

The Relationship Between the Impact of the Covid-19 Pandemic and Adolescent

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You Have to Know!

1. This study aims to investigate changes in adolescents' mental health during the COVID-19 pandemic, with a focus on adolescents in Samarinda.
2. The COVID-19 pandemic led to an increase in anxiety, sleep disturbances, social isolation, depression, and stress among adolescents due to limited social interactions, restricted activities, fear of infection, boredom, and misinformation.
3. These findings highlight the need for mental and psychosocial health support to protect adolescents' emotional development and resilience during public health crises.

Abstract

Introduction: COVID-19 is a non-natural disaster that can have an impact on mental and psychosocial health and can be experienced by all groups, especially adolescents. Adolescence is a transitional stage from childhood to adulthood where adolescents experience many psychological, social, and biological changes at this stage. In addition, adolescence is a vulnerable age stage and is very at risk of emotional and behavioral problems because it is in the development stage. The COVID-19 pandemic has had an impact on increasing anxiety problems, sleep disorders, social isolation, depression, and stress experienced by adolescents. This is because the COVID-19 pandemic has forced adolescents to limit social interactions with friends of the same age, causing adolescents to interact a lot online, and adolescents have to be sent home to avoid the spread of COVID-19, limited activities outside the home, frustration, boredom, fear of infection, and inaccurate information about COVID-19. **Methods:** Based on the description above, researchers want to see the actual phenomenon to obtain data related to changes in adolescents' mental health during the COVID-19 pandemic, especially in Samarinda. **Results:** The results show that respondents experienced mild depression and moderate levels of anxiety. **Conclusions:** There is a relationship with moderate to solid strength between the impact of the COVID-19 pandemic and mental health in adolescents, including depression, anxiety levels, stress, and sleep quality.

Keyword: Impact, Pandemic, COVID-19, Mental Health, Adolescents

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1. INTRODUCTION

One of the provinces in Indonesia affected by COVID-19 is East Kalimantan. East Kalimantan has ten regencies/cities with an area of 127,346.92 km² and a population of 3,793,152 people. On March 22, 2020, the first case of Covid-19 was found in East Kalimantan, totalling nine positive cases of Covid-19. Data from the Covid-19 Task Force of the East Kalimantan Provincial Government on August 9, 2021, confirmed 132,280 cases of Covid-19, with 400,611 suspected cases and 4,048 deaths due to the virus. Several areas have been confirmed to be

highly favourable for COVID-19, namely Bontang, Balikpapan, and Samarinda.¹

The World Health Organization (WHO) states that the incidence of stress globally is 450 million people, and stress is a disease ranked 4th as a disease that threatens society in the world. In Indonesia, the incidence of stress is 10% of the total population of Indonesia. According to the 2018 Basic Health Research (Riskesdas) showed that more than 19 million people aged over 15 years experienced emotional, mental disorders, emotional, mental disorders in Indonesia, with symptoms of stress in

2018 recorded as stress in women at 22.3% and men at 21.4%.²

The research was conducted at SMA 14 Samarinda, specifically in the MIPA XI class. This location was chosen due to its relevance in examining the impact of the COVID-19 pandemic on adolescent mental health, particularly in the context of online learning. The respondents provided valuable insights into the difficulties they faced in understanding lessons, as well as feelings of boredom, anxiety, frustration, and stress caused by the accumulation of assignments and the need to utilize technology effectively. The results of interviews with ten respondents at SMA 14 Samarinda class MIPA XI stated that they experienced the impact of the COVID-19 pandemic on mental health. The effect of the Covid-19 pandemic experienced by respondents was "difficulty understanding learning because it was done online so that respondents became less interested in learning." Respondents also stated that they "often feel bored, anxious, easily offended, difficult to concentrate, frustrated, worried and afraid if they are late in submitting assignments so that students experience sleep pattern problems because they have to stay up late to do assignments and respondents often experience stress because of piling up assignments and are required to understand technology in using applications online."

2. METHODS

2.1. Study Design and Sample

The research design employed is observational analytic, utilizing a cross-sectional approach and parametric statistical analysis techniques. This design aims to determine the correlation between the variables

The number of participants in this study was 150 respondents from the SMK 14 class MIPA XI Samarinda, and the sampling technique used was total sampling. The author used total sampling in this study to ensure that all 150 respondents from the SMK 14 class MIPA XI Samarinda were included, allowing for a comprehensive representation of the

population being studied. This technique is often chosen when the population is small and accessible, ensuring that every individual has an equal chance of being selected, which enhances the reliability and generalizability of the findings.

2.2. Data Collection

The instrument used in this study is a questionnaire; one is the COVID-19 pandemic impact questionnaire, which was tested for validity and reliability with the results. The results of the questionnaire validity test were assessed using the present product moment formula. The results of the questionnaire validity test were assessed using the present product moment formula.

2.3. Data Analysis

Bivariate analysis using Pearson product-moment.

3. RESULTS

Table 1 shows that respondents experienced the Impact of the COVID-19 Pandemic, with an average value of 35. The pandemic is believed to have impacted respondents by 33.66-35.82%. Based on table 2 shows that respondents experienced mild depression with an average value of 12. Respondents also experienced moderate levels of anxiety, with an average value of 12, but respondents did not experience stress, as indicated by an average value of 14. Respondents' sleep quality was poor, with an average value of 20.

Based on table 3. shows that there is a relationship between the impact of the COVID-19 pandemic and depression in adolescents with a p-value of 0.01 < as well as the level of anxiety, stress, and sleep quality, all three with a p-value of 0.00 < 0.05. The strength of the relationship ranges from - 433 to -647, meaning the relationship is at a moderate to solid level. The direction of the negative relationship implies that the higher the impact of the COVID-19 pandemic, the lower the mental health of adolescents.

Table 1. Impact of the Covid 19 Pandemic

	Mean	Median	Standart Deviation	Standart Error	CI 95%	
					Lower	Upper
Impact of the Covid-19 Pandemic	35	34	7	548	33,66	35,82

Table 2. Adolescent Mental Health: Depression, Anxiety, Stress, Sleep Quality

	Me an	Median	Standart Deviasi	Standart Error	CI 95% Lower	Upper
Depression	12	11	8,85	74	10,56	13,49
Anxiety	12	11	8	613	10,7	13,2
Stress	14	14	8	684	12,76	15,46
Sleep Quality	20	20	8,25	667	18,37	21,01

Table 3. Analysis of the Relationship between the Impact of the Covid 19 Pandemic and Adolescent Mental Health

Impact of the Covid 19 Pandemic	CI 95%	Person Correlation	Sig (2- tailed)	N
	Lower	Upper		
Depression	-740	-528	-647	0.01
Anxiety	-669	418	-552	0.00
Stress	-724	-489	-612	0.00
Sleep Quality	-577	-291	-433	0.00

4. DISCUSSION

Based on the results of the study it shows that the results of the statistical test of the statistical program with the Pearson Product Moment test showed that there was a significant relationship between the impact of the COVID-19 pandemic and depression, anxiety levels, stress, and sleep quality in adolescents with a p-value between 0.00 and 0.01 <0.05. According to Jumrana (2020), most adolescents experience mild depression because adolescents get good support from their families and peers so that adolescents can overcome depression. Peers play a significant role in being a place to confide and share stories so that they can support improving health status to keep thinking positively and not thinking about negative things. Depression is a mental disorder that often occurs in adolescents; this is characterized by symptoms such as sleep disturbances and loss of appetite.³ Chronic stress can be very burdensome and affect the immune system. The journal states that adolescents who cannot adjust to the impact of the COVID-19 pandemic will experience depression.³ The implementation of distance learning during the COVID-19 pandemic can be related to learning readiness which is inseparable from student anxiety, which will later be the basis or benchmark for a person's ability to follow the

learning process on learning outcomes, and considering the results of interviews with teachers that the implementation of distance learning resulted in student grades decreasing.⁴ So, in learning readiness, it is necessary to avoid someone from anxiety. To clarify, in terms of learning readiness, it is important to prevent anxiety, as anxiety can negatively impact a person's ability to engage in and focus on the learning process. Reducing anxiety helps ensure that individuals are better prepared and able to absorb and retain information effectively.

Research conducted in developed countries shows that the incidence of stress in adolescents only occurs in the first week; this happens because there is a possibility that adolescents underestimate the risks associated with the COVID-19 pandemic.⁵ The factors causing stress levels in adolescents during the current pandemic are that they have difficulty learning online, adolescents assume that with this system, learning becomes less practical to implement, there are restrictions on activities, and the lack of information obtained by adolescents regarding the spread and anticipation of transmission of COVID-19, as well as the circulation of information or news about COVID-19 which is exaggerated, causing excessive worry.⁶ According to adolescents, the corona virus is hazardous. The lack

of interaction between adolescents and their peers and limited space for movement during the COVID-19 period can affect the mental health of adolescents. The learning process is carried out online, and the absence of interaction between teachers and students means that students must have personal responsibility for the learning they do and can complete their assignments online.⁷ Direct interaction between teachers and students is critical to knowing the progress of the student's learning process. With online learning, teachers pay attention to students in learning that is done online. In terms of learning readiness, it is essential to minimize anxiety, as it can hinder a student's ability to engage effectively. With online learning, teachers actively monitor and support students during virtual lessons to ensure they remain engaged, comprehend the material, and achieve learning objectives, despite the absence of face-to-face interaction. Online learning methods make students bored, and many students even experience stress because there is no direct interaction. The adaptation that occurs at this time can affect the mental health of adolescents, such as adolescents experiencing excessive anxiety and stress. This aligns with research states that distance learning implemented during this pandemic requires time to adapt. Before the coronavirus, they met face-to-face at school and could interact without restrictions.⁸ Many changes in students' lives during the pandemic have impacted the quality of students' sleep. Students must use electronic equipment as a learning medium during online learning. Coupled with the tendency for sedentary behavior during online learning, it is a factor that significantly influences the irregularity of the body's circadian rhythm. This increases the incidence of insomnia, which impacts the poor quality of students' sleep.⁹ The impact of the COVID-19 pandemic can affect the mental and psychological health of adolescents, such as psychological stress, social problems, mental illness, sadness, helplessness, despair, fear, anxiety, stress, and depression.³ They keep classes to a minimum while studying and move all children's activities to school. Distance learning happens daily, even through television and online. The involvement of parents and children in household activities helps children complete daily tasks. However, isolation weakens the child's body.

Based on the description above, the researcher assumes that there is a significant impact on adolescent mental health, particularly in terms of depression, anxiety, stress, and sleep quality. The

analysis reveals a significant relationship between the pandemic's impact and mental health issues in adolescents, influenced by online learning, limited social interaction, and increased anxiety and stress. Support from family and peers can help mitigate these effects; however, the need to adapt to online learning and excessive use of electronic devices leads to sleep disturbances and anxiety. Social isolation and the lack of direct interaction further exacerbate adolescents' mental well-being during the pandemic.

5. CONCLUSION

There is a relationship with moderate to solid strength between the impact of the COVID-19 pandemic and mental health in adolescents, including depression, anxiety levels, stress, and sleep quality.

6. CONFLICT OF INTEREST

There is no conflict of interest that influences the process or results of this research.

7. ACKNOWLEDGEMENT

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8. ETHICAL CONSIDERATION

There are no ethical issues. This study was approved by the Health Research Ethics Committee of the Universitas Mulawarman Samarinda.

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