Psychosocial Stressors Associated with Depression Among Young Adults in Bandung, West Java, Indonesia.

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Abstract

The early stage of adulthood is a critical period of interpersonal, educational, and career development, leading to an increased risk of depression. While studies examining psychosocial stressors among depressed young adults have been conducted in developed countries, more efforts are needed to identify the risk factors in developing countries. This study aimed to identify the psychosocial stressors associated with depression among young adults in Bandung, West Java, Indonesia.

This cross-sectional study recruited 341 respondents aged 18 – 40 (mean age 21.7). The Beck Depression Inventory-II were used to identify the level of

depression, and the psychosocial stressors were self-reported. Bivariate and multivariate analyses assessed the risk factors of depression.

Results: A total of 39% of participants had severe depression. The level of depression was higher in participants who were government employee (p<.001), were living with a partner(p<.001), and had experienced being bullied (p<.05). Types of occupation was a significant predictor (p<.001) of levels of depression, adjusting for socio-demographic factors and other psychosocial stressors. Special attention needs to be placed on promoting mental health among people who live with a partner, have experience of being bullied and those who work in the government sectors in Indonesia.

Keywords: depression, psychosocial stressors, young adults, government employees, Indonesia

Introduction

Depression is a mental disorder characterised by loss of interest and pleasure, decreased energy, feelings of guilt, low self-esteem, sleep disorders, no appetite and lowered ability to concentrate (Ngasa et al., 2017). Depression contributes to more years lost due to disability compared to other mental disorders, and it increases the economic burden due to decreased productivity, medical costs, and comorbidities of other psychiatric illnesses (Lin et al., 2017).

Depression is the most common type of mental disorder in Indonesia Metrics(Institute for Health Metric and Evaluation [IHME] 2017), with more than 12 million people over 15 years experiencing depression. Mental health problems are growing, especially during the COVID-19 pandemic. Young adulthood is a critical transitional period with important developmental tasks, including higher education attainment, relationship development, having children, employment and changes in residence. Low academic achievement, problems in employment and interpersonal relationships are often associated with mental health problems in young adults (Gustavson et al., 2018). Signs and symptoms of depression are often neglected, leading to thoughts of ending one's life (Choi et al., 2019). Depression that occurs at a young age often recurs throughout life (Ngasa et al., 2017). Therefore, preventive measures in young adulthood are of paramount importance.

Environmental factors such as stress and trauma experienced by individuals can increase depression. Trauma and emotional abuse experienced in childhood are related to depression at a later age (Penner-goeke & Binder, 2019); (Laugharne et al., 2010); (Risch et al., 2009). Depression can also be a mediator between bullying and suicide (Fuentes, Carvallo, & Poblete, 2020); (Echavarría, González, Bernal, & Rodríguez, 2017), and it is associated with early marriage (Fakhari et al., 2020)(Kiecolt-Glaser et al., 2018). Moreover, women are at twice the risk of developing depression compared to men due to higher vulnerability to violence and gender inequality (Salk et al., 2017). Depression among young adults is also more common in groups that do not have a job,

work part-time, are widowed, divorced or unmarried and have lower annual income (Mojtabai et al., 2016); (Folb et al., 2019). Low self-esteem and poor interpersonal relationships are also the risk factors of depression (Choi et al., 2019).

Despite the evidence, fewer insights about mental health and its risk factors have been shared in the context of low socio-economic and developing areas. In addition, how the types of occupation and experience of being bullied are related to depression is still unclear. This study, therefore, aimed to identify socio-demographic factors and psychosocial stressors associated with depression in young adults in Bandung, West Java, Indonesia, in an attempt to develop effective mental health promotion programs in the community.

Methods

Study Design

This cross-sectional study was approved by the research ethics committee of STIKes Santo Borromeus (number: 015/STIKes-SB/Etik/Has./V/2021). Informed consent was obtained from all participants, and the study was conducted according to the Declaration of Helsinki. A convenient sample was recruited from April 2021 to July 2021 by distributing an online questionnaire via social media.

Participants

Inclusion Criteria

Participants aged 18-40 years living in Bandung and having a history of depression were eligible for this study. Participants were screened using the three questions of the International Statistical Classification of Diseases and Related Health Problems: (1) whether you have ever experienced depression or depressed mood (yes/no), (2) whether in the last three months, you have experienced sad symptoms, lost of interest and enjoyment for two weeks or more (yes/no) (3) whether the symptoms experienced interfere with daily activities such as reduced energy leading to increased fatigability and diminished activity (yes/no)(World Health Organization (WHO), 2016). Participants were screened through social media, including WhatsApp, Facebook and Instagram. If any of the two questions are positive (i.e. Yes), the participants were considered to have experienced depression (World Health Organization (WHO), 2016). A total of 464 respondents completed the screening about depression, and 341 were eligible to participate in this study.

Data Collection

Demographic data, including age, gender, occupation and living circumstance, were collected. The Indonesian version of the Beck Depression Inventory-II (BDI II) was used to assess levels of depression. BDI II has been a valid and reliable tool (Nuraeni & Mirwanti, 2017)to measure levels of depression. The psychosocial stressors were

assessed based on Yes/No questions concerning(1) intrapersonal problems, (2) family problems, (3) childhood trauma, (4) experience of being bullied, (5) social rejection, and (6) poor relationship with partners.

Data Analysis

Data analysis uses a statistical program for social science (SPSS) 23. Descriptive statistics, including frequency, percentage, mean, and standard deviation (SD) were presented. Due to the normality of the data, non-parametric Kruskal Wallis tests and Mann Whitney U tests were used to compare levels of depression between two or more groups (e.g. having experience of being bullied or not; types of occupation). Multiple linear regression was used to identify significant predictors of depression, adjusting for socio-demographic factors and psychosocial stressors. Statistical significance was set at $p<0.05$.

Results

Characteristics of the Participants, Depression Score and Psychosocial Stressor.

A total of 341 participants participated in this study. Table 1 shows that 56% of respondents are female, 48.7% are students, 67.7% live with their parents and the average age of respondents is 21.7 years (SD: 4.36). A total of 39.0 % of respondent has severe depression, and 34.9% of respondent reported their experience of being bullied. The characteristics of the participants, the mean score of BDI II and the self-reported psychosocial factors are presented in Table 1.

Table 1. Characteristics of the Respondents(n=341)

Variable	N(%)
Demographic characters	
Gender	
Male	150 (44)
Female	191 (56)
Ages, mean (SD)	21.74 $\pm$ 4.36
Occupation	
College student	166 (48.7)
Government employee	2 (0.6)
non-government employee	86 (25.2)
non-worker	87 (25.5)
Living circumstance	
living with parents	231 (67.7)
living with others	34 (10.0)
living alone	58 (17.0)
living with partner	18 (5.3)
Depression, mean (SD)	23.86$\pm$13.25
level of depression	
minimum or normal	84 (24.6)
mild	48 (14.1)
moderate	76 (22.3)
severe	133 (39.0)
Psychosocial stressors	
Intrapersonal problems	18 (5.3)
Family conflict	38 (11.1)
Childhood trauma	62 (18.2)
Experience of being bullied	119 (34.9)
Social rejection	52 (15.25)
Poor relationship with spouse	52 (15.25)

n: frequency, SD: Standard deviation

Occupation, Living Circumstances and Depression.

Kruskal Wallis tests the mean average occupation, living circumstance, and depression, showing that occupation and living circumstances are related to depression (table 2).

Table 2. Mean Average Depression Based on Types of Occupation and Living Circumstances

Variable	Mean	SD	95% CI	P value*
Occupations				<.001
College student	20.95	12.06	19.05-22.84	
Government employee	39.00	0.00	39.00-39.00	
non-government employee	23.37	11.25	21.07-25.68	
Non-worker	29.40	15.34	26.13-32.67	
Living circumstance				
living with parents	23.65	12.02	22.09-25.21	<.001
living with others	27.85	15.00	22.62-33.09	
living alone	18.64	14.13	14.92-22.35	
living with partner	36.22	11.92	30.29-42.15	

SD: Standard deviation, CI: confidence Interval

*Kruskal Wallis tests

Table 2 shows there were significant differences in levels of depression between different types of occupation and living circumstances. Participants who were government employees and living with a partner had the highest mean depression scores. Post-hoc tests showed that participants who were living with parents (p=.008) and others (p=.009) had higher mean depression scores than those who were living alone. However, participants who were living with a partner had higher mean depression scores than those who were living with parents (p<.001), others (p<.05) and alone (p<.001).

Gender, Psychosocial Stressor and Level Depression.

Mann-Whitney U tests to analyse gender, psychosocial stressors and depression (table 3).

Table 3. Levels of Depression in Relation to Gender, Intrapersonal Problems, Family Conflict, Childhood Trauma, Experience of Being Bullied, Social Rejection, and Poor Relationship with Spouse.

Variable	Mean	SD	SE	P value*	N
Gender				0.798	
Male	23.69	13.45	1.09		150
Female	24.03	13.05	0.94		191
Psychosocial factor					
Intrapersonal problems				0.208	
Yes	26.56	10.75	2.53		18
No	23.73	13.33	0.74		323
Family conflict				0.991	
Yes	23.53	9.21	1.49		38
No	23.92	13.64	0.78		303
Childhood trauma				0.252	
Yes	25.57	11.032	1.40		62
No	23.57	13.64	0.81		279
Experience of being bullied				**0.022**	
Yes	22.09	15.17	1.39		119
No	24.84	11.96	0.80		222
Social rejection				0.145	
Yes	26.50	13.59	1.88		52
No	23.41	13.11	0.77		289
Poor relationship with spouse				0.681	
Yes	23.02	13.44	1.86		52
No	24.03	13.19	0.77		289

n: frequency, SD: Standard deviation, SE: Standard error Mean

*Mann-Whitney U tests

Table 3 shows that participants who had experienced being bullied had significantly higher levels of depression than those who had not. Gender, intrapersonal problems, family conflict, childhood trauma, social rejection, and poor relationship with spouse did not significantly with depression. To predict levels of depression, age, gender, types of occupation, living circumstances and psychosocial stressors were put in the model. Only the occupation types remain significant predictors (B=2.45, 95% CI: 1.34, 3.55, p<.001).

Discussion

Characteristics of the Participants, Depression Score and Psychosocial Stressor.

The majority of participants in this study were female. Females experience more depression related to poor nutrition. Iron deficiency in anaemia can worsen depression in women (Hidese et al., 2018).

More than a quarter of participants had severe depression in this study. Previous studies found that college students risk experiencing mental disorders and psychological stress because of poor academic achievement and interpersonal relationships, especially first and final-year college students. Moreover, undergraduate medical students are at higher risk of experiencing depression than other study programs (Sahle et al., 2019); (Seo et al., 2021); (Farrer et al., 2016). In the current study, however, the subjects of the study among college students were not assessed. In this study, gender was not associated with the level of depression, which is not consistent with some previous studies (Farrer et al., 2016); (Azad et al., 2017); (Morita et al., 2015).

Depressive symptoms have been significantly associated with having family problems, traumatic experiences, social rejection and interpersonal problems, which are supported by previous studies (Penner-goeke & Binder, 2019); (Laugharne et al., 2010); (Risch et al., 2009); (Gilman et al., 2013). Psychosocial stressors such as work, finances, housing, health and social relationships are common risk factors for depression in the literature (Fakhari et al., 2020); (Kiecolt-Glaser et al., 2018); (Pryce & Fuchs, 2017). Consistent with previous studies, this study found that participants who had experienced being bullied had higher depression scores than those who had not.

Expectedly, psychosocial stressors, including experience of being bullied, and socio-demographic factors such as the types of occupation, were significantly associated with depression, which is consistent with previous studies (Fuentes et al., 2020); (Echavarría et al., 2017); (Nuraeni & Mirwanti, 2017); (Piechaczek et al., 2020); (Pryce & Fuchs, 2017).

Occupation, Living Circumstances and Depression

In addition, the types of occupation were a significant predictor of the level of depression. The results of previous studies found that doing night shift work in health professions was not associated with depression, but doing night shift work outside of health professions may increase the risk of depression(Angerer et al., 2017); (Lee et al., 2017)(Alreshidi & Rayani, 2023).

Almost half of the respondents were college students. The prevalence of depression in college students has increased because college students face new academic and social situations that require varied social skills (Moeller & Seehuus, 2019).

Living with parents is a culture that exists in Indonesian society, and this condition is often found not only in young adults but also in children who already have families. The results of previous studies have shown that young adults living with their parents with closer relationships reported lower rates of depression (Romm et al., 2021); (Hankin & Griffith, 2023); (Idris & Tuzzahra, 2023). Living alone is more at risk of depression than living with a partner (Copp et al., 2018); (Honjo et al., 2018). However, in our post-hoc analyses, we found that participants who were living with parents (p=.008) and others (p=.009) had higher mean depression scores than those who were living alone.

Participants who were living with a partner had higher mean depression scores than those who were living with parents (p<.001), others (p<.05) and alone (p<.001). Our findings indicate that living with parents and partners could result in poorer mental health.

Gender, Psychosocial Stressor and Level Depression.

Gender did not significantly affect depression. Even though women often experience depression, the current study results align with previous research that gender differences do not predict depression levels (Salk et al., 2017).

Participants who had experienced being bullied had significantly higher levels of depression.

Bully victimisation: verbal, relational, cyber and physical relates positively to depressive symptoms (Moranet al., 2018)(Lutricket al., 2020).

The limitations of this study pertain to reliance on self-report data. This study is cross-sectional, so causal relationships cannot be tested. Recruitment via social media may lead to sampling bias.

Conclusion

In this study, types of occupation, living circumstances and experience of being bullied were associated with levels of depression. The study recommends that young adults with depression receive comprehensive intervention to overcome depression and the ability to manage psychosocial stressors adaptively.

A supporting group with mental healthcare professionals at Bandung's higher education, workplace and primary healthcare centres is recommended. Further research is warranted to improve psychological well-being in the community of developing countries.

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