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Attitude And Peer Influence Associated With Drug Abuse Among Residents In West Baturaja District: A Cross-Sectional Study

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Abstract

Drug abuse remains a public health problem that requires attention because it affects individual health, family stability, and community safety. This study aimed to analyze the association between attitude, peer influence, and drug abuse among residents in West Baturaja District. This study used a quantitative analytic design with a cross-sectional approach. The study was conducted in West Baturaja District, Ogan Komering Ulu Regency, South Sumatra, Indonesia, from February to April 2026. The sample consisted of 56 respondents selected using accidental sampling. Data were collected using a structured questionnaire and checklist, then analyzed using univariate analysis and Chi-square test with a significance level of 0.05. The results showed that 32 respondents (57.1%) were classified as positive for drug abuse, 27 respondents (48.2%) had negative attitudes, and 34 respondents (60.7%) were exposed to negative peer influence. The Chi-square test showed a significant association between attitude and drug abuse (p = 0.028) and between peer influence and drug abuse (p = 0.001). This study concludes that attitude and peer influence are significantly associated with drug abuse among residents in West Baturaja District. Community-based prevention should strengthen protective attitudes, peer control, family supervision, and continuous health education.

Keywords: Drug abuse, attitude, peer influence, community prevention.

INTRODUCTION

Drug abuse remains a major public health problem because it threatens individual health, family stability, social order, and community productivity. Recent studies have shown that substance use among adolescents and young people is associated with psychological vulnerability, social exposure, peer pressure, family environment, and community-level risk factors (Avcı, 2025; Lawal et al., 2025). Drug abuse also creates long-term consequences because early substance exposure can affect cognitive function, emotional regulation, and future health behavior (Bhatia et al., 2023; Ito et al., 2025). Public health systems therefore need local evidence to identify modifiable factors that contribute to drug abuse in community settings (Azwar et al., 2026; Kim & Kim, 2025).

Adolescents and young residents represent a vulnerable population because they experience developmental transitions, social curiosity, and increased exposure to risky environments. Previous research has demonstrated that adolescent substance use is closely related to behavioral pathways, perceived social norms, family supervision, and peer group interaction (Azwar et al., 2026; Rodríguez-Ruiz & Espejo-Siles, 2025). Peer influence can increase drug abuse risk because adolescents often adopt behaviors that strengthen group acceptance and social identity (McClure-Thomas et al., 2022; Sultana et al., 2023). This condition indicates that drug abuse prevention should address individual cognition and social interaction simultaneously (Tinner et al., 2022; Kurevakwesu et al., 2024).

Attitude is an important behavioral factor because it shapes personal judgment, intention, and readiness to avoid or engage in drug-related behavior. Studies have reported that adolescents with permissive attitudes toward risky behavior tend to show higher vulnerability to substance use and other health-risk behaviors (Kim & Kim, 2025; Burdzovic Andreas & Bretteville-Jensen, 2026). Attitude formation is influenced by knowledge, social exposure, digital media, family communication, and peer norms in daily life (Bozhar et al., 2025; Sharm & Kappor, 2025). Health education and community-based prevention can strengthen protective attitudes by improving awareness, refusal skills, and perceived consequences of drug abuse (Baffsky et al., 2023; Noh & Kim, 2023).

Peer influence is also a critical determinant because peer groups provide social reinforcement that can normalize or discourage drug abuse. A systematic scoping review showed that the association

between peer substance use and individual substance use is moderated by social context, family control, and adolescent vulnerability (Rodríguez-Ruiz & Espejo-Siles, 2025). Studies in several countries have found that weak parental connectedness, limited monitoring, and negative peer support are associated with high-risk behaviors among adolescents (Shawaluddin et al., 2025; Sojib et al., 2024). These findings suggest that peer-related prevention should be integrated with family-based supervision, school-based programs, and community participation (Pinquart & Reeg, 2025; Rachman et al., 2022).

The Indonesian context requires stronger community-based evidence because drug abuse prevention must consider local culture, family structure, peer networks, and access to preventive services. Indonesian studies have emphasized that family approaches, parental empowerment, and community-based prevention are relevant strategies for reducing adolescent health-risk behavior (Krisnana et al., 2024; Rachman et al., 2022). Behavioral and social pathways of adolescent drug use in Indonesia also indicate that prevention programs should focus on knowledge, attitudes, family support, peer influence, and community engagement (Azwar et al., 2026). Local research in West Baturaja District is therefore important because community-level findings can support targeted prevention and cross-sectoral intervention planning (Tinner et al., 2022; Kurevakwesu et al., 2024).

Although previous studies have examined substance use among adolescents, limited local evidence has specifically assessed the relationship between attitude, peer influence, and drug abuse among residents in West Baturaja District. This knowledge gap is important because local determinants may differ according to social environment, community exposure, family supervision, and peer group characteristics (Lawal et al., 2025; Azwar et al., 2026). A cross-sectional study can provide empirical evidence about the association between psychosocial factors and drug abuse in a defined community population (Kim & Kim, 2025; Widhawati et al., 2026).

This study aimed to analyze the association of attitude and peer influence with drug abuse among residents in West Baturaja District.

RESEARCH METHODS

This study used a quantitative analytic design with a cross-sectional approach to examine the association between attitude, peer influence, and drug abuse among residents in West Baturaja District. The study was conducted in West Baturaja District, Ogan Komering Ulu Regency, South Sumatra, Indonesia. This area was selected because local data showed an increase in drug-related cases and indicated the need for evidence-based prevention strategies at the community level. The study was carried out from February to April 2026. This period included preparation of the research instrument, participant recruitment, data collection, data checking, and statistical analysis. The setting reflected a community context in which social interaction, peer networks, and individual attitudes may influence the occurrence of drug abuse.

The target population in this study was residents of Ogan Komering Ulu who were aged 17 years and lived in the study area during the data collection period. The accessible population consisted of residents who could be reached by the researchers in West Baturaja District. The sample included 56 respondents who met the study criteria and agreed to participate in the research. The sample size was considered sufficient for the initial analysis of categorical variables using the Chi-square test in a community-based cross-sectional study. The inclusion of residents aged 17 years was relevant because this age group represents a developmental stage that is vulnerable to social influence, peer pressure, and risk-taking behavior.

The study used accidental sampling as a non-probability sampling technique. This technique was applied because the researchers recruited respondents who were available, accessible, and eligible during the data collection period. Accidental sampling was considered practical for community-based research because it allowed the researchers to obtain respondents directly from the field within the available time and resources. Although this technique does not provide equal probability for all

members of the population, it was appropriate for an exploratory analytic study that aimed to identify initial associations between psychosocial factors and drug abuse. To reduce selection bias, the researchers applied the same eligibility criteria to all respondents and used a standardized data collection procedure.

The dependent variable in this study was drug abuse status among respondents. Drug abuse was categorized into positive and negative groups based on the results of the questionnaire and checklist used during data collection. The independent variables were attitude and peer influence. Attitude was categorized as positive or negative based on respondents' responses to items related to perceptions, beliefs, and tendencies toward drug abuse prevention or risk behavior. Peer influence was categorized as positive or negative based on respondents' exposure to peer behavior, peer encouragement, and peer-related social interactions associated with drug abuse risk.

Data were collected using a structured questionnaire and checklist developed to assess attitude, peer influence, and drug abuse status. The questionnaire was used because it enabled the researchers to obtain standardized responses from all participants. The checklist was used to support the classification of drug abuse status and to ensure consistency during data recording. The attitude section assessed respondents' views and tendencies related to drug abuse, whereas the peer influence section assessed the role of peer groups in shaping risky or protective behavior. The use of structured instruments helped minimize variation in data collection and improved the comparability of responses among participants.

The researchers collected data directly from eligible respondents in West Baturaja District. Before data collection, the researchers explained the purpose of the study, the voluntary nature of participation, and the confidentiality of respondent information. Respondents who agreed to participate completed the questionnaire with guidance from the researchers when clarification was needed. The researchers checked each questionnaire after completion to identify missing responses and to ensure data completeness. Completed questionnaires were then coded, entered into the statistical software, and prepared for analysis.

Data management was conducted through several steps, including editing, coding, entry, cleaning, and tabulation. Editing was performed to check the completeness and consistency of respondent answers. Coding was conducted by assigning numerical values to each response category, including drug abuse status, attitude category, and peer influence category. Data entry was performed using statistical software to facilitate descriptive and inferential analysis. Data cleaning was conducted to identify possible entry errors, missing data, and inconsistent values before final analysis. Tabulation was then used to summarize the distribution of each variable in frequency and percentage form.

Data were analyzed using univariate and bivariate analysis. Univariate analysis was used to describe the frequency and percentage distribution of drug abuse status, attitude, and peer influence. Bivariate analysis was used to examine the association between attitude and drug abuse, as well as the association between peer influence and drug abuse. The Chi-square test was applied because the variables in this study were categorical and the analysis aimed to compare proportions between groups. The level of statistical significance was set at $\alpha = 0.05$. A p-value less than 0.05 was interpreted as evidence of a statistically significant association between the independent variable and drug abuse.

RESULTS AND DISCUSSION

Table 1. Distribution of Drug Abuse, Attitude, and Peer Influence among Respondents in West Baturaja District (n = 56)

Variable	Category	Frequency (n)	Percentage (%)
Drug abuse	Positive	32	57.1
	Negative	24	42.9
Attitude	Negative	27	48.2
	Positive	29	51.8
Peer influence	Negative	34	60.7
	Positive	22	39.3

As shown in Table 1, most respondents were classified as positive for drug abuse, representing 32 respondents or 57.1% of the total sample. The distribution of attitude showed that 29 respondents or 51.8% had a positive attitude, whereas 27 respondents or 48.2% had a negative attitude. The peer influence variable showed that 34 respondents or 60.7% were exposed to negative peer influence, while 22 respondents or 39.3% were classified as having positive peer influence. These findings indicate that drug abuse was relatively high among respondents and that negative peer influence was more dominant than positive peer influence in the study population.

Table 2. Association between Attitude and Drug Abuse among Respondents in West Baturaja District (n = 56)

Attitude	Positive Drug Abuse n (%)	Negative Drug Abuse n (%)	Total n (%)	p-value
Negative	20 (74.1)	7 (25.9)	27 (100.0)	0.028
Positive	12 (41.4)	17 (58.6)	29 (100.0)	
Total	**32 (57.1)**	**24 (42.9)**	**56 (100.0)**	

As shown in Table 2, respondents with a negative attitude had a higher proportion of positive drug abuse status than respondents with a positive attitude. Among respondents with a negative attitude, 20 respondents or 74.1% were classified as positive for drug abuse. Among respondents with a positive attitude, 12 respondents or 41.4% were classified as positive for drug abuse. The Chi-square test showed a p-value of 0.028, indicating a statistically significant association between attitude and drug abuse at a significance level of 0.05. This result suggests that attitude is an important psychosocial factor associated with drug abuse among residents in West Baturaja District.

Table 3. Association between Peer Influence and Drug Abuse among Respondents in West Baturaja District (n = 56)

Peer Influence	Positive Drug Abuse n (%)	Negative Drug Abuse n (%)	Total n (%)	p-value
Negative	26 (76.5)	8 (23.5)	34 (100.0)	0.001
Positive	6 (27.3)	16 (72.7)	22 (100.0)	
Total	**32 (57.1)**	**24 (42.9)**	**56 (100.0)**	

As shown in Table 3, respondents with negative peer influence had a higher proportion of positive drug abuse status than respondents with positive peer influence. Among respondents exposed to negative peer influence, 26 respondents or 76.5% were classified as positive for drug abuse. Among respondents with positive peer influence, only 6 respondents or 27.3% were classified as positive for drug abuse. The Chi-square test obtained a p-value of 0.001, indicating a statistically significant association between peer influence and drug abuse at a significance level of 0.05. This finding demonstrates that peer influence was strongly related to drug abuse among respondents in West Baturaja District.

This study found that drug abuse was identified in more than half of the respondents in West Baturaja District. The findings also showed that negative attitude was associated with a higher

proportion of drug abuse among respondents. Respondents with negative attitudes had a greater tendency to be classified as positive for drug abuse than respondents with positive attitudes. The study also found that negative peer influence had a strong association with drug abuse. Respondents exposed to negative peer influence showed a higher proportion of drug abuse than respondents exposed to positive peer influence. These findings indicate that attitude and peer influence are important psychosocial factors related to drug abuse in the study population.

The high proportion of drug abuse in this study reflects the vulnerability of community residents to risky social and behavioral exposure. Drug abuse remains a public health concern because substance use can affect mental health, social functioning, family relationships, and community safety (Avcı, 2025). Substance use among young people requires serious attention because early exposure can increase the risk of repeated use and long-term behavioral consequences (Bhatia et al., 2023). Community-level drug abuse also requires contextual prevention because social environment can shape individual decisions and behavioral patterns (Azwar et al., 2026). Public health prevention should therefore identify modifiable psychosocial factors that contribute to drug abuse in local communities (Kim & Kim, 2025). Local evidence from West Baturaja District can support prevention strategies that are more responsive to the social realities of the community (Kurevakwesu et al., 2024).

The significant association between attitude and drug abuse in this study indicates that personal beliefs and behavioral tendencies play an important role in substance-related risk. Attitude can influence behavior because individuals often act based on their perception of risk, social acceptability, and expected consequences (Kim & Kim, 2025). Adolescents and young residents with permissive attitudes toward risky behavior may become more vulnerable to drug abuse when they encounter enabling social environments (Burdzovic Andreas & Bretteville-Jensen, 2026). Attitude toward drug abuse may also be shaped by knowledge, emotional regulation, family communication, and social media exposure (Bozhar et al., 2025). Health education can strengthen protective attitudes because structured information can improve awareness of consequences and strengthen refusal capacity (Baffsky et al., 2023). Community-based education should therefore address attitude formation rather than only deliver general information about the dangers of drugs (Noh & Kim, 2023).

The role of attitude in this study also suggests that drug abuse prevention should focus on cognitive, emotional, and behavioral readiness. Individuals may avoid drug abuse when they have strong personal rejection, clear perceived harm, and confidence to resist social pressure (Avcı, 2025). Positive attitudes toward prevention can reduce vulnerability because individuals can interpret drug exposure as a threat to health and social functioning (Lawal et al., 2025). Negative attitudes may increase risk because individuals may underestimate harm, normalize experimentation, or accept drug use as part of social interaction (Burdzovic Andreas & Bretteville-Jensen, 2026). School-based and community-based prevention programs can influence attitudes when the programs use consistent messages, participatory learning, and supportive environments (Tinner et al., 2022). Prevention programs in West Baturaja District should therefore include attitude strengthening as a core component of drug abuse prevention.

The significant association between peer influence and drug abuse in this study confirms that peer groups can function as a strong social determinant of substance-related behavior. Peer influence can increase drug abuse risk because individuals may adopt group behaviors to gain acceptance, maintain belonging, or avoid rejection (Rodríguez-Ruiz & Espejo-Siles, 2025). Peer groups can also normalize risky behavior when drug use is perceived as common, acceptable, or socially rewarding (McClure-Thomas et al., 2022). Negative peer influence may weaken individual resistance because social pressure often operates through invitation, imitation, and repeated exposure (Sultana et al., 2023). The influence of peers becomes stronger when family monitoring, parental connectedness, and community supervision are weak (Shawaluddin et al., 2025). These findings suggest that drug abuse prevention should not only target individuals but also address peer networks and social group dynamics (Rodríguez-Ruiz & Espejo-Siles, 2025).

The association between peer influence and drug abuse also highlights the importance of strengthening protective social environments. Positive peer groups can reduce risky behavior because supportive peers can reinforce healthy norms, encourage constructive activities, and reduce exposure to drug-related invitations (Sojib et al., 2024). Family supervision can strengthen peer-related protection because parental monitoring can limit risky social exposure and guide adolescent decision-making (Pinquart & Reeg, 2025). Community youth organizations can provide alternative social spaces because structured activities can reduce idle time and strengthen positive identity among young residents (Kurevakwesu et al., 2024). Family-based prevention can also reduce drug abuse risk because parental empowerment improves communication, supervision, and behavioral guidance (Krisnana et al., 2024). Cross-sectoral collaboration among families, schools, health workers, community leaders, and law enforcement can strengthen social control and prevention coverage in local communities (Rachman et al., 2022).

The findings of this study support the need for integrated community-based prevention in West Baturaja District. Prevention efforts should combine health education, family engagement, peer-group intervention, and community empowerment because drug abuse is shaped by multiple interacting factors (Tinner et al., 2022). Community programs should identify high-risk peer environments because peer-related exposure can accelerate the transition from curiosity to repeated drug use (Rodríguez-Ruiz & Espejo-Siles, 2025). Health workers should strengthen counseling and educational activities because local prevention requires accessible information and sustained behavioral support (Azwar et al., 2026). Schools and community organizations should develop structured youth activities because positive engagement can protect young people from risky social interaction (Baffsky et al., 2023). Future research should include larger samples and multivariable analysis because broader evidence can clarify the independent contribution of attitude, peer influence, family support, and other psychosocial determinants to drug abuse (Lawal et al., 2025).

CONCLUSIONS

This study concludes that attitude and peer influence were significantly associated with drug abuse among residents in West Baturaja District. Respondents with negative attitudes and negative peer influence showed higher proportions of drug abuse than respondents with positive attitudes and positive peer influence. These findings indicate that drug abuse prevention in West Baturaja District should prioritize attitude strengthening, peer-group control, family supervision, and community-based education. Local government, health services, schools, community leaders, youth organizations, and law enforcement agencies should develop coordinated prevention programs that provide continuous education, counseling, positive youth activities, and early identification of at-risk groups. Future studies should use larger samples, probability sampling, and multivariable analysis to strengthen the evidence and identify dominant predictors of drug abuse in the community.

REFERENCES

Akbar, M. A., & Aulia, S. (2024). Edukasi Komunitas Remaja Tentang Bahaya Judi Online. *Bakti Nusantara Pengabdian Masyarakat Indonesia*, *1*(2), 44-50. https://doi.org/10.63202/bnpmi.v1i2.19

Anggaraini, N. D., & Lestari, D. (2025). Relationship between knowledge of anemia and attitudes toward adherence to iron supplementation among high school students: A cross-sectional study. *Indonesian Journal of Health Services*, *2*(3), 88-95. https://doi.org/10.63202/ijhs.v2i3.108

Avcı, M. (2025). Adolescents' experiences with substance use: Risks, protective factors and interventions. *BMC Psychology*, *13*(1), 802. https://doi.org/10.1186/s40359-025-03125-w

Azwar M, Hamdan DF, Iskandar R, Widiastuty L, Adnan Y. Behavioral and social pathways of adolescent drug use in Indonesia: implications for community-based prevention. BMC Public Health. 2026 Feb 21;26(1):1031. doi: 10.1186/s12889-026-26667-z.

Baffsky, R., Ivers, R., Cullen, P., Wang, J., McGillivray, L., & Torok, M. (2023). Strategies for enhancing the implementation of universal mental health prevention programs in schools: A systematic review. *Prevention Science*, *24*(2), 337–352. https://doi.org/10.1007/s11121-022-01434-9

Bhatia, D., Lewis, B., Farrior, H., Moore, A., & Nixon, S. J. (2023). Substance familiarity in middle childhood and adolescent substance use. *Drug and Alcohol Dependence*, *250*, 110892. https://doi.org/10.1016/j.drugalcdep.2023.110892

Bozhar, H., de Rooij, S. R., Lok, A., Vrijkotte, T., & Larsen, H. (2025). On the edge of the social media landscape: Associations with adolescent substance use and moderation by parental rules. *Journal of Public Health, 47*(1), 90–98. https://doi.org/10.1093/pubmed/fdae290

Burdzovic Andreas, J., & Bretteville-Jensen, A. L. (2026). The role of self-reported willingness to use drugs in public health research: Population-level projections of adolescents' decriminalised cannabis use and associated risk profiles. *Drug and Alcohol Review*, *45*(1). https://doi.org/10.1111/dar.70061

Daly, F. P., Millar, S. R., Major, E., & Barrett, P. M. (2025). Prevention of adolescent stimulant drug use: Do the home life environment and extracurricular activities influence this? Findings from the Irish Planet Youth Survey. *PLOS ONE*, *20*(8), e0330489. https://doi.org/10.1371/journal.pone.0330489

Haine-Schlagel, R., Dickson, K. S., Lind, T., Kim, J. J., May, G. C., Walsh, N. E., Lazarevic, V., Crandal, B. R., & Yeh, M. (2022). Caregiver participation engagement in child mental health prevention programs: A systematic review. *Prevention Science, 23*(2), 321–339. https://doi.org/10.1007/s11121-021-01303-x

Institóris, L., Hidvégi, E., Rárosi, F., Sija, É., Kovács, K., Süvegh, G., Berkecz, R., & Kereszty, É. M. (2026). Drug use pattern of suspected drug-influenced drivers in Hungary (2019–2023). *Forensic Science International, 378*, 112681. https://doi.org/10.1016/j.forsciint.2025.112681

Ismail, R., Shukor, M. S., Ganasegeran, K., & Manaf, M. R. A. (2025). The mediating role of familial support and religiosity on youths' mental health and illicit drug use: A path analysis. *International Journal of Mental Health and Addiction, 23*(6), 5003–5021. https://doi.org/10.1007/s11469-024-01391-0

Ito, A., Usui, N., Doi, M., & Shimada, S. (2025). Adolescent methamphetamine exposure drives neuroinflammation and aberrant neurogenesis linked to anxiety and cognitive impairments in adult mice. *Translational Psychiatry, 15*(1), 364. https://doi.org/10.1038/s41398-025-03613-y

Kim DH, Kim Y. Factors Associated With Habitual Drug Use Among Adolescents: A Secondary Data Analysis. Asian Nurs Res (Korean Soc Nurs Sci). 2025 Feb;19(1):78-85. doi: 10.1016/j.anr.2024.12.006.

Krisnana, I., Rachmawati, P. D., Kurnia, I. D., Wahyuni, L., & Rithpo, P. (2024). Developing a parental empowerment model to prevent health risk behaviors among adolescents in East Java, Indonesia. *Jurnal Ners, 19*(2), 188–196. https://doi.org/10.20473/jn.v19i2.54203

Kurevakwesu, W., Masona, G., Mabeza, T. T., Zengeni, F., & Chiweshe, C. C. (2024). Factors responsible for substance use among youths in urban areas and social work-related interventions. *Journal of Social Work Practice in the Addictions, 24*(4), 367–384. https://doi.org/10.1080/1533256X.2023.2212475

Lawal, A., Abdullahi, S. B., Olorukooba, A. A., Hamza, K. L., Usman, B., Abdulkadir, A., et al. (2025). Prevalence and factors associated with substance abuse among adolescents in public and private secondary schools in Katsina State, Nigeria. *BMC Public Health, 25*(1), 531. https://doi.org/10.1186/s12889-025-21739-y

Markus, H., Ceneviva, G. D., Thomas, N. J., & Krawiec, C. (2025). Impact of substance use disorders on critical care management and health outcomes in septic adolescents. *Annals of Intensive Care*, *15*(1), 63. https://doi.org/10.1186/s13613-025-01482-8

McClure-Thomas, C., Lim, C., Sebayang, S., Fausiah, F., Gouda, H., & Leung, J. (2022). Perceived loneliness, peer, and parental relationship with smoking: A cross-sectional analysis of adolescents across South-East Asia. *Asia-Pacific Journal of Public Health*, *34*(8), 770–777. https://doi.org/10.1177/10105395221115220

Metz, K., Lewis, J., Mitchell, J., Chakraborty, S., McLeod, B. D., Bjørndal, L., Mildon, R., & Shlonsky, A. (2023). Problem-solving interventions and depression among adolescents and young adults: A systematic review of the effectiveness of problem-solving interventions in preventing or treating depression. *PLOS ONE*, *18*(8), e0285949. https://doi.org/10.1371/journal.pone.0285949

Monreal-Bartolomé, A., Barceló-Soler, A., García-Campayo, J., Bartolomé-Moreno, C., Cortés-Montávez, P., Acon, E., et al. (2023). Preventive gambling programs for adolescents and young adults: A systematic review. *International Journal of Environmental Research and Public Health*, *20*(6), 4691. https://doi.org/10.3390/ijerph20064691

Ngoufack, S. B. K., Ngoupaye, G. T., Noubouwo, J. C., Foutsop, A. F., & Kom, T. B. D. (2025). Tramadol-induced addiction shows sex-dependent variation response in pubescent adolescent Wistar rats. *IBRO Neuroscience Reports*, *19*, 801–810. https://doi.org/10.1016/j.ibneur.2025.10.007

Noh, D., & Kim, H. (2023). Effectiveness of online interventions for the universal and selective prevention of mental health problems among adolescents: A systematic review and meta-analysis. *Prevention Science, 24*(2), 353–364. https://doi.org/10.1007/s11121-022-01443-8

Pinquart, M., & Reeg, A. (2025). Associations of parental monitoring and behavioral control with substance use in adolescents and emerging adults: A meta-analysis. *Substance Use & Misuse*, *60*(10), 1497–1505. https://doi.org/10.1080/10826084.2025.2505142

Putri, A. (2024). Promosi Kesehatan untuk Pengetahuan Kesehatan di Kalangan Pelajar tentang Cyber Bullying di Sekolah. *Bakti Nusantara Pengabdian Masyarakat Indonesia*, *1*(2), 51-58. https://doi.org/10.63202/bnpmi.v1i2.66

Rachman, W. O. N. N., Syafar, M., Nasir, S., Amiruddin, R., Ahmad, A. K., Abdullah, M. T., et al. (2022). Drugs abuse behavior prevention model through family approach in adolescents in Kendari City. *Biomedical and Pharmacology Journal*, *15*(3), 1497–1502. https://doi.org/10.13005/bpj/2487

Rodríguez-Ruiz, J., & Espejo-Siles, R. (2025). What moderates the link between peers' and individual's substance use in adolescence? A systematic scoping review. *Adolescent Research Review*, *10*(2), 285–307. https://doi.org/10.1007/s40894-024-00247-x

Sanz-Pérez, A., Serrano, D. R., Fraguas-Sánchez, A. I., Pardo, M. C., Sánchez de León, J. M. R., Estupiñá, F. J., et al. (2026). Growing concerns: A systematic review and meta-analysis of cannabis use and mental health risks in youth. *Addictive Behaviors*, *172*, 108528. https://doi.org/10.1016/j.addbeh.2025.108528

Shaluhiyah, Z., Qatrannada, S. A., & Sulistyorini, D. (2025). HIV-AIDS prevention among women in Indonesia and the Philippines: A demographic health survey 2017. *Journal of Health Research, 39*(2). https://doi.org/10.56808/2586-940X.1143

Sharm, A., & Kappor, P. (2025). Investigation of the relationship between internet addiction with emotion regulation in adolescent: A cross-sectional study. *Journal of Community Nursing and Primary Care*, *2*(2), 65-74. https://doi.org/10.63202/jcnpc.v2i2.116

Shawaluddin, N. S., Lah, T. M. A. T., Mahjom, M., Nasaruddin, N. H., Alias, N., Riyadzi, M. R., et al. (2025). Associations of parental connectedness and monitoring with high-risk behaviors among Malaysian adolescents: A nationally representative study. *BMC Public Health, 25*(1). https://doi.org/10.1186/s12889-025-24598-9

Sojib, M. T. H., Rahman, M. H., Hasan, M. K., et al. (2024). Does parent-child connectedness influence substance use among Bhutanese adolescents: Evidence from a national survey? *BMC Public Health*, *24*(1), 2889. https://doi.org/10.1186/s12889-024-20404-0

Sultana, M., Gow, J., Mosharaf, P., Rahman, H., Koly, K. N., Rahman, M. A., et al. (2023). Parental role and peer support in adolescent suicidal behavior in eight South-East Asian countries. *Journal of Affective Disorders*, *332*, 221–230. https://doi.org/10.1016/j.jad.2023.03.092

Tadesse, T. Y., Kifle, Z. D., Adugna, M., Fisiha, B., Teshager, T., Ashagrie, M., et al. (2025). Prevalence and predictors of non-medical and lifetime use of controlled drugs among patients accessing mental health services at the University of Gondar Comprehensive Specialized Hospital: Northwest Ethiopia. *BMC Psychiatry*, *25*(1), 638. https://doi.org/10.1186/s12888-025-07092-9

Tinner, L., Palmer, J. C., Lloyd, E. C., Caldwell, D. M., MacArthur, G. J., Dias, K., et al. (2022). Individual-, family- and school-based interventions to prevent multiple risk behaviours relating to alcohol, tobacco and drug use in young people aged 8–25 years: A systematic review and meta-analysis. *BMC Public Health*, *22*(1), 1111. https://doi.org/10.1186/s12889-022-13072-5

Wang, Q., & Wang, H. (2023). Cannabis and tobacco use among adolescents aged 12–17 years from 16 low- and middle-income countries. *Journal of Global Health*, *13*, 04066. https://doi.org/10.7189/jogh.13.04066

Widhawati, R., Rivani, B., & Nurazizah, S. B. (2026). Association of food consumption patterns and physical activity with obesity among junior high school students in Tangerang, Indonesia: A cross-sectional study. *Indonesian Journal of Health Services*, *3*(1), 16-26. https://doi.org/10.63202/ijhs.v3i1.143

Yela, E., Abiétar, D. G., & Clua-García, R. (2025). How to eliminate hepatitis C between people who inject drugs in community services and prisons in Catalonia. *Harm Reduction Journal*, *22*(1), 133. https://doi.org/10.1186/s12954-025-01286-w

Zhuo, N. (2025). The history of substance abuse disorder in critically ill septic adolescent patients is associated with increased utilization of critical care resources and organ dysfunction. *Annals of Intensive Care*, *15*(1), 152. https://doi.org/10.1186/s13613-025-01554-9