Pancasakti Journal of Public Health Science and Research
Vol. 5, No. 2 May 2025: Page. 248–256
Doi: 10.47650/pjphsr.v5i2.1881
ISSN (Online): 2777-1296
OJS: http://journal.unpacti.ac.id/index.php/pjphsr

Counseling as a Smoking Behavior Service Strategy for Students at SMA Negeri 4 Jeneponto

Fatmawati M Saing*, Elna Sari, Rasniah Sarumi, Endang Sri Mulyawati L, Dewi Rahmawati
Universitas Karya Persada Muna

***Correspondence Address:** fatmawatim.saing23@gmail.com

Article Info

Article History
Received: May 06, 2025
Revised: May 15, 2025
Accepted: May 21, 2025

Keywords:
Smoking Behavior, counseling, knowledge, attitude, action.

ABSTRACT

Smoking in adolescence has a long-term impact on physical health as well as social and psychological development. This study aims to analyze the effectiveness of group counseling services in reducing smoking behavior among SMA Negeri 4 Jeneponto students. The study used a quasi-experimental design with a quantitative approach, involving two groups: the intervention group that received Group Counseling (KKp) services and the control group that received Group Counseling (BKp) services. A total of 40 smoking students were selected through purposive sampling techniques. The instrument in the form of a structured questionnaire that measures the knowledge, attitudes, and actions of smoking, has been tested for validity and reliability. Data was collected through pre-test and post-test, as well as documentation of the counseling process. The normality test showed abnormal data distribution, so the analysis was carried out using the Wilcoxon and Mann-Whitney tests. Results showed significant improvements in student knowledge, attitudes, and actions in the intervention group ($p < 0.05$), while the control group showed no significant changes. The average post-test scores of the intervention group were higher, and more respondents achieved the "good" category in all three domains. The conclusion of this study is that group counseling is effective in reducing smoking behavior among high school students, especially at SMA Negeri 4 Jeneponto.

INTRODUCTION

Smoking is one of the most significant global public health challenges, causing more than 8 million deaths each year, including approximately 1.3 million deaths due to exposure to secondhand smoke (World Health Organization, 2023). About 80% of the world's 1.3 billion tobacco users live in low- and middle-income countries, which are often the tobacco industry's main targets (World Health Organization, 2023). In Indonesia, the prevalence of smoking among adolescents remains high despite various control efforts. Data from the 2023 National Health Survey shows that the prevalence of smoking in the 10–18 age group decreased to 7.4% from 9.1% in 2018, but this figure is still above the national target of 5.4% (Azis Kumala, 2024).

Smoking behavior in adolescents is often influenced by social environmental factors, including the influence of peers and family members who smoke (Artanti et al., 2024). A

qualitative study by Fithria et al, (2021) revealed that adolescents view smoking as a social habit influenced by peer pressure, curiosity, and perceptions of masculinity. These factors demonstrate the importance of an approach that considers social and psychological context in efforts to prevent smoking among adolescents (Fithria et al., 2021).

Various interventions have been undertaken to reduce the prevalence of smoking among adolescents, including anti-smoking campaigns, increased tobacco taxes, and cigarette advertising bans. However, the effectiveness of these interventions is often limited if not accompanied by a more personalized and contextual approach. Counseling approaches, particularly group counseling, have shown potential in helping individuals understand and change their smoking behaviors through social support and personal reflection (Artanti et al., 2024).

SMA Negeri 4 Jeneponto is one of the schools in Indonesia that faces challenges in controlling smoking behavior among its students. Even though the smoking ban has been implemented in the school environment, students are still found to smoke secretly. This condition shows the need for an intervention approach that is not only prohibitive, but also educational and supportive.

This study aims to analyze the effectiveness of group counseling services as an intervention strategy in minimizing smoking behavior among SMA Negeri 4 Jeneponto students. Using a quasi-experimental design, this study will compare changes in smoking behavior between the group receiving Group Counseling (KKp) services and the group receiving Group Counseling (BKp) services. The results of this study are expected to make a theoretical contribution to the development of counseling-based intervention strategies as well as practical benefits for schools in implementing more effective smoking prevention programs.

METHODS

Quantitative research using a quasi-experimental design tests a hypothesis using statistically analyzed numerical data. This research uses independent sample t-tests to compare pretest and posttest scores to see if counselling affects students' smoking behavior (Siswanto, L., 2015). Research activities were carried out at SMA Negeri 4 Jeneponto, starting from January 6, 2025 to March 26, 2025. The selection of this location was based on the large number of smoking behaviors among students, especially students of SMA Negeri 4 Jeneponto. The population in this study includes all students (males) at SMA Negeri 4 Jeneponto, which totals 153 students. However, grade XII students were not included because they were preparing for the final school exam. Using the questionnaire, 40 pupils were found to smoke. Purposive sampling was used to choose pupils who smoked (Siswanto, L., 2015). This research collected data by giving all pupils smoking questionnaires, supporting data was obtained through literature review from books, journals, and other scientific sources. The data that has been collected is arranged in the form of a table to make it easier to analyze. Data processing is carried out with the help of SPSS (Statistical Product and Service Solution) software (Ghozali, 2002). Univariate analysis was carried out to describe the distribution of data and the frequency of each observed variable. Bivariate analysis was used to evaluate the relationship between two variables using the Wilcoxon test (Setiadi, 2010) and Mann Whitney test (Ghozali, 2002).

RESULTS

Table 1. Distribution of Respondents Based on the Characteristics of SMA Negeri 4 Jeneponto Students

Respondent Characteristics		Intervention Groups		Control Group	
		n	%	n	%
The Amount of Cigarettes Smoked	1-4 stems/day	0	0,0	13	65,0
	5-14 stems/day	20	100,0	7	35,0
Smoking Time	<1 year	1	5,0	3	15,0
	>= 1 year	19	95,0	17	85,0
Reasons for Smoking	Follow your friends	8	40,0	15	75,0
	Delicious	10	50,0	3	15,0
	To be considered cool/slang	2	10,0	2	10,0
Getting a cigarette from	Friend	4	20,0	11	55,0
	Buy your self	16	80,0	9	45,0
Complaints during smoking	Yes	2	10,0	0	0,0
	Not	18	90,0	20	100,0
Total		**20**	**100**	**20**	**100**

Source: Primary Data, 2025

Table 1 shows that the intervention group consumed 5-14 cigarettes per day, 100% of the daily cigarette consumption. The proportion of respondents based on the length of smoking was the highest which was above or equal to 1 year of 95%. The highest reason for smoking is because respondents feel good as much as 50%. The proportion of respondents' cigarette sources, namely from self-purchase, was 80% and respondents based on complaints during smoking were the highest, namely respondents who did not feel complaints as much as 90%.

The proportion of respondents in the control group based on the number of cigarettes consumed in a day was the highest at 65% by consuming 1-4 cigarettes per day. The proportion of respondents based on the length of smoking was the highest which was above or equal to 1 year of 85%. The reason for smoking is the highest because 75% of respondents follow their friends. The proportion of respondents' cigarette sources, namely from friends as much as 55% and respondents based on complaints during smoking, namely respondents who did not feel complaints as much as 100%.

Table 2. Analysis of Average Pre and Post Scores in the Intervention Group

Score Intervention Group	Pre-test			Post-test		
	Min	Max	Mean ± SD	Min	Max	Mean ± SD
Knowledge	46.67	93.33	72.6667 ± 10.79311	66.67	100.00	86.3333 ± 6.65789
Attitude	46.67	80.00	67.2500 ± 9.54023	58.33	83.33	73.5000 ± 8.85061
Action	33.33	44.44	39.4444 ± 4.73468	38.89	94.44	67.5000 ± 16.64472

Table 2. Analysis of Average Pre and Post Scores in the Control Group

Score Control Group	Pre-test			Post-test		
	Min	Max	Mean ± SD	Min	Max	Mean ± SD
Knowledge	53.33	86.67	69.000 ± 8.98992	40.00	86.67	68.0000 ± 13.26297
Attitude	50.00	91.67	69.1667 ± 11.98805	46.67	80.00	62.4167 ± 9.08818
Action	33.33	44.44	38.0556 ± 4.13978	33.33	66.67	43.6111 ± 7.49160

Source: Primary Data, 2025

Based on table 2 on the average knowledge score in the intervention group, the highest was in the posttest with a mean value of 86.3333 standard deviation of 6.65789. The highest average attitude score in the intervention group was in the posttest with a mean value of 73.5000 with a standard deviation of 8.85061. Meanwhile, the average action score was highest in the intervention group, namely in the posttest, with a mean value of 67.5000, standard deviation of 16.64472. All variable scores in the intervention group showed an average increase from pretest to posttest.

The pretest average knowledge score for the highest control group was 69.0000 with a standard deviation of 8.98992. Pretest attitude scores were greatest in the control group at 69.1667, the standard deviation was 11.98805. Meanwhile, the average highest action score in the control group was in the posttest, with a mean value of 43.6111 with a standard deviation of 7.49160. The action score in the control group experienced an average increase from pretest to posttest, while the knowledge and attitude score decreased from pretest to posttest (table 3).

Table 4. Analysis of Respondent Status Distribution Based on Knowledge, Attitudes and Actions

Variable		Intervention				Control			
		Pretest		Posttest		Pretest		Posttest	
		n	%	n	%	n	%	n	%
Knowledge	Less	1	5,0	0	0,0	0	0,0	2	10,0
	Enough	11	55,0	1	5,0	16	80,0	14	70,0
	Good	8	40,0	9	95,0	4	20,0	4	20,0
Attitude	Not good	4	20,0	1	5,0	4	20,0	8	40,0
	Good	16	80,0	19	95,0	16	80,0	12	60,0
Action	Not good	20	100	5	25,0	20	100	19	95,0
	Good	0	0,0	15	75,0	0	0,0	1	5,0

Source: Primary Data, 2025

Based on table 4, in the intervention group, the distribution of the respondents' pretest knowledge was the most in the sufficient category, which was 11 people (55%). After the intervention, the posttest distribution showed an increase to the good category with a total of 19 people (95%). The attitude in the pretest of the intervention group, the majority of respondents were in the good category as many as 16 people (80%), and after the intervention,

the number increased to 19 people (95%) who remained in the good category. Action, before the intervention, all respondents (100% or 20 people) were in the poor category, but after the intervention there was a significant increase with 15 people (75%) in the good category.

In the control group, the distribution of the most respondents' knowledge pretest was also in the sufficient category, as many as 16 people (80%). The posttest results showed a slight decrease with 14 people (70%) still in the adequate category. For attitudes, both in the pretest and posttest, the most categories remained in the good category12 persons (60%), down from 16 people (80%). In the action, all pretest responses (100% or 20 persons) were poor, and 19 (95%) were poor in the posttest.

Table 5. Normality Test Analysis of Intervention Groups and Control Groups

Score	Intervention Group			Control Group		
	Shapiro-Wilk			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Pretest						
Knowledge	0,948	20	0,338	0,927	20	0,135
Attitude	0,944	20	0,284	0,930	20	0,157
Action	0,787	20	0,001	0,809	20	0,001
Posttest						
Knowledge	0,818	20	0.002	0,894	20	0,032
Attitude	0,850	20	0,005	0,948	20	0,332
Action	0,912	20	0,071	0,820	20	0,002

Source: Primary Data, 2025

Based on table 5 on the results of the normality test analysis in the intervention group that the abnormal distribution data is in the pretest score of the action score, the knowledge posttest and attitude posttest.

The table of the normality test analysis results in the control group, that the data is abnormally distributed, namely in the pretest score of the action, the knowledge posttest and the posttest of the action. The follow-up analysis used in this study is the Wilcoxon and Mann-Whitney tests.

Based on table 6, the analysis of pre/post knowledge changes in the highest intervention group was respondents who experienced an increase of 19 respondents with a sig value. 0.000 which means that there is an influence of knowledge on the provision of counseling on the smoking behavior of SMA Negeri 4 Jeneponto students while the change in pre/post knowledge in the highest control group is the respondents who have increased by 9 respondents with a sig value. 0.841 which means that there is no effect of knowledge on the provision of guidance about cigarettes on the smoking behavior of SMA Negeri 4 Jeneponto students.

The change in Pre/post attitude in the highest intervention group was respondents who experienced an increase of 16 respondents with a sig value. 0.001 which means that there is an influence of attitudes towards counseling on the smoking behavior of SMA Negeri 4 Jeneponto students, while the change in pre/post attitude in the highest control group is the respondents

who have decreased by 8 respondents with a sig value. 0.033 which means that there is an influence of attitudes towards the provision of guidance about cigarettes on the smoking behavior of SMA Negeri 4 Jeneponto students.

Table 6. Analysis of the Influence of Pre/Post Knowledge, Attitudes and Actions on Intervention Groups and Control Groups Using the Wilcoxon Test

Variable	Group	n	Decreased	Increase	Settled	Sig.
Knowledge	Intervention	20	0	19	1	0,000
	Control	20	6	9	5	0,841
Attitude	Intervention	20	2	16	2	0,001
	Control	20	8	5	7	0,033
Action	Intervention	20	0	18	2	0,000
	Control	20	0	11	9	0,003

Source: Primary Data, 2025

The change in pre/post action in the intervention group was the highest number of respondents who increased by 18 respondents with a sig value. 0.000 which means that there is an effect of action on the provision of counseling on the smoking behavior of SMA Negeri 4 Jeneponto students while the change in pre/post action in the highest control group is the respondents who have increased by 11 respondents with a sig value. 0.003 which means that there is an effect of action on the provision of guidance about cigarettes on the smoking behavior of SMA Negeri 4 Jeneponto students.

Table 7. Analysis of Differences in Knowledge, Attitudes and Actions in the Intervention Group and Control Group Using the Mann Whitney Test

Group			n	Mean Ranks	Sig.
Pre-test	Knowledge	Intervention	20	22.85	0,211
		Control	20	18.15	
	Attitude	Intervention	20	20.25	0.904
		Control	20	20.75	
	Action	Intervention	20	22.20	0,369
		Control	20	18.80	
Post-test	Knowledge	Intervention	20	28.80	0,000
		Control	20	12.20	
	Attitude	Intervention	20	26.60	0,001
		Control	20	14.40	
	Action	Intervention	20	28.10	0,000
		Control	20	12.90	

Source: Primary Data, 2025

Based on Table 6, the results of the analysis of the difference in pretest knowledge between the intervention and control groups showed a significance value of 0.211, which indicates that there was no significant difference in the pretest knowledge score in the two

groups. In contrast, the posttest analysis of knowledge showed a significance value of 0.000, indicating a significant difference between the intervention group and the control group after the intervention was performed.

The pretest difference between the intervention and control groups showed no significant change in respondents' opinions before the intervention (0.904). However, the posttest significance value was 0.001, indicating a substantial difference between groups. In the action variable, the pretest significance value of 0.369 showed no significant difference between the intervention and control groups, while the posttest results with a significance value of 0.000 showed a significant difference in action scores after the intervention (Prochaska, J. O., & DiClemente, 1983).

DISCUSSION

Smoking habits among adolescents are a form of addictive behavior that is influenced by various psychosocial factors, such as the influence of peer groups, immaturity in forming self-identity, and lack of ability to control themselves. In this case, counseling is one of the strategic methods because it functions not only as a medium for delivering information, but also as a forum to build awareness and encourage changes in attitudes and behaviors.

The main findings in this study show that the implementation of Group Counseling (KKp) services has a significant impact on improving students' knowledge, attitudes, and actions related to smoking behavior. The increase is not only quantitatively measurable, but also shows a deeper change in meaning in the way students understand cigarettes and the risks of acceptance. These findings are in line with the theory of behavior change by Prochaska and DiClemente (1983), which highlight the importance of stages of awareness, intention to change, and commitment to realize sustainable behavior change (Prochaska, J. O., & DiClemente, 1983).

The effectiveness of Group Counseling Services (KKp) is suspected to come from its participatory and reflective approach, rather than just conveying one-way information. Through group discussions in a supportive atmosphere, participants were more open in recognizing mindset errors and forming a commitment to quit smoking. Research by Putri and Kurniawati (2022) also supports this, by showing that group dynamics and emotional interactions in group counseling can encourage the formation of new values and attitudes (Putri, D. A., & Kurniawati, 2022).

The control group that only received Group Guidance (BKp) services showed no significant changes. This indicates that counseling that is informative alone, without an emotional and reflective approach, is less effective in dealing with addictive behaviors such as smoking. Simanjuntak (2021) also emphasized that non-interactive approaches tend to have a weaker influence on changing adolescent health behaviors (Simanjuntak, 2021).

The cognitive-behavioral therapy-based approach (CBT) applied in some studies, such as by Rahmawati, et al (2021), has also resulted in improvements in terms of self-control and awareness of the dangers of smoking. This confirms that counseling methods that combine psychological and reflective elements greatly contribute to long-term behavioral change (Rahmawati, L., Supriyadi, E., & Hidayat, 2021).

However, the success of the intervention is not only determined by counseling alone. Several studies, such as by Yuliani and Nugroho (2023), show that support from the surrounding environment, especially from parents, teachers, and school culture that is consistent in rejecting smoking behavior, greatly determines the effectiveness of the program. Without such support, students tend to experience behavioral regression even though they have participated in counseling (Yuliani, N., & Nugroho, 2023).

Therefore, the success of group counseling services as a behavioral intervention strategy is highly dependent on the synergy between students, educational institutions, and families. A cross-sectoral collaborative approach is key to creating sustainable behavioral change in adolescent smokers.

CONCLUSION

This study concludes that Group Counseling Services (KKp) significantly affect the improvement of student knowledge, attitudes and actions in minimizing smoking behavior at SMA Negeri 4 Jeneponto. Consistent improvements in these variables after intervention showed that group counseling was effective as a service strategy in suppressing smoking habits among adolescents. In contrast, the Group Guidance (BKp) service in the control group showed no significant change, which reinforced the effectiveness of the KKp method in the behavior change approach. The study's goal of assessing counseling's influence on student smoking behavior was attained.

The suggestion for further research is that the school is expected to integrate group counseling services regularly as part of the student development program, especially in the issue of smoking behavior and other adolescent problems. Further development of a behavioral-cognitive group counselling model is required to improve secondary school treatments. It is recommended to conduct similar studies with longer intervention periods and wider sample coverage, including different school backgrounds, to test the consistency of results and expand the generalization of findings.

REFERENCES

Artanti, K. D., Arista, R. D., & Fazmi, T. I. K. (2024). The influence of social environment and facility support on smoking in adolescent males in Indonesia. *Journal of Public Health Research*, *13*(1). https://doi.org/10.1177/22799036241228091

Azis Kumala. (2024). *Smoking prevalence in 10- to 18-year-olds declined to 7*. https://en.antaranews.com/news/314685/smoking-prevalence-in-10-to-18-year-olds-declined-to-74-percentAntara News

Fithria, F., Adlim, M., Jannah, S. R., & Tahlil, T. (2021). Indonesian adolescents' perspectives on smoking habits: a qualitative study. *BMC Public Health*, *21*(1), 1–8. https://doi.org/10.1186/s12889-020-10090-z

Ghozali, I. (2002). *No TitleAplikasi Analisis Multivariate dengan Program SPSS*. Badan Penerbit Universitas Diponegoro.

Prochaska, J. O., & DiClemente, C. C. (1983). Stages and Processes of Self-Change of Smoking:

Toward An Integrative Model of Change. *Journal of Consulting and Clinical Psychology*, *51 (3)*, 390–395.

Putri, D. A., & Kurniawati, H. (2022). Pengaruh Konseling Kelompok Terhadap Perubahan Perilaku Merokok Pada Siswa SMA. *Jurnal Bimbingan Konseling Indonesia*, *7 (2)*, 98–107.

Rahmawati, L., Supriyadi, E., & Hidayat, A. (2021). Pendekatan CBT dalam Konseling untuk Mengatasi Perilaku Merokok Remaja. *Jurnal Konseling Dan Psikologi Pendidikan*, *5 (1)*, 24–31.

Setiadi. (2010). *Metode Penelitian untuk Keperawatan dan Kesehatan*. Salemba Medika.

Simanjuntak, H. (2021). Pengaruh Bimbingan Kelompok terhadap Pengetahuan Merokok di Sekolah Menengah. Jurnal Pendidikan Remaja. *Jurnal Pendidikan Remaja*, *7(3)*, 30–36.

Siswanto, L., et al. (2015). *Metodologi Penelitian Kesehatan*. Rajawali Pers.

World Health Organization. (2023). *Tobacco*. https://www.who.int/news-room/fact-sheets/detail/tobaccoWorld Health Organization

Yuliani, N., & Nugroho, S. (2023). Faktor Kontekstual dalam Efektivitas Program Anti Rokok di Sekolah. Jurnal Kebijakan Kesehatan Remaja. *Jurnal Kebijakan Kesehatan Remaja*, *4(2)*, 71–80.