

Prevalence of depression, anxiety, and stress among first-year midwifery students: a descriptive analysis

Nurul Mahmudah*, Yekti Satriyandari

Study Program of Midwifery, Faculty of Health Sciences, Universitas Aisyiyah Yogyakarta, Yogyakarta, Indonesia

Abstract. New students are individuals who are on their way to personal maturity with a change in status from a student to a student. Some of the stress experienced by students comes from the school or academic environment, too many assignments and lack of interest in courses. This research method is a descriptive research. The population is a new student of midwifery. Sample withdrawal was carried out using *the purposive sampling* method of 92 respondents. The DASS-21 instrument, which measured anxiety, stress, and depression levels, was the research tool utilized. Univariate data analysis presented with frequency distribution in the form of percentages. As a result, the category of depression with the most normal was 60 respondents (65%) and the lowest severe depression was 2 respondents (2%). Anxiety category the most low anxiety 26 respondents (28%) and the least severe anxiety 12 respondents (13%), Normal stress category 73 respondents (79%) and least severe stress 1 respondent (1%). Conclusion, it was found that 2 respondents (2%) were in the category of severe depression and 1 respondent (1%) in the category of severe stress that needed to be treated immediately.

1 Introduction

New students are individuals who are on their way to personal maturity with a change in status from a student to a student. It will cross his mind how to be able to study well, achieve the goals that he has brought from the beginning from the village to the university and get a good job. New students do not have experience related to how the learning process is carried out in higher education. This tends to encourage them to more easily experience psychological disorders in the learning process [1]. Some of the stress experienced by students comes from the school or academic environment. Too many assignments, lack of interest in courses, learning methods that change from offline to online [2].

The more complex the system and lecture materials, the more significant the changes that new students need to adapt. A theory- and practice-based learning system that aims to help

* Corresponding author: nurulmahmudah@unisayogya.ac.id

others is a hallmark of the health science study program [3]. Psychological disorders can be anxiety disorders, stress can even escalate into depression. Anxiety is defined as a state of worry, discomfort, uncertainty, or intense fear brought on by a threat or frightening sensation, the true cause of which is unknown. Because anxiety frequently results in perception distortion and confusion, it has an impact on students' learning outcomes. These abnormalities can hinder learning by impairing concentration, memory, and the capacity to make connections between different things [4].

Prolonged anxiety that occurs continuously can interfere with daily activities. An individual may experience stress as a result of persistent anxiety. Stress is a psychological reaction that people have when they are confronted with situations that they feel have gone too far or are deemed challenging. Academic stress is one of the parts of stress experienced by students due to academic demands and responsibilities. Academic stress is caused by *academic stressors* which are causes of stress such as a lot of assignments, low grades or achievements, and anxiety about facing exams [5]. Stress and anxiety disorders if not treated properly can lead to more serious psychological disorders such as depression. Depression is a disorder that occurs due to many life events that cause stress for a person. In addition, depression can also arise as a result of someone who judges themselves negatively constantly. These psychological disorders will certainly be able to interfere with and affect the learning process and learning outcomes later. There is still a lack of depth in investigating the specific mental health experienced by new students of the Bachelor of Midwifery Study Program. For this reason, the author's goal in this study is to analyze the Mental Health of New Students in Facing the Lecture Process in the Midwifery Undergraduate Study Program.

2 Methods

This research is a descriptive research. The population in this study is new students of the Bachelor of Midwifery Study Program. Sample withdrawal was carried out using *the purposive sampling method* with inclusion and exclusion criteria. The inclusion criteria are new students of the Midwifery Undergraduate Study Program who actively attend lectures in odd semesters and are willing to become respondents, while the exclusion criteria are new students of the Midwifery Undergraduate Study Program who actively participate in lectures in odd semesters and are not willing to become respondents. Respondents in this study were collected in classrooms with a total of 92 respondents. The research instrument used was to adopt a standard instrument from DASS-21 which included an assessment of the level of depression, anxiety, and stress with the following assessment:

Table 1. Categorization of Psychological Condition Identification Results (With DASS-21)

Category	Depression	Anxiety	Stress
Normal	0 - 4	0 - 3	0 - 7
Low	5 - 6	4 - 5	8 - 9
Keep	7 - 10	6 - 7	10 - 12
Heavy	11 - 13	8 - 9	13 - 16
Very Heavy	≥14	≥10	≥17

The data was analyzed univariately which was presented with a frequency distribution in the form of percentages.

3 Results and discussion

From 92 research samples conducted in semesters 1A and 1B of the Bachelor of Midwifery Study Program, the results were obtained:

Table 2. Respondent characteristics

Age	f	%
17	9	9,8
18	49	53,3
19	25	27,2
20	7	7,6
21	1	1,1
22	1	1,1
Total	92	100

Based on the age of 18 years, 49 respondents (53.3%) and the least at the age of 21 and 22 years, 1 respondent each (1.1%).

Students are at risk of experiencing mental health disorders because students are a group of people who are in the process of becoming adults, have characteristics and are susceptible to emotional disorders [6] states that unexpected changes in circumstances or situations in individuals can cause psychological stress. Activities that are often done every day tend to form a certain pattern that can minimize the amount of energy and resources in the individual's body to expend. When the individual's habits change, the new situation pressures the individual to use greater energy to adapt. Anxiety and mood problems are more prevalent in women and frequently manifest throughout adolescence. This is because the sympathetic nervous system and the HPA (Hypothalamic Pituitary Adrenal) axis are activated differently in men and women when the body is under stress [7]. Men have stronger sympathetic nervous system and HPA axis reactions, which affect how they respond to stimuli. Because sex hormones like estrogen and progesterone reduce the HPA axis and sympathoadrenal responses, which in turn reduces the negative feedback of the hormone cortisol to the brain, women are more likely to experience stress. The respondents in this study were all midwifery students, all of whom were women.

Table 3. Result

Category	Depression		Anxiety		Stress	
	f	%	f	%	f	%
Normal	60	65	17	18	73	79
Low	13	14	26	28	6	6,5
Keep	17	18	24	26	12	13
Heavy	2	2	13	14	1	1
Very Heavy	0	0	12	13	0	0
Total	92	100	92	100	92	100

The category of depression with the most normal was 60 respondents (65%) and the lowest severe depression was 2 respondents (2%). Anxiety category the most low anxiety 26 respondents (28%) and the least severe anxiety 12 respondents (13%), Normal stress category 73 respondents (79%) and least severe stress 1 respondent (1%).

Mental health problems are public health issues that require special attention, especially among students [8]. The results of mental health research on 1st semester students of the Midwifery Study Program show mental health problems in the form of depression, anxiety and stress. Research [9] suggests that there are around 20 to 40 percent of college students suffering from varying degrees of depression, anxiety, and stress and is consistent with

several previous relevant studies, which concluded that about one-fifth of students struggle with varying degrees of mental health problems. For new students, what they experience may be due to adjustment disorders, especially when students have to be separated from their parents and friends and have to adjust to a new environment [9].

These mental health problems will clearly be a threat to students' mental health which can have an impact on educational, social and economic consequences such as poor academic performance and increased risk of dropping out of college [10]. The importance of maintaining students' mental health is closely related to preventive and promotive efforts that can be carried out by educational institutions. Preventive efforts aim to identify and address risk factors that can lead to mental health disorders, while promotive efforts aim to improve mental well-being.

The most common mental health conditions among college students are sleep quality disorders, anxiety, and depression experienced by college students [11]. Digital-based mental health services [12], online counseling and psychotherapy [13], and mental health education programs at the University [14]. Students have financial worries, stigma, shame, and lack of information about how to access mental health services as barriers to receiving services [15]. Therefore, digital-based or online-based interventions are very important and can be an alternative alternative solution to expand access to mental health services on campuses and can reach students in need more widely.

Based on the above discussion, it can be concluded that combining internal and external positive resources can be an effective alternative solution to prevent and alleviate mental health problems that occur among students.

4 Conclusion

In this study, the majority of respondents were in the normal category (60 respondents, 65%). However, there were 2 respondents (2%) who experienced Severe Depression. The highest level of anxiety was in the Low category (26 respondents, 28%). However, a number of respondents were found with significant levels of anxiety, namely the Heavy (13 respondents, 14%) and Very Heavy (12 respondents, 13%) categories. Stress The majority of respondents were in the normal category (73 respondents, 79%), with only 1 respondent (1%) experiencing severe stress.

Overall, although most new students are in a normal mental state, there is a significant proportion (especially in the anxiety aspect) who experience psychological disorders ranging from Low to Very Severe, indicating a challenge of self-adjustment.

The results showed that although the rates of depression and severe stress tended to be low, significant levels of anxiety (Heavy and Very Heavy totaled 27%) were the main issues that needed attention. The presence of anxiety and other mental health issues can threaten academic performance, sleep quality, and increase the risk of dropping out of college. This confirms that the transition process from student to student, with complex academic demands, has triggered adjustment disorders in some new students.

References

- [1] R. Sepriani, "Analisis Psikologis Mahasiswa Baru Jurusan Pendidikan Olahraga Saat Pembelajaran Daring di Masa Pandemi Covid-19," *J. Pendidik. dan Olahraga*, vol. 3, no. 10, pp. 9–16, 2020.
- [2] F. Andiarna, "Effects of Online Learning on Student Academic Stress During the Covid-19 Pandemic," *J. Psikol.*, vol. 16, no. 2, pp. 139–150., 2020.
- [3] L.-J. T. Bogossian F, McKenna L, "Mobilising the nursing student workforce in COVID-19: The value proposition Nothing," *Collegian*, vol. 27, no. 2, pp. 147–149, 2020.

- [4] L. Hasanah, U., Ludiana, Immawati, & PH, “Gambaran Psikologis Mahasiswa Dalam Proses Pembelajaran Selama Pandemi Covid-19.,” *J. Keperawatan Jiwa*, vol. 8, no. 3, pp. 299–306, 2020.
- [5] S. Chita Putri Harahap, A., Permatasari Harahap, D., & Rivai Harahap, “Analisis Tingkat Stres Akademik Pada Mahasiswa Selama Pembelajaran Jarak Jauh Dimasa Covid-19.,” *J. Kaji. Konseling Dan Pendidik.*, vol. 3, no. 1, pp. 10–14, 2020.
- [6] P. S. and N. H. Eva N, “Pengaruh Dukungan Sosial Terhadap Kesejahteraan Psikologis Mahasiswa Dengan Religiusitas Sebagai Moderator,” *J. Kaji. Bimbing. Dan Konseling*, vol. 5, no. 3, pp. 122–131, 2020.
- [7] J. Rincón-Cortés M, JP Herman, S Lupien and M. and R. Shansky, “Stress: Influence Of Sex, Reproductive Status And Gender.,” *Neurobiol. Stress*, 2019, [Online]. Available: doi: 10.1016/j.ynstr.2019.100155.
- [8] C. et al Wang, ““Socio-demographic characteristics, lifestyles, social support quality and mental health in college students: a cross-sectional study.,”” *BMC Public Health*, p. 1583, 2022.
- [9] W. Liu, X., Ping, S. and Gao, “Changes in Undergraduate Students’ Psychological Well-Being as They Experience University Life.,” *Int. J. Environ. Res. public Heal.*, vol. 16, no. 16, 2019.
- [10] F. et al. Campbell, ““Factors that influence mental health of university and college students in the UK: a systematic review,”” *BMC Public Health*, vol. 22, no. 1, 2022.
- [11] E. Ibarra-Mejia, G., Lusk, M., & Umucu, “Mental Health Among College Students During the COVID-19 Pandemi at a Hispanic-Serving Institution,” *Health Promot. Pract.*, vol. 24, no. 3, pp. 455–464, 2022.
- [12] Y. Choudhury, A., Kuehn, A., Shamszare, H., & Shahsavar, “Analysis of Mobile App-Based Mental Health Solutions for College Students: A Rapid Review.,” *Healthc. (Switzerland)*, vol. 11, no. 2, 2023.
- [13] B. Zeren, S. G., Erus, S. M., Amanvermez, Y., Genc, A. B., Yilmaz, M. B., & Duy, “The effectiveness of online counseling for university students in Turkey: A non-randomized controlled trial,” *Eur. J. Educ. Res.*, vol. 9, no. 2, pp. 825–834, 2020, [Online]. Available: <https://doi.org/10.12973/eu-jer.9.2.825>.
- [14] S. Briand, C., Hakin, R., Macario de Medeiros, J., Luconi, F., Vachon, B., Drolet, M.-J., Boivin, A., Vallée, C., & Montminy, “Learner Experience of an Online Co-Learning Model to Support Mental Health during the COVID-19 Pandemi: A Qualitative Study.,” *Int. J. Environ. Res. Public Heal.*, vol. 20, no. 3, 2023, [Online]. Available: <https://doi.org/10.3390/ijerph20032498>.
- [15] J. Fu, W., Wang, C., Zou, L., Guo, Y., Lu, Z., Yan, S., & Mao, “Psychological health, sleep quality, and coping styles to stress facing the COVID-19 in Wuhan, China.,” *Transl. Psychiatry*, vol. 10, no. 1, 2020, [Online]. Available: <https://doi.org/10.1038/s41398-020-00913-3>.