

## MENTAL HEALTH PROBLEMS AMONG ADOLESCENT IN BANDA ACEH

### *Mental Health Problems Among Adolescent In Banda Aceh*

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#### Abstrak

**Latar Belakang:** Kesehatan mental pada remaja merupakan masalah yang terus meningkat setiap tahunnya dan semakin memprihatinkan. Masalah kesehatan mental yang sering terjadi pada remaja yaitu depresi, kecemasan, dan stres. Kondisi tersebut akan berdampak pada kemampuan remaja dalam belajar. **Tujuan:** Tujuan penelitian ini adalah untuk mengidentifikasi masalah kesehatan mental pada remaja. **Metode:** Jenis penelitian adalah kuantitatif dengan desain deskriptif menggunakan pendekatan *cross-sectional*. Populasi penelitian ini adalah siswa SMAN 5 Banda Aceh. Sampel berjumlah 94 remaja menggunakan teknik *purposive sampling* dengan kriteria inklusi. Pengumpulan data menggunakan aplikasi CERDAS yang berisi kuesioner DASS-21. Analisis data menggunakan analisis deskriptif. **Hasil:** Hasil penelitian menunjukkan bahwa tingkat depresi, kecemasan, dan stres remaja berada pada kategori sedang dengan persentase 39,4%, 52,1%, dan 36,2%. Lebih lanjut, hasil analisis menunjukkan bahwa anak perempuan memiliki skor lebih tinggi daripada anak laki-laki dalam masalah kesehatan mental. **Kesimpulan:** Diharapkan remaja dapat meningkatkan literasi kesehatan mental dan mendapatkan intervensi yang tepat, sehingga remaja lebih produktif dalam belajar dan kehidupan sehari-hari. **Kata kunci:** ansietas, aplikasi CERDAS, depresi, kesehatan mental, stress.

#### Abstract

**Background:** Mental health in adolescents is a problem that continues to increase every year and is increasingly concerning. Mental health problems that often occur in adolescents are depression, anxiety, and stress. This condition will have an impact on how well adolescents learn. **Objective:** The aim of this study is to determine mental health problems among adolescents. **Method:** The research method is quantitative, with a descriptive design and a cross-sectional approach. The population of this study is the students of SMAN 5 Banda Aceh. The sample consisted of 94 adolescents using purposive sampling techniques with inclusion criteria. Data was collected using a CERDAS application containing the DASS-21 questionnaire. Data analysis used descriptive analysis. **Result:** The results showed that the level of adolescent depression, anxiety, and stress was in the moderate category with a percentage of 39.4%, 52.1%, and 36.2%. We find that girls scored higher than boys in mental health problems. **Conclusion:** It is hoped that adolescents can improve mental health literacy and get the right intervention, so that adolescents are more productive in learning and everyday life. **Keywords:** anxiety, CERDAS application, depression, mental health, stress.

#### INTRODUCTION

Adolescence is a critical time for social and emotional growth, which is vital for mental health. Adolescents go through many changes, including mental, emotional, physical, and social ones. These changes will affect how they view the world, how they behave, how independent they become, and how they make decisions (Wilson, Hockenberry, and Rodgers, 2017). Adolescents frequently experience various external influences during this transitional stage, such as hormone shifts, stress from school, self-identity exploration, and interpersonal connections (Aldris, 2024). Adolescents also have trouble controlling their emotions because of the changes that come with

this stage of life. Adolescents' mental health and their capacity to adjust to internal changes are intimately linked (Florensa and associates, 2023). The goal of mental health is to preserve and improve an individual's mental state to ensure it is healthy and free from issues. If adolescents are unable to cope with obstacles and challenges effectively, it will lead to the emergence of mental health issues (Whittle, Zhang, Rakesh, 2024).

Adolescents are the age group most vulnerable to experiencing mental health problems. Mental health issues begin to emerge when teenagers are 14 years old (Renwick, et al., 2024). The World Health Organization (WHO, 2021) estimates that 1 in 7 adolescents aged 10–14 years worldwide, or 14 percent, experience mental health problems, and most of these conditions go unrecognized and untreated. The mental health problems often experienced by adolescents include depression, anxiety, and stress. According to the WHO (2021), 2.8% of adolescents aged 15-19 and 1.1% of adolescents aged 10-14 experience depression. Anxiety disorders reach 3.6% among adolescents aged 10-14 years and 4.6% among adolescents aged 15-19 years. Based on this data, the age group of 15-19 experiences mental health issues at a higher rate compared to the 10-14 age group. Anxiety contributes to 3.7% of all adolescent mental health problems, followed by depression at 1% and stress at 0.9% (Wahdi, Wilopo, Erskine, 2023).

Several risk factors for the occurrence of depression, anxiety, and stress in adolescents are caused by older age, suicidal thoughts, experiencing bullying more than three times in the past month, engaging in sedentary behavior (Marthoenis & Ocak, 2022), parenting styles (Cadman et al., 2022), and conflicts with peer (Pande, Wulandari, Wijaya, 2024). Mental health problems often arise when a person is vulnerable to stress and continue throughout life. If not properly addressed, adolescents with mental health issues may experience various disorders such as cognitive development disorders, difficulties in learning due to their inability to concentrate on lessons, poor memory, or inappropriate behavior in the school environment, which can lead to an increase in delinquency and criminality in adulthood that may occur at home, school, or even with peers. Mental health problems can also disrupt healthy child development and will have an impact into adulthood. These conditions can interfere with physical and mental health and limit opportunities for living a good and quality life in adulthood (WHO, 2021). Given the wide range of risk factors and impacts that can arise from mental health problems in adolescents, early detection of mental health problems in adolescents is essential to prevent more severe consequences. According to the description, the researchers want to determine mental health issues among adolescents in Banda Aceh.

## **METHOD**

This study is quantitative, using a descriptive design with a cross-sectional approach. The population of this study is all SMAN 5 Banda Aceh students. Data collection was conducted through purposive sampling with inclusion criteria of being in 12th grade, aged 17-18 years, willing to be respondents, using a mobile phone, and not being unwell or sick. The sample size was 94 people. The measurement of mental health problems in adolescents (depression, anxiety, and stress) is conducted using a questionnaire available in an application called CERDAS, which can be accessed through the website <https://cerdas.usk.ac.id/>. The questionnaire used in the CERDAS application is the Depression Anxiety Stress Scales (DASS)-21, consisting of 21 items with a Likert scale. The system utilizes web and mobile technology, and the results are processed to determine the levels of depression, anxiety, and stress in adolescents. DASS-21 is a valid and reliable instrument for assessing anxiety, stress, and depression levels. The results of the validity test show a point measure correlation value of  $> 0.40$  and a reliability value of 0.99, meaning that the quality of the items is very good for detecting depression, anxiety, and stress (Ifdil et al., 2020). Data analysis using a descriptive approach with frequency distribution. This research has received ethical clearance from the Ethics Committee of the Faculty of Nursing, Syiah Kuala University with number 113003110624.

## RESULT AND DISCUSSION

The results of this study consist of respondent characteristics (age and gender), a general description of the mental health levels (depression, anxiety, and stress) of adolescents, and a description of the mental health status (depression, anxiety, and stress) of adolescents based on gender.

**Tabel 1. Characteristics of respondents (n=94)**

Characteristics of respondents	Result		
	Mean $\pm$ SD	Frequency (f)	Percentage (%)
Age	17,14 $\pm$ 0,404		
Gender			
Female		54	57,4
Male		40	42,6

Table 1 shows that the respondents' average age is 17.14 years, the majority of respondents are female, with a percentage of 57.55%, while male respondents account for 42.55%.

**Tabel 2. The level of mental health (depression, anxiety, and stress) among adolescents (n=94)**

No	The Level of Mental Health Problems	Level	Frequency (f)	Percentage (%)
1	Depression	None	28	29,8
		Mild	21	22,3
		Moderate	37	39,4
		Severe	8	8,5
		Very severe	0	0
2	Anxiety	None	7	7,4
		Mild	15	16,0
		Moderate	49	52,1
		Severe	13	13,8
		Very severe	10	10,6
3	Stress	None	26	27,7
		Mild	25	26,6
		Moderate	34	36,2
		Severe	9	9,6
		Very severe	0	0

Based on Table 2, it was found that the highest level of depression is in the moderate category with a percentage of 39.4%, followed by mild depression at 22.3%, and no depression at 29.8%. The level of anxiety among adolescents is highest in the moderate category, with a percentage of 52.1%. The stress level among adolescents is highest in the moderate category, with a percentage of 36.2%.

**Table 3. Levels of depression, anxiety, and stress among adolescents based on gender**

Category	Gender (n=94)			
	Male (n=40)		Female (n=54)	
	f	%	f	%
Depression				
None	9	22,5%	19	35,2%

Mild	10	25%	11	20,4%
Moderate	17	42,5%	20	37%
Severe	4	10%	4	7,4%
Very Severe	0	0%	0	0%
Anxiety				
None	6	15%	1	1,9%
Mild	8	20%	7	13%
Moderate	16	40%	33	61,1%
Severe	7	17,5%	6	11.1%
Very Severe	3	7,5%	7	13%
Stress				
None	12	30%	14	25,9%
Mild	11	27,5%	14	25,9%
Moderate	14	35%	20	37%
Severe	3	7,5%	6	11,1%
Very Severe	0	0%	0	0%

Table 3 demonstrates that there are male adolescents have a moderate level of depression, with 42.5% of all respondents. The same thing is also seen in the level of depression of female, which is in the moderate category of 37% of all respondents. The level of anxiety in male out of 40 respondents is in the moderate category of 16 respondents, and the level of anxiety in female is also in the moderate category, of 33 out of 54 respondents. Furthermore, the stress level in male and female is mostly in the moderate category, namely 35% (male) and 37% (female).

Based on the research conducted, the results show the prevalence of mental health issues among adolescents, particularly related to depression, anxiety, and stress. The levels of depression, anxiety, and stress among adolescents are highest in the moderate category. According to Santrock (2007), adolescence is a transitional period of development between childhood and adulthood that includes biological, cognitive, and socio-emotional changes. The process of developmental transition and several changes experienced by adolescents can lead to stress, anxiety, and even depression, making them vulnerable to mental health issues (Suswati et al., 2019). Mental health problems can arise as a result of unaddressed developmental obstacles (Pribadi et al., 2022).

According to Fakhriyani (2019), mental health is related to a person's holistic self-development, both physically and psychologically. In addition, mental health includes efforts to cope with stress, learning to adapt to new environments, building relationships with others, and making decisions. Adolescents' mental health is one of the most pressing issues today. Although adolescence is a crucial period for enhancing mental health, over 50% of high school students face challenges related to their mental well-being (Suswati et al., 2019). Many adolescents with mental health issues continue to struggle throughout their adult lives (Kessler et al., 2005).

Adolescents with mental health issues are very vulnerable to human rights violations, poor physical health, educational difficulties, risky behaviors, discrimination, and stigma that affect their willingness to seek help (Suswati, Budiman, & Yuhbaba, 2019). This is supported by a statement from the WHO (2022) which states that adolescents with mental health issues are very vulnerable to being ostracized in their social environments, not being valued, and being negatively labeled by peers and the surrounding community. This mistreatment often makes it difficult for them to obtain a proper education, defend themselves, and secure their rights.

According to Riskesdas data (2018), the prevalence of emotional mental disorders such as stress, depression, and anxiety among adolescents in Indonesia is 9.8% of the total number of adolescents in the country. The developmental stage in adolescents can be disrupted if they experience one of the mental health issues, such as prolonged stress. Prolonged stress leads to a crisis of maturity (Sutejo, 2017). Prolonged stress can occur due to disturbances in balance and a

combination of other factors, namely biological, psychological, personality, and social. (sekolah, keluarga, teman sebaya). The lifestyle chosen by adolescents, the friendships they build, and the coping skills they possess can influence their stress levels (Priyoto, 2019).

Stress can arise from the lack of balance between demands and the resources available to adolescents; the greater the gap, the higher the level of stress experienced by adolescents (Yosep & Sutini, 2014). Stress is a psychological reaction that arises due to pressure, whether internal or external. Stress in adolescents is generally caused by certain conditions, such as when a family member suffers, substance dependence, depression, peer influence, experiencing failure, pressure from parents or the surrounding environment, or even from themselves, as well as feelings of anger and a desire to rebel (Ratnawati & Astari, 2019).

Someone who experiences stress is also likely to feel anxious. According to WHO (2019), there are 301 million people living with anxiety disorders, including 58 million children and adolescents. The Indonesian National Adolescent Mental Health Survey (I-NAMHS) in 2022 states that anxiety is a normal part of life. Many people worry about things like health, money, or family issues. However, anxiety disorders involve more than just temporary worries or fears. For people with anxiety disorders, the anxiety does not go away and can worsen over time. These symptoms can disrupt daily activities, such as work performance, school assignments, and social relationships. Furthermore, it was stated that the most common mental health disorder experienced by adolescents is anxiety disorder, at a rate of 3.7%.

Anxiety is a state when negative emotions arise due to concerns about unforeseen dangers that may occur in the future (Annisa & Ifdil, 2016). Anxiety is actually a normal feeling that humans experience; when there is a sense of unease, it indicates that a person has been given information about a potential threat (Suwandi & Malinti, 2020). However, the impact of excessive anxiety can disrupt the learning process, lead to insomnia, make it difficult to focus or concentrate, cause forgetfulness, and tend to result in feelings of frustration and irritability. (Fitria & Ifdil, 2021).

Factors that influence anxiety levels in adolescents can stem from both internal and external factors. Adolescents undergoing many changes need family support to adapt to those changes. Additionally, this is also influenced by the adolescent personality; for instance, someone with an introverted personality tends to be reserved, struggles to accept changes or adapt, and often overthinks, which leads introverted individuals to have a higher average level of anxiety. A good relationship with the surrounding environment or with family provides additional positive influence in facing situations and reduces anxiety levels. (Sitepu & Simanungkalit, 2019).

In addition, a common mental health issue experienced by adolescents is depression. According to WHO (2022), depression is a common mental health condition that can affect anyone. This is marked by a bad mood or a loss of pleasure and interest in activities over a long period of time. The depressive episode lasts almost all day, for at least two weeks. People with depression may experience sleep disturbances and changes in appetite. They have feelings of inferiority, thoughts of death, despair about the future, as well as fatigue and poor concentration that often occur. Furthermore, the WHO (2022) explains that depression is the leading cause of disability among adolescents. In addition, depression can be a cause of suicide, which is the fourth leading cause of death among adolescents worldwide. Based on the Basic Health Research (Risesdas) conducted in 2018 by the Health Research and Development Agency, data shows that 6.2% of the Indonesian population aged 15-24 experience depression. This is supported by data from the Indonesian Health Survey (SKI) in 2023, which states that the highest prevalence of depression is found in the age group of 15-24 years, at 2%.

The results of this study indicate that based on gender, female experience mental health problems more frequently than male. This finding is consistent with data from SKI (2023), which shows that female have the highest prevalence of depression compared to boys, at 1.8%. Furthermore, the research by Abas, Boekoesoe, and Tarigan (2023) reveals that 19% of female experience emotional mental health disorders more than their male counterparts. This is due to the hormonal differences between male and female, which affect their responses when facing stressors. The testosterone hormone in male makes them more stable in carrying out activities

compared to estrogen, which is believed to influence female psychology in their behavior when solving problems. This is what makes female more susceptible to mental health issues compared to male (Matud, Ibanez, Fortes, Bethencourt, 2023). In addition, the average level of emotional difficulties in female is already higher compared to male at the age of 11–12 years and continues to increase year by year. However, the emotional difficulties of male remain relatively stable over time, even slightly decreasing, which results in a difference in emotional difficulties between male and female (Yoon et al., 2023).

Depression in adolescents can lead to negative impacts, including difficulties in concentration, limited social interactions, disrupted self-adjustment, and even the emergence of negative thoughts, such as suicidal ideation and the risk of suicide (Mandasari & Tobing, 2020). Symptoms of depression in adolescents are often displayed through feelings of irritability, sadness, fear, lack of enthusiasm, and conflicts with friends and family (Rahmayanti & Rahmawati, 2018). Dianovinina's research (2018) found that several symptoms of depression exhibited by adolescents include 82% feeling like they are truly bad individuals, 65% being unable to concentrate, 41% feeling uninterested in doing anything, and 35% experiencing significant weight changes.

Most of these mental health issues go unnoticed and do not receive appropriate treatment. Improper and slow handling of depression cases can lead to death by suicide. Only 10.4% of adolescents with depression seek treatment. Adolescents with the highest prevalence of depression are the group that receives the least treatment (Kementerian Kesehatan RI, 2024). According to the Indonesian National Adolescent Mental Health Survey (I-NAMHS) in 2022, very few adolescents seek professional assistance for mental health problems. Counselling or mental health services are used by only 2.6% of teenagers with mental health difficulties to assist them in dealing with their emotional and behavioural challenges. This figure is still very low compared to the number of adolescents who actually need assistance in addressing their mental health challenges.

Mental health screening is a brief and culturally sensitive process designed to identify groups of children and adolescents who may be at risk of experiencing mental health disorders, requiring immediate attention, intervention, or referral for diagnostic assessment. The main purpose of screening is to identify mental health issues, using valid and reliable screening tools, and to determine whether these issues require further assessment (O'Connell et al., 2009). Mental health issues have significant implications for various aspects of adolescents' lives, including their ability to engage in education, participate in constructive family relationships, make friends, and develop independence. Therefore, detection, treatment, and support are fundamental parts of the services that will be provided to the youth population (Hagell et al., 2015).

## CONCLUSION

The conclusion of this study is that the levels of depression, anxiety, and stress among adolescents are highest in the moderate category. Females experiencing the most depression, anxiety, and stress than male adolescents.

## RECOMENDATION

This research is expected to serve as foundational data for future studies and to inform respondents and school authorities to seek or request health assistance to reduce the mental health issues faced by adolescents, thereby minimizing the negative impacts on them in adulthood

## REFERENCE

Abas, J., Boekoesoe, L., & Tarigan, S. F. N. (2023). Analisis determinan gangguan kesehatan mental emosional remaja di SMA Negeri 1 Limboto. *Health Information : Jurnal Penelitian*. 15(2), e1302. Retrieved from <https://myjurnal.poltekkes-kdi.ac.id/index.php/hijp/article/view/1302>



- Aldris, M. (2024) Kesehatan mental remaja menjaga kesejahteraan di masa transisi. *Psikologi*. 1(4).
- Annisa, D. F., & Ifdil, I. (2016). Konsep kecemasan (Anxiety) pada lanjut usia (Lansia). *Konselor*. 5(2): 93-102. doi: 10.24036/02016526480-0-00
- Cadman, T., Paul, E., Culpin, I., Sallis, H., Bould, H., Pearson, R. (2022). Parental monitoring longitudinally associates with reduced risk of adolescent mental health problems. *Journal of Affective Disorders Reports*. 10 :1-5. Available from: <https://doi.org/10.1016/j.jadr.2022.100420>
- Center for Reproductive Health, University of Queensland, & Johns Bloomberg Hopkins School of Public Health. (2022). *Indonesia – National Adolescent Mental Health Survey (I-NAMHS): Laporan Penelitian*. Pusat Kesehatan Reproduksi.
- Dianovinina, K. (2018). Depresi pada remaja: gejala dan permasalahannya. *Journal Psikogenesis*. 6(1), 69–78. doi: 10.24854/jps.v6i1.634
- Fakhriyani, D.V. (2019). *Kesehatan mental*. Jawa Timur: Duta Media Publishing.
- Fitria, L., & Ifdil, I. (2021). Kecemasan remaja pada masa pandemi Covid-19. *Jurnal Penelitian Perawat Profesional*. 3(3), 483–492. doi: 10.37287/jppp.v3i3.530
- Florensa, F., Hidayah, N., Sari, L., Yousrihatin, F., & Litaqia, W. (2023). Gambaran kesehatan mental emosional remaja. *Jurnal Kesehatan*. 2023. 12(1), 112–117. Available from: <https://doi.org/10.46815/jk.v12i1.125>
- Hagell, A., & Coleman, J. B. F. Key data on adolescence. *Association for Young People's Health*. 2015.
- Hockenberry, M., Wilson, D., & Rodgers, C. (2017) *Wong's Essentials Of Pediatric Nursing*, 10th Edition. St. Louis: Elsevier.
- Ifdil, I., Syahputra, Y., Fadli, R. P., Zola, N., Putri, Y. E., Amalianita, B., Rangka, I. B., Suranta, K., Zatrachadi, M. F., Sugara, G. S., Situmorang, D. D. B., & Fitria, L. (2022). The depression anxiety stress scales (DASS-21): an Indonesian validation measure of the depression anxiety stress. *COUNS-EDU: The International Journal of Counseling and Education*, 5(4), 205–215. <https://doi.org/10.23916/0020200536840>
- Kementerian Kesehatan Republik Indonesia. (2024). *Laporan Tematik Survei Kesehatan Indonesia Tahun 2023: Potret Indonesia sehat*. Jakarta: Badan Kebijakan Pembangunan Kesehatan. 2024.
- Kementerian Kesehatan Republik Indonesia. (2024). *Potret Indonesia sehat*. Jakarta: Badan Kebijakan Pembangunan Kesehatan.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*. 62(6), 593–602.
- Mandasari, L., & Tobing, D. L. (2020). Tingkat depresi dengan ide bunuh diri pada remaja. *Jurnal Keperawatan*. 2(1), 1–7.
- Marthoenis, M., Schouler-Ocak, M. (2022). Investigating the Prevalence of Psychological Distress and Its Associated Factors Among Indonesian Adolescents: A Cross-Sectional Study. *Child Adolesc Soc Work J*. 40, 857–866. <https://doi.org/10.1007/s10560-022-00818-8>
- Matud, M. P., Ibáñez, I., Fortes, D., & Bethencourt, J. M. (2023). Adolescent Stress, Psychological Distress and Well-Being: A Gender Analysis. *Child & Youth Services*. 45(3), 300–323. <https://doi.org/10.1080/0145935X.2023.2210833>
- O'Connell, M. E., Boat, T., & Warner, K. E. (2009). Committee on the prevention of mental disorders and substance abuse among children, youth, and young adults: Research advances and Promising interventions, preventing mental, emotional, and behavioral disorders among young people, progress and possibiliti. *National Academies Press*. doi: 10.17226/12480
- Pande, N. L. P. I. P. ., Wulandari, N. P. D. ., & Wijaya, I. P. A. (2024). Hubungan Antara Dukungan Teman Sebaya Dengan Tingkat Kecemasan, Stres, dan Depresi Pada Siswa Kelas X di SMA Negeri 2 Abianseml: The Correlation Between Peer Support on The

- Levels of Anxiety, Stress, and Depression on the Ten Grade Students at Senior High School 2 Abiansema. *Journal Nursing Research Publication Media (NURSEPEDIA)*, 3(1), 1–11. <https://doi.org/10.55887/nrpm.v3i1.48>
- Pribadi, T., Elliya, R., Furqoni, P. D., Ernita, C., Desmonika, C., Sari, E. N., & Erlianti, F. (2022). Penyuluhan kesehatan tentang kesehatan jiwa pada remaja. *Journal of Public Health Concerns*. 2(1), 1-9.
- Priyoto, P. (2019). *Konsep manajemen stres*. Nuha Medika.
- Rahmayanti, Y. E., & Rahmawati, T. (2018). Hubungan dukungan keluarga dengan kejadian depresi pada remaja awal. *Jurnal Asuhan Ibu & Anak*. 3(6), 8-20.
- Ratnawati, D., & Astari, I. D. (2019). Hubungan tingkat stres dengan perilaku berpacaran pada remaja di SMA X Cawang Jakarta Timur. *Jurnal Profesi Medika*. 13(1), 15-21.
- Renwick, L., Pedley, R., Johnson, I. *et al.* (2024). Mental health literacy in children and adolescents in low- and middle-income countries: a mixed studies systematic review and narrative synthesis. *Eur Child Adolesc Psychiatry*. 33, 961–985. <https://doi.org/10.1007/s00787-022-01997-6>
- Riskesdas. (2018). *Laporan Nasional Riskesdas*. Kementrian Kesehatan RI: Badan Penelitian dan Pengembangan Kesehatan.
- Santrock, J. W. (2007). *Remaja*. Alih bahasa: Benedictine Widiasinta. Jakarta: Erlangga.
- Sitepu, Y. R., & Simanungkalit, J. N. (2019). Kecemasan remaja. *Jurnal Penelitian Perawat Profesional*. 1(11), 89–94.
- Suswati, W. S. E., Budiman, M. E. A., & Yuhbaba, Z. N. (2023). Kesehatan mental pada remaja di lingkungan sekolah menengah atas Wilayah Urban dan Rural Kabupaten Jember. *Jurnal Keperawatan Jiwa (JKJ): Persatuan Perawat Nasional Indonesia*. 11(3), 537-544
- Sutejo. (2017). *Keperawatan kesehatan jiwa prinsip dan praktik asuhan keperawatan jiwa*. Pustaka Baru Press.
- Suwandi, G. R., & Malinti, E. (2020). Hubungan tingkat pengetahuan dengan tingkat kecemasan terhadap Covid-19 pada remaja di SMA Advent Balikpapan. *Malahayati Nursing Journal*. 2(4), 677-685. doi: 10.33024/manuju.v2i4.2991
- Wahdi, A., Wilopo, S., & Erskine, H. (2023). The Prevalence of Adolescent Mental Disorders in Indonesia: An Analysis of Indonesia – National Mental Health Survey (I-NAMHS). *Journal of Adolescent Health*. 72(3).
- Whittle, S., Zhang, L. & Rakesh, D. (2024). Environmental and neurodevelopmental contributors to youth mental illness. *Neuropsychopharmacol*. Available from: <https://doi.org/10.1038/s41386-024-01926-y>.
- World Health Organization. (2022). *World mental health report : Transforming mental health for all*.
- World Health Organization (WHO). (2021). Mental health of adolescents. Available from: <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>
- Yoon, Y., Eisenstadt, M., Lereya, S.T. *et al.* (2023). Gender difference in the change of adolescents' mental health and subjective wellbeing trajectories. *Eur Child Adolesc Psychiatry*. 32, 1569–1578. <https://doi.org/10.1007/s00787-022-01961-4>
- Yosep, I., & Sutini, T. . (2014). *Buku ajar keperawatan jiwa dan advance mental health nursing*. Bandung: Refika Aditama