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EARLY ENCOUNTERS: UNDERSTANDING EARLY ONSET DRUG MISUSE AMONG YOUTH

Mutia Rahmah*, Annisa Intan Sulistyani
Nursing Study Program, Faculty of Medicine and Health Sciences, Unversitas Lambung Mangkurat, Banjarbaru, Jl. Veteran Sungai Bilu No.128, Melayu, Banjarmasin Tengah, Banjarmasin, Kalimantan Selatan 70122, Indonesia
*mutiarahmah@ulm.ac.id

ABSTRACT
Adolescents experience a transition from childhood dependence to adult independence, which is often accompanied by a search for identity, exploration of the social environment, and increased curiosity about new things, including risky behavior, namely drug abuse. Based on data obtained at the preliminary study stage at the BNN Banjarbaru City, two junior high schools were found with the most significant number of students who had ever abused drugs. This study aims to determine the description of drug abuse and determine the relationship between respondent characteristics and drug abuse in adolescents. This study employed a quantitative descriptive approach using a cross-sectional design conducted at SMP "X" in Banjarbaru City. Results: The Simple Random Sampling technique was used, and 70 students were obtained as respondents. The instruments used were demographic questionnaires and ASSIST Young 10-14 and ASSIST Young 15-17. Data analysis was carried out univariately and bivariately (chi-square). There was a significant relationship between age and tobacco (p-value = .036) and alcohol ((p-value = .040). There was no relationship between gender and tobacco (p-value = 0.153) and alcohol ((p-value = 0.363). Prevention and intervention programs should pay special attention to the dangers of tobacco/vaping and alcohol, target adolescents to reduce moderate and high risks, and prevent initiation of use in non-risk groups.

Keywords: adolescences; alcohol; NAPZA; smoking

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INTRODUCTION

Adolescence is a critical phase in human development, marked by comprehensive biological, psychosocial, and cognitive changes (Nasution et al., 2024). During this period, individuals transition from childhood dependence to adult independence, often accompanied by a search for identity, exploration of the social environment, and an increased curiosity about new things, including risky behavior (Al Atsari & Ichsan, 2025). One form of risky behavior that is of global concern is the abuse of addictive substances, better known as NAPZA (Narcotics, Psychotropics, and Other Addictive Substances). These substances have a significant impact on the central nervous system, thus affecting a person's perception, mood, consciousness, and behavior (Ministry of Health of the Republic of Indonesia, 2014; Cosma et al., 2023).

Global data shows a significant increase in the number of illicit substance users, particularly among young people. According to the 2023 World Drug Report by the United Nations Office on Drugs and Crime (UNODC), approximately 296 million people worldwide used drugs in 2021, a 23% increase over the past ten years. More than 40% of users are in the adolescent and young adult age range (15–24 years), indicating that early childhood is the most vulnerable phase for initiating substance use. A global meta-analysis also stated that more than half of all lifetime mental disorders, including Substance Use Disorder (SUD), begin before the age of 14. This indicates the importance of early intervention aimed at adolescents as a primary prevention strategy. By comparison, in India, approximately 42% of the total population is under the age of 18, making a focus on substance abuse in young people a priority in public health policy in that country (Cosma et al., 2023; UNODC, 2023).

A comparable trend is evident in Indonesia. Data from the National Narcotics Agency (BNN) indicate that the prevalence of drug abuse among Indonesian students in 2022 reached 1.95%. The National Drug Abuse Survey (BNN, 2022) further reports that individuals aged 15–24 exhibit the highest levels of exposure to addictive substances, including narcotics, psychotropic drugs, conventional cigarettes, e-cigarettes (vapes), alcohol, and inhalants. Substance abuse is not confined to the family and community settings but also extends into schools. Factors such as easy accessibility, peer pressure, insufficient parental supervision, and limited education regarding the dangers of substance abuse contribute to adolescent experimentation and subsequent drug use.

This pattern is corroborated by a preliminary study conducted by the National Narcotics Agency (BNN) in Banjarbaru City, South Kalimantan, which identified two junior high schools (SMP) with a relatively high incidence of drug abuse cases among students. In-depth interviews with health workers (nurses), Guidance and Counseling (BK) teachers, and students revealed that drug abuse occurs both outside and within school premises, particularly after school hours. Two students from SMP "X" admitted to using addictive substances such as conventional cigarettes, vapes, and local alcohol known as "minuman gaduk." The BK teacher also reported that several students were apprehended smoking behind the school and subsequently received guidance. These findings suggest that drug abuse behaviors emerge at a relatively young age, even among junior high school. Furthermore, this behavior is repeated in an environment that should be safe and educational.

These conditions reveal deficiencies in the school-based mental and behavioral health monitoring and education system. Consequently, research is needed to comprehensively characterize patterns of drug abuse among adolescents, particularly those at the junior high school level. The present study seeks to describe the prevalence of drug abuse among junior high school students and to examine the relationship between respondent characteristics and drug abuse. The findings are expected to inform the development of more effective, contextually relevant, and sustainable preventive and promotive programs aimed at mitigating the negative impact of substance abuse.

METHOD

This research design is a quantitative descriptive study using a cross-sectional approach. The research was conducted at one of the junior high schools in Banjarbaru City. The study population consisted of all students attending SMP "X" in Banjarbaru City. The research sample was selected using the Simple Random Sampling technique from grades VII-IX and consisted of 70 students. The variables in this study include respondent characteristics (age and gender) and risky behavior of drug abuse. The instruments used to collect data were a demographic questionnaire and ASSIST Young 10-14 (for respondents aged 10-14 years) and ASSIST Young 15-17 (for respondents aged 15-17 years). Validity and reliability tests have been conducted on the ASSIST Young 10-14 and ASSIST Young 15-17 instruments in one of the junior high schools in Banjarbaru City. The validity test of ASSIST Young 10-14 with results of 0.577-0.947 and a reliability value of 0.841. The validity test of the ASSIST Young 15-17 instrument yielded results of 0.729–0.947 and a reliability value of 0.858.

The research was conducted in three stages: preparation, implementation, and reporting. The preparation stage involved: (1) obtaining research permits from the school; (2) coordinating with the school for data collection; (3) preparing the research instruments; and (4) randomizing the population to obtain a sample. The implementation stage included: (1) gathering respondents in one room to provide information and obtain research consent; (2) collecting data using a prepared questionnaire. Respondents were called one by one to complete the questionnaire, accompanied by the researcher; (3) checking the completeness of the questionnaire. The reporting stage included: (1) inputting data into the master table; (2) coding; (3) analyzing the obtained data using statistical applications; (4) interpreting the research results and compiling the research report.

The data obtained will be subjected to univariate and bivariate (Chi-Square) analyses using statistical software, with frequency distributions and cross-tabulations of the research variables to assess the significance of the relationships between the variables being tested. If the p-value > .05, it means there is no relationship between the two variables, and if the p-value < .05, it means there is a relationship between the two variables.

RESULT

This study involved 70 adolescent respondents currently in junior high school (SMP), with varying ages and genders. Understanding these demographics is important to provide context for the findings regarding drug abuse in the adolescent population, a vulnerable group. Table 1 shows that the majority of respondents were aged 12-17. The largest number of respondents was 15 years old, at 24 (34.3%). The distribution of respondents by gender was nearly equal, with 51.4% boy and 48.6% girl.

Table 1.
Frequency Distribution of Respondent Ages (n=70)

	Variable	f	%
Age	12	6	8.6
	13	8	11.4
	14	21	30.0
	15	24	34.3
	16	10	14.3
	17	1	1.4
Gender	Boy	36	51.4
	Girl	34	48.6

Table 2.
Distribution of Drug Abuse Frequency (n=70)

Drugs Type	Category	f	%
Tobacco/Vaping	No Risk	40	57.1
	Moderate risk	12	17.1
	High risk	18	25.7
Alcohol	No Risk	61	87.1
	Moderate risk	6	8.6
	High risk	3	4.3

Table 2, it can be concluded that the majority of respondents were in the no-risk category for tobacco drug abuse (40 people (57.1%), and in the no-risk category for alcohol drug abuse (61 people (87.1%). However, a small number of adolescents were identified as falling into the moderate and high-risk drug abuse categories.

Table 3.
Cross-tabulation of Age with Tobacco/Vape Type Drug Abuse (n=70)

Drug Abuse Category (Tobacco/Vapor)	Age (Year)						Total
	12	13	14	15	16	17	
No Risk	4	3	13	15	5	0	40 (57.2%)
Moderate risk	1	3	1	5	2	0	12 (17.1%)
High risk	1	2	7	4	3	1	18 (25.7%)
Total	6	8	21	24	10	1	70 (100%)

Table 4.
Chi-Square Test of Age and Drug Abuse (Tobacco/Vapor) (n=70)

Drug Abuse Category (Tobacco/Vapor)	Age (Year)		p-value
	10-14	15-17	
No Risk	20 (28.6%)	20 (28.6%)	.036
Moderate risk	5 (7.1%)	7 (10%)	
High risk	10 (14.3%)	8 (11.4%)	
Total	35 (50%)	35 (50%)	

Based on Table 3, the 14-year-old age group is predominantly in the High Risk category, with 7 people (10%). The results of the statistical test of the relationship between age and tobacco drug abuse in Table 4 are p-value = 0.036 (<0.05).

Table 5.
Cross Tabulation of Age with Alcohol Type Drug Abuse (n=70)

Drug Abuse Category (Alcohol)	Age (Year)						Total
	12	13	14	15	16	17	
No Risk	5	8	18	21	9	0	61 (87.1%)
Moderate risk	0	0	1	3	1	1	6 (8.6%)
High risk	1	0	2	0	0	0	3 (4.3%)

Table 6.
Chi-Square Test of Age and Drug Abuse (Alcohol) (n=70)

Drug Abuse Category (Alcohol)	Age (Year)		*p-value*
	10-14	15-17	
No Risk	31 (44.3%)	30 (42.9%)	.040
Moderate risk	1 (1.4%)	5 (7.1%)	
High risk	3 (4.3%)	0 (0%)	

Table 5 indicates that the 14-year-old age group is primarily classified in the High Risk category, comprising 2 individuals (10%). Statistical analysis of the association between age and tobacco drug abuse, as presented in Table 4, yielded a p-value of 0.040 (<0.05).

Table 7.
Chi-Square Test of Gender and Drug Abuse Tobacco/Vape Type (n=70)

Drug Abuse Category (Alcohol)	Gender		*p-value*
	Boy	Girl	
No Risk	13 (18.6%)	27 (38.6%)	.153
Moderate risk	8 (11.4%)	4 (5.7%)	
High risk	15 (21.4%)	3 (4.3%)	

Table 8.
Chi-Square Test of Gender and Drug Abuse Alcohol Type

Drug Abuse Category (Alcohol)	Gender		Total
	Boy	Girl	
No Risk	29 (41.4%)	32 (45.7%)	.363
Moderate risk	6 (8.6%)	0 (0%)	
High risk	1 (1.4%)	2 (2.8%)	

Table 7, the results of the statistical test of the relationship between gender and tobacco drug abuse are p-value = 0.153 (> 0.05), and the relationship between gender and alcohol drug abuse is p-value = 0.363 (> 0.05).

DISCUSSION

Table 1 presents the frequency distribution of respondents by age, ranging from 12 to 17 years. The 15-year-old group constitutes the largest proportion, with 24 respondents (34.3%). This finding suggests that most participants are in the developmental phase spanning early to late adolescence, a period characterized by heightened social and emotional pressures that may influence behavior, including susceptibility to drug abuse. The study primarily focuses on middle adolescents (14-15 years), identifying this group as particularly vulnerable and a primary target for drug abuse prevention efforts.

According to Tables 3 and 4, 18 adolescents (25.7%) fall into the High Risk category for tobacco or vaping abuse, while 3 (4.3%) are classified as High Risk for alcohol abuse. The prevalence of tobacco use, including both cigarettes and vaping, among adolescents at this age is a significant concern, as many are already actively smoking. Although the incidence of alcohol use remains relatively low, these findings underscore the need for targeted interventions addressing risky

behaviors in this population. Research by Sjodin, Ranine, & Larm (2024) indicates that initiating alcohol consumption at an early age is associated with increased use in late adolescence compared to peers who begin drinking later in life.

Of the adolescent respondents, 40 individuals (57.1%) were categorized as not at risk for tobacco or vaping abuse, indicating that the majority are not engaged in drug use. However, 12 respondents (17.1%) fell into the Moderate Risk category, which may reflect experimental or occasional use with the potential for escalation if preventive measures are not implemented. Additionally, 18 respondents (25.7%) were classified as High Risk for tobacco or vaping, suggesting that use of these products represents a significant issue among adolescents. This finding is consistent with the increasing trend of vaping among this population and supports concerns regarding long-term health effects and the risk of nicotine dependence.

In contrast, Table 4 shows that 61 respondents (87.1%) were not at risk for alcohol abuse, indicating that alcohol use is less prevalent or poses a lower risk among the adolescents studied compared to tobacco or vaping. Although the proportion of moderate- and high-risk alcohol users is smaller than that for tobacco or vaping, the existence of a high-risk group remains a concern. Notably, previous analysis identified 12- and 14-year-olds within the high-risk category for alcohol use, suggesting that, despite their small numbers, these individuals may be particularly vulnerable due to early initiation and the potential for serious health consequences.

Table 5 indicates that at age 12, one respondent was classified in the High Risk category for drug abuse. Fourteen-year-olds represented the age group with the highest number of respondents in this category, totaling seven individuals. Risky substance abuse behaviors most commonly begin during adolescence, particularly between ages 14 and 18. During this developmental stage, adolescents exhibit increased tendencies toward experimentation, curiosity, susceptibility to peer influence, resistance to authority, and low self-esteem, all of which heighten vulnerability to drug abuse. Adolescents who engage in drug abuse may experience impaired brain development, such as disruptions in synaptic growth and pruning in the prefrontal cortex, as well as physiological changes associated with puberty and psychosocial or educational challenges, including role transitions (Degenhardt et al., 2018; Cioffredi et al., 2021). Substance abuse disrupts the transition to adulthood by impeding the development of critical thinking and essential cognitive skills. Furthermore, adolescents who abuse drugs are reported to have higher rates of physical and mental illness, along with diminished overall health and well-being (Nawi et al., 2021).

Table 7 demonstrates that alcohol abuse among adolescents aged 12 and 14 is classified as High Risk. This result underscores the particular vulnerabilities of this younger age group, who are in the early stages of physical and cognitive development. Early exposure to alcohol can result in more severe consequences compared to exposure at older ages. The adolescent brain, especially the frontal lobe responsible for decision-making, is still maturing. Alcohol consumption at age 12 may disrupt this developmental process, potentially resulting in long-term cognitive deficits and increased impulsivity (National Institute on Alcohol Abuse and Alcoholism, 2021).

Statistical analysis revealed a significant association between age and the abuse of tobacco and alcohol (p-value <0.05). These findings are consistent with previous research by Hidayati (2024), which also identified a significant relationship between age and drug use. During adolescence, individuals often experience instability and a desire for autonomy, increasing their susceptibility to negative influences in the absence of strong social norms and religious beliefs (Chairunnisa et al., 2019). Age should therefore be recognized as a critical risk factor in prevention strategies. Effective preventive measures must address the developmental characteristics of adolescents, particularly their instability and pursuit of freedom. Fostering a strong understanding of social

norms and religious values, alongside the development of a supportive environment, is expected to reduce adolescents' vulnerability to drug abuse.

The findings indicate no significant relationship between gender and tobacco or alcohol abuse among adolescents (p-value >0.05). This result is consistent with previous studies that reported no gender differences in adolescent drug use behavior. Both boy and girl adolescents demonstrate similar potential for drug abuse, with contributing factors including peer influence, parental supervision, and the broader social environment (Chairunnisa et al., 2019). Negative social interactions, such as spending extended periods with peers late at night without clear objectives, may increase the risk of involvement in drug abuse (Solehati et al., 2019). However, some earlier studies reported higher levels of illicit substance use among boy adolescents compared to girls. In recent decades, a convergence in gender patterns of illicit substance use has been observed, suggesting that gender differences persist in certain risky behaviors related to adolescent drug abuse (Inchley et al., 2020).

Gender differences in substance use among adolescents remain inconclusive. Some studies indicate that boy adolescents are more likely to engage in drug use and report higher frequencies of alcohol consumption than their girl counterparts (Halladay et al., 2020). In contrast, other research suggests that girl adolescents are more susceptible to developing substance use problems (McHugh et al., 2018). These disparities may be influenced by cultural factors or national policies, such as increased stigma directed toward girl adolescents (El Khoury et al., 2019), as well as developmental differences between genders related to substance use (McHugh et al., 2018). Additionally, adolescent girls are more likely to experience internalizing symptoms that elevate their risk of substance use, whereas boys tend to display higher levels of risk-taking behaviors (Hardee et al., 2018). Consequently, both boy and girl adolescents are at significant risk for substance abuse.

Adolescents represent the most vulnerable demographic for addiction (Luikinga et al., 2018). This developmental stage is characterized by heightened experimentation, curiosity, susceptibility to peer influence, resistance to authority, and low self-esteem, all of which increase the likelihood of substance abuse (Degenhardt, 2018). Fundamental developmental processes during adolescence involve changes in relationships between individuals and their social contexts. Variations in the nature and timing of these relationships contribute to diversity in adolescent experiences and serve as both risk and protective factors throughout this period. These factors are essential for helping adolescents realize their full potential and achieve optimal health during the transition to adulthood. Substance abuse disrupts this transition by impeding the development of critical thinking and essential cognitive skills. Furthermore, adolescents who misuse drugs report higher rates of physical and mental health problems and reduced overall well-being (Nawi et al., 2021).

CONCLUSION

Substance abuse represents a global public health challenge that affects diverse populations, including adolescents. In Indonesia, adolescent drug abuse has increased in recent years and has become a persistent issue, indicating a national drug emergency. Findings from this study demonstrate that drug abuse often begins as early as 12 years of age, with tobacco (cigarettes and vape) and alcohol being the primary substances used. A significant association was found between age and the abuse of tobacco (p-value = .036) and alcohol (p-value = .040). No significant relationship was observed between gender and the abuse of tobacco (p-value = 0.153) or alcohol (p-value = 0.363), suggesting that both boy and girl adolescents are equally at risk. Prevention and intervention programs should prioritize addressing the risks associated with tobacco and vape use among adolescents, aiming to reduce moderate and high-risk behaviors and to prevent initiation among non-risk groups.

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