



Adolescents ' Level of Knowledge Regarding the Impact of Drug Abuse on Physical and Psychosocial Health

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Abstract

Drug abuse is a health problem that can have a wide-ranging impact on the lives of adolescents, both physically and psychosocially. Adolescence is a crucial period in development, as biological, cognitive, emotional, and social changes occur that can influence health behaviors into adulthood. A good understanding of the impacts of drug abuse is expected to be a supporting factor in efforts to prevent drug abuse in adolescents. This study aims to determine the level of knowledge of adolescents about the impact of drug abuse on physical and psychosocial health. The study used a quantitative descriptive design with a *cross-sectional approach* . The sample consisted of 100 adolescents selected using a *purposive sampling technique* . Data collection was conducted using a knowledge questionnaire consisting of 25 questions regarding the definition of drugs, risk factors, impacts on physical health, psychological impacts, and social impacts. Data were analyzed univariately using frequency distribution and percentages. The results showed that the majority of respondents had a good level of knowledge (63 respondents), while 27 respondents (27%) had sufficient knowledge and 10 respondents (10%) had insufficient knowledge. Regarding physical health impacts, 68% of respondents had good knowledge. Regarding psychosocial impacts, 59% of respondents had good knowledge. These results indicate that while most adolescents have good knowledge, some still need more information about the impacts of drugs, particularly the psychosocial aspects. Continuous health education through schools, families, health workers, and the community is necessary as part of efforts to prevent drug abuse among adolescents.

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1. Introduction

World Health Organization (WHO), According to the World Health Organization (WHO), adolescence, spanning the ages of 10–19, is a crucial period in the development of health and behavioral patterns that can persist into adulthood. During this period, rapid physical, cognitive, emotional, and social development occurs. Therefore, various behaviors that emerge during adolescence can have consequences for current and future health (World Health Organization, 2024).

One issue that requires attention among adolescents is the abuse of psychoactive substances, or drugs. The WHO explains that the use of psychoactive substances without medical supervision can pose significant health risks and can develop into a substance use disorder. This disorder can impact an individual's functioning in personal, family, social, educational, and professional life (World Health Organization, 2023; World Health Organization, 2025).

The drug problem also remains a significant issue in Indonesia. According to the National Narcotics Agency (BNN), the prevalence of drug abuse in 2023 was 1.73%, or approximately 3.3 million people. The BNN also highlighted adolescents and students as a group that requires special attention, as curiosity and peer influence can be factors that drive someone to try drugs (National Narcotics Agency of the Republic of Indonesia, 2023; National Narcotics Agency of the Republic of Indonesia, 2024).

In a recent update, the National Narcotics Agency (BNN) reported that survey results for the 2023–2025 period indicated a drug abuse prevalence of 2.11%, equivalent to approximately 4.15 million Indonesians aged 15–64. This situation demonstrates the continued need for prevention efforts, which must be implemented sustainably through educational, family, school, and community approaches (National Narcotics Agency of the Republic of Indonesia, 2025).

Drug abuse can impact physical health. These impacts vary depending on the type of substance, dose, frequency of use, method of use, the user's health condition, and the concurrent use of multiple substances. Disorders can involve the nervous, cardiovascular, respiratory, and various other bodily functions. The WHO states that psychoactive drug use is associated with increased morbidity and mortality and can lead to substance use disorders (World Health Organization, 2025; World Health Organization, 2024).

Drug abuse is also linked to mental and psychosocial health issues. Substance use in adolescence can be associated with behavioral, emotional, social, and academic problems. The WHO states that substance use in adolescence is associated with neurocognitive changes that can impact behavioral, emotional, social, and academic functioning. The UNODC also emphasizes that adolescence is a sensitive period because the brain is still





developing, and early drug use can increase the risk of substance use disorders (Bhandari et al., 2023; United Nations Office on Drugs and Crime, 2023; World Health Organization, 2025).

Psychosocial impacts can include disrupted relationships with family and peers, decreased academic achievement, disciplinary problems, social isolation, interpersonal conflict, behavioral changes, and mental health issues. Therefore, adolescents' knowledge of the effects of drug abuse is crucial not only for understanding the physical effects but also for understanding its social and psychological consequences (Bhandari et al., 2023; World Health Organization, 2025).

Knowledge is a crucial component in developing healthy behaviors. Adolescents who receive accurate information about drugs are expected to be able to recognize the risks, resist the temptation to use drugs, and make healthier decisions. The WHO also emphasizes the importance of age-appropriate information, life skills development, and a safe and supportive environment in supporting adolescent health (Pannyiwi & Ali, 2026; World Health Organization, 2023; World Health Organization, 2024).

Based on this description, research on adolescents' knowledge levels regarding the impact of drug abuse on physical and psychosocial health is important. The results can provide an initial overview of educational needs and serve as a basis for developing health promotion activities and preventing drug abuse among adolescents..

2. Research Methods

This study used a quantitative descriptive design with a cross-sectional approach to describe adolescents' level of knowledge regarding the impact of drug abuse on physical and psychosocial health during a single measurement period. The study population consisted of adolescents who met the predetermined research criteria, with a total sample of 100 respondents selected using purposive sampling based on the criteria established by the researcher. The inclusion criteria were adolescents aged 15–19 years, willing to participate as respondents, able to read and understand the questionnaire questions, and willing to complete the questionnaire fully, while the exclusion criteria included respondents who did not complete the questionnaire and those who did not meet the specified age range.

The main research variable was adolescents' level of knowledge regarding the impact of drug abuse on physical and psychosocial health. Data were collected using a closed-ended questionnaire consisting of 25 true-or-false questions. Data analysis was conducted using univariate analysis to describe the distribution of respondents' characteristics and knowledge levels, with the results presented as frequency distributions and percentages. The study also adhered to research ethics principles, including obtaining informed consent





from respondents, maintaining confidentiality of respondent identities, using the data solely for research purposes, and respecting respondents' freedom to participate in or withdraw from the study at any time.

3. Results and Discussion

a. Result

Table 1. Distribution of Respondents by Age

Age	Frequency	Percentage
15 years	18	18%
16 years	21	21%
17 years	25	25%
18 years	20	20%
19 years old	16	16%
Total	100	100%

Based on Table 1, the most respondents were aged 17 years, namely 25 respondents (25%), while the fewest respondents were aged 19 years, namely 16 respondents (16%).

Table 2. Distribution of Respondents by Gender

Gender	Frequency	Percentage
Man	46	46%
Woman	54	54%
Total	100	100%

Based on Table 2, the majority of respondents were female, namely 54 respondents (54%), while 46 respondents (46%) were male.

Table 3. Distribution of Adolescents' Knowledge Levels about the Impact of Drug Abuse

Level of Knowledge	Frequency	Percentage
Good	63	63%
Enough	27	27%
Not enough	10	10%
Total	100	100%

Based on Table 3, the majority of respondents had a good level of knowledge, namely 63 respondents (63%). Twenty-seven respondents (27%) had sufficient knowledge, and 10 respondents (10%) had insufficient knowledge.



**Table 4.** Respondents' Knowledge of Physical Impacts

Category	Frequency	Percentage
Good	68	68%
Enough	23	23%
Not enough	9	9%
Total	100	100%

Based on Table 4, 68 respondents (68%) had good knowledge of the impact of drug abuse on physical health. Twenty-three respondents (23%) were in the adequate category, and nine respondents (9%) were in the poor category.

Table 5. Respondents' Knowledge of Psychosocial Impacts

Category	Frequency	Percentage
Good	59	59%
Enough	29	29%
Not enough	12	12%
Total	100	100%

Based on Table 5, 59 respondents (59%) had good knowledge of the psychosocial impacts of drug abuse. 29 respondents (29%) had adequate knowledge, and 12 respondents (12%) had insufficient knowledge.

Table 6. Respondents' Sources of Information about Drugs

Resources	Frequency	Percentage
Social media/internet	39	39%
School/teacher	28	28%
Family	16	16%
Health workers	9	9%
Friends of the same age	8	8%
Total	100	100%

Social media and the internet were the most common sources of information used by respondents, at 39 (39%). Meanwhile, health workers were a source of information for 9 (9%).





b. Discussion

1) Level of Adolescent Knowledge about the Impact of Drug Abuse

The research results showed that the majority of respondents (63%) had good knowledge of the impacts of drug abuse. This indicates that most respondents understood basic information about drugs and the consequences of their use. Good knowledge can be a supporting factor in prevention efforts. Teenagers who understand the negative impacts of drugs are expected to consider the risks before making decisions related to substance use (Pannyiwi & Ali, 2026; World Health Organization, 2023).

There were still 37% of respondents in the "fair" and "poor" knowledge categories. These findings indicate that not all respondents fully understand information about drugs. The WHO explains that adolescence is a crucial period in the formation of health behavior patterns. During this time, adolescents need age-appropriate information, life skills, appropriate health services, and a safe and supportive environment. Increasing knowledge needs to be done continuously, not just through one-time information delivery. Health education materials can be delivered through school activities, counseling, digital media, family, and community activities (World Health Organization, 2024; World Health Organization, 2023; Pannyiwi & Ali, 2026)..

2) Knowledge of Physical Health Impacts

The research results showed that 68% of respondents had good knowledge of the physical effects of drug abuse, representing one of the highest levels of knowledge.

This may be because information about the physical effects of drugs is relatively easy for teenagers to find and understand. Information about physical health problems, organ damage, dependence, and the risk of death is often used in drug prevention campaigns (National Narcotics Agency of the Republic of Indonesia, 2024; World Health Organization, 2025).

The WHO explains that the use of psychoactive drugs without medical supervision is associated with significant health risks. Substance use disorders can also increase the risk of morbidity and mortality (World Health Organization, 2025; World Health Organization, 2024).





Good knowledge of the physical effects is important because it can help teenagers understand that drugs are not just a social or legal problem, but also a health problem (World Health Organization, 2025)..

3) Knowledge of Psychosocial Impacts

Knowledge of psychosocial impacts was lower than that of physical impacts. Fifty-nine percent of respondents were in the good category, while 41% were in the fair and poor categories. These results show that there are still respondents who do not fully understand that drug abuse can affect mental health and social relationships (Bhandari et al., 2023; World Health Organization, 2025).

Psychosocial impacts are sometimes less immediately visible and therefore more difficult to understand than physical impacts. However, substance use in adolescents can be associated with behavioral, emotional, social, and academic changes. WHO states that substance use in children and adolescents is associated with neurocognitive problems that can impact behavior, emotions, social relationships, and academic achievement (Bhandari et al., 2023; World Health Organization, 2025).

The UNODC also considers adolescence a sensitive period for drug use because brain development is still ongoing. Substance use from an early age can increase the risk of substance use disorders and various other problems. Drug education materials for adolescents should not only emphasize physical harm. They should also explain the relationship between drug abuse and anxiety, behavioral changes, disruptions in family relationships, academic achievement, social interactions, and mental health (United Nations Office on Drugs and Crime, 2023; United Nations Office on Drugs and Crime, 2024; Bhandari et al., 2023)..

4) The Role of Information Sources

In this study, social media and the internet were the most frequently used sources of information by respondents. This indicates that digital media can be a strategic tool for providing education on drug prevention. Digital information also carries the risk of being inaccurate or misleading. Therefore, education through social media needs to use credible sources and language appropriate to the characteristics of adolescents (World Health Organization, 2023; Pannyiwi & Ali, 2026).





Schools and families also continue to play important roles. Schools can provide structured health education, while families can provide emotional support and positive supervision. Prevention efforts that involve various environments will be more comprehensive than relying on just one source of information (Pannyiwi & Ali, 2026; World Health Organization, 2024)..

This study has several limitations. First, the descriptive research design only provides an overview of the respondents' level of knowledge and cannot explain the causal relationship between respondents' characteristics and their level of knowledge. Second, the use of questionnaires allows for bias in answering because respondents can provide answers that are considered socially correct. Third, respondents' sources of information about drugs are very diverse so that the quality of information received by each respondent can be different.

4. Conclusions

The study concluded that most adolescents had good knowledge regarding the physical and psychosocial impacts of drug abuse, with 63% having good overall knowledge, 68% regarding physical impacts, and 59% regarding psychosocial impacts. However, further education is needed, particularly on psychosocial effects. Adolescents are encouraged to obtain information from credible sources and avoid drug use, while schools, families, and health workers should strengthen education, prevention, communication, and support. Further research should involve larger samples and examine the relationship between knowledge, attitudes, and preventive behaviors.

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