapt to the academic process (face-to-face learning to online learning). Online learning allows students to get more assignments than usual, such as weekly quizzes, independent assignments and group assignments (11). Lack of physical activity during the COVID-19 pandemic can also affect quality of life (12). A study shows that physical activity and diet are important components of healthy lifestyle behaviors, not only related to sleep quality but also quality of life (13).

2. MATERIALS AND METHODS

This study used a descriptive analytic study design. The number of respondents in this study were 153 respondents. Respondents were students from senior high school in Malang. The sampling method used was random sampling. Data were collected in May 2021 using a demographic questionnaire, PSC-17 questionnaire to measure mental emotional disorder. Variables were analyzed by using SPSS version 20. Each variable is calculated by frequency distribution and percentage.

The PSC-17 questionnaire consists of 17 items. 5 items measure internalizing disorder, 7 items measure externalizing disorder and 7 items measure attention disorder. The type of answer used in this instrument is a Likert rating with a choice of answers “never”, “sometimes” and “often”. This research has passed the ethical clearance from UMM Ethic commission with ethical number E.5.a/061/KEPK-UMM/IV/2021.

3. RESULTS

Table 1 below shows that the average age of the respondents is 15.6 years and is dominated by female sex. Most of the respondents were from class 10, majoring in nursing assistants and office management. The income range of the respondent's parents is mostly between five hundred thousand rupiah to two million rupiah.

Table 2 above shows the type of internalization disorder that is most experienced by respondents (83.25%). When viewed from the number of disorders experienced by each, there are only 15.69% of respondents who are normal. Others have at least 1 type of mental-emotional disorder symptoms. The majority of combination disorder are internalizing disorder – attention disorder (96,77%)

TABLE 1: Demographic Characteristics of Respondents (n=153).

Characteristics	n	%
Age (Years)	15,6	
Sex		
Male	35	22,9
Female	118	77,1
Level		
10	66	43,1
11	38	24,8
12	49	32,0
Field of Study		
Nursing Assistant	47	30,7
Multimedia	1	0,7
Office Automation & Governance	46	30,1
Heavy Equipment Engineering	7	4,6
Automotive Engineering	9	5,9
Banking & Microfinance	12	7,8
Cullinary art	3	2,0
Clinical & Community Pharmacy	8	5,2
Hospitality	3	2,0
Computer and Network Engineering	11	7,2
Electrical Power Installation Engineering	3	2,0
Motorcycle Engineering and Business	2	1,3
Autotronic Engineering	1	0,7
Parent income		
< Rp. 500.000,-	35	22,9
Rp. 500.000,- s/d Rp. 1.000.000,-	41	26,8
Rp. 1.000.000,- s/d Rp.2.000.000,-	39	25,5
Rp. 2.000.000,- s/d Rp. 3.000.000,-	19	12,4
Rp.3.000.000,- s/d > RP. 5.000.000,-	19	12,4

TABLE 2: Description of behavioral, emotional and psychosocial disorders in adolescents (n=153).

Variable	n	%
Type of mental disorder		
Internalizing	126	83,25
Externalizing Attention	4	2,61
	33	21,57
Combination of mental disorder		
Normal (no mental disorders)	24	15,69
Have 1 type of mental disorder	96	62,75
Combination 2 types of mental disorders	30	3,23
Internalizing – externalizing	0	0
Internalizing – attention	2	0
Externalizing – attention	1	0
Combination 3 types of mental disorders	1	1,31

4. DISCUSSION

The results of this study indicate that during the Covid-19 pandemic, most of the adolescent respondents experienced a tendency to experience depression. Symptoms of internalization disorders such as withdrawal, lack of motivation, easy anxiety, unstable mood changes, individuals with internalization disorders tend to be more prone to stress because they often keep their problems to themselves (14). People with internalization disorders also often show symptoms of low self-esteem, social withdrawal, in the medium to long term there can be a decrease in academic performance to the risk of suicide (15).

There are two factors that trigger emotional mental disorders in adolescents, internal and external factors. Internal factors include: psychological conditions, personality, physical conditions, attitudes in dealing with life's problems, and balance in thinking. The external factors include: social support, economy, etc (16). Other factors that can cause emotional mental disorders in adolescents during the COVID-19 pandemic are academic stress factors and parenting factors (17). Academic stress is a form of individual response related to learning demands. This can cause discomfort, and a change in behavior. The aspects of academic stress are; learning pressure, task load, worry about grades, self-expectations, decisions, and emotions (18). This academic stress is caused by competing pressures in showing achievement, so that academic stress that becomes the student's response includes: demands to go to class, complete many assignments, get high grades, decisions to determine majors, anxiety facing exams. (19).

Mental disorders in adolescents (10-19 years) are physical, emotional, social changes, including exposure to poverty, abuse, or violence, which can make adolescents vulnerable to mental health problems (6). These conditions can trigger emotional mental disorders, in which a situation that affects individuals who will later experience emotional changes if allowed to continue (14). There are several studies in Indonesia that examines that mental emotional disorders, especially neurotic disorders, can be divided into four parts: decreased energy, somatic disorders, depressive feelings, and depressive thoughts. This disorder can be suffered by all circles of children to old age, and can recover when it was in its original condition if it can be overcome by the individual or also by visiting a health facility. (20). Other facts from online learning can affect students' mental problems, namely increased anxiety, fear, depression, insomnia caused by the impact of COVID-19 on the world of education both in Indonesia and abroad. (23).

The stress that occurs in the pandemic is caused by academics, interpersonal relationships, problems with friends, life changes and job search (21). This is felt by students

when studying online (online), due to lack of mastery of technology, additional internet quota fees used for communication and socialization between students and teachers. This can be experienced by students due to academic failures caused by unpreparedness in overcoming the adaptation of new learning methods, which previously had no preparation for using online media for learning, so that when faced with the COVID-19 pandemic situation, the school changed learning methods and finally students did not ready to accept change (22). At the beginning of the pandemic, there were several problems in use that hindered the implementation of online learning methods, namely; limited mastery of information technology by teachers and students, inadequate facilities and infrastructure, limited internet access, unprepared budget provision (19).

Other mental emotional disorders experienced by respondents were externalization disorders (2.61%) and attention disorders (21.57%). Externalization disorder or more commonly known as conduct, is indicated by the behavior of children who are socially problematic, act negatively on the environment, violate rules, fights, verbal and physical aggression and several other behaviors related to rejection in the social environment. Interestingly, about 23 % of people with internalizing disorders also have attention disorders. Most of the attention disorders (90.91%) are also internalizing disorders. This means that changes in depressive mood due to stress during the pandemic are directly related to the emergence of cognitive disorders, especially in the center of attention. While attention disorders are often indicated by symptoms of difficulty concentrating, easily bored, causing a decrease in learning achievement (24). These symptoms can worsen learning achievement and can directly exacerbate internalization disorders.

Although the percentage of this type of disorder is still far below the internalization disorder, behavioral disorders shown in externalizing disorders and attention disorders are also a problem in children. This disorder often grabs the attention of parents and teachers because the effects are immediately visible and disturbing to others. Parents and teachers are usually more responsive and aware when they see their children do social delinquency and their learning achievement declines. On the other hand, internalizing disorders often go unnoticed by others. This is because children who experience internalization disorders tend to be silent with their own problems. People around him will see the child as a good child because of his silent behavior, even though in the child's mind there are various kinds of problems that can explode at any time. Parents often only realize the problem when their child's behavior leads to self-harm to suicide. Other studies have also shown that mental emotional problems also have implications for an increased risk of suicide in students (25).

Mental emotional disorders in students are a concern for health workers, teachers, parents and related policy holders. Quick treatment must be done because long-lasting internalization disorders can trigger more severe mental disorders. The role of parents is very important as an effort to deal with problems from an early age (26). The role of the family, especially parents, is a form of social support. Social support is very influential in preventing mental disorders in all age groups, social support, especially from the family, is significantly related to the prevalence of mental disorders in adolescents during the Covid 19 pandemic. Students who have good relationships with their families tend to be mentally healthier even in conditions of academic stress (27). Early treatment efforts are important because the impact caused by severe mental disorders reduces the possibility of recovery. Parents and teachers need to get education to recognize the symptoms of the disorder early. Efforts can be made through socialization to parents, the formation of self-help groups between parents and teachers and others.

5. CONCLUSION

This study concluded that the majority of respondents experienced internalizing disorders characterized by symptoms of depression, withdrawal, lack of motivation, easy anxiety, unstable mood changes, symptoms of low self-esteem, social withdrawal. Early treatment efforts must be carried out because the impact caused by severe mental disorders reduces the possibility of recovery. Parents and teachers need to get education to recognize the symptoms of the disorder early. Efforts can be made through socialization to parents, the formation of self-help groups between parents and teachers and others.

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