

Increasing public knowledge regarding the dangers and impacts of smoking through education

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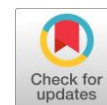
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Received 8 November 2023; accepted 8 May 2024; published 29 December 2024

ABSTRACT

Smoking behavior is still a health problem globally and in Indonesia. Smoking is a behavior that is a risk factor for various types of non-communicable diseases. Based on the results of community diagnosis, smoking behavior at home is 27%, and this includes groups of men and teenagers. Based on this problem, education is needed about the dangers of smoking through community service activities. This activity aims to provide an understanding of the dangers and impacts of smoking. The method used is direct counseling, assisted by leaflets and posters so they can be read again at home. The results obtained were an increase in knowledge before and after being given counseling regarding the dangers and impacts of smoking (sig. 0.000). It can be concluded that education about the dangers and impacts of smoking is effective in increasing public knowledge, so it is hoped that this understanding can influence smoking cessation behavior.



KEYWORDS

Education
Knowledge
Smoking



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1. Introduction

Smoking is the enjoyment of nicotine smoke produced by burning tobacco. Apart from nicotine, cigarettes contain sugar compounds, additives, sauces, flavors, fragrances, and other ingredients that create a taste that is attractive to consumers (smokers). A single cigarette consists of different forms of gelatinous tobacco, each with a different taste and aroma [1], [2]. The impact of chemical compounds in cigarettes, such as alkaloids as stimulants [3], [4]. Tobacco leaves contain alkaloids such as myosin, nicotine, anabasine, and nicotine. Nicotine is the chemical most often present in cigarettes [5]. *Nicotine* is a toxic alkaloid molecule isolated in tobacco that has the empirical formula C₁₀H₁₄N₂, which is known in organic chemistry as 1-methyl-2-pyrrolidin (3-pyridine) [6].

Smoking is a problem that is dangerous for public health; Indonesia ranks third in active smokers in the world [4], [7]–[10]. Smoking behavior can occur in all age groups and gender [11]. Smoking behavior is one of the risk factors that can be intervened in controlling non-communicable diseases (NCDs). Combating NCDs through public health efforts consists of prevention and control. Prevention efforts are carried out through health promotion activities and early detection of risk factors [12], [13].

Smoking behavior can be changed in a person. Several factors that influence changes in smoking behavior are knowledge, attitudes, and smoking frequency [14]–[16]. By knowing these risk factors, prevention can be done by providing the public with a correct understanding of the dangers of smoking. People who have low knowledge will be more at risk of smoking [17]. For this reason, socialization is needed about the dangers of smoking by providing education regarding the impact of smoking behavior to help people stop smoking [18].

This community service activity is carried out to provide knowledge about the dangers of smoking through education to fathers and teenagers. Providing education about the dangers of smoking can increase knowledge because it produces a person's senses through the senses of hearing and sight [19].

Providing education increases public understanding about smoking and the importance of implementing clean and healthy living behavior (PHBS) in everyday life [20].

2. Method

The method used in solving problems based on community diagnosis analysis in Pringgolayan Hamlet is health education. Participants in community service are fathers and teenagers. PkM participants are given material about cigarettes and their ingredients, the dangers of smoking both for themselves and others, the impact of smoking and the diseases it causes, and how to stop smoking. Measuring the effectiveness of health education using a knowledge questionnaire about smoking behavior before and after giving the education. Data from the questionnaire was processed and analyzed using the paired t-test and then presented in table form.

3. Results and Discussion

This Community Service (PkM) activity was carried out based on the results of problem priority analysis and community deliberation based on what was found with partners as an intervention effort to resolve health problems related to the smoke-free healthy home movement. This PkM was carried out on May 22, 2023, and June 9, 2023, in Pringgolayan Hamlet in collaboration between the Public Health study program and Banguntapan Community Health Center 3. The target of this PkM activity was 25 fathers and teenagers. The material presented is about smoking behavior, the dangers of smoking, the impacts it causes, and the diseases caused by smoking behavior. PkM material is provided using direct counseling methods and assisted by PowerPoint media, leaflets, and posters. Evaluation to measure the level of knowledge using a smoking behavior knowledge questionnaire given before and after the education was given. This PkM activity went well and smoothly; this could be seen from the enthusiasm in listening to and discussing the material with the participants during the implementation. Documentation of the activities can be seen in Fig. 1, Fig. 2, Fig. 3 and Fig. 4.



Fig. 1. Leaflet media



Fig. 2. Community deliberation in determining problem priorities



Fig. 3. Intervention Activities in Pringgolayan



Fig. 4. Giving pre-post test to participants

The effectiveness of education regarding smoking-free, healthy homes is measured by completing questionnaires before and after the education is provided. Pre-test for 25 counseling participants. The knowledge score obtained was subjected to a statistical test using a paired t-test because the test requirements were met. Namely, the data was normally distributed. Based on Table 1, it can be seen that the significance value is 0.000, which means there is a difference in the mean before and after the education intervention regarding knowledge of the dangers of smoking. Health education can increase public knowledge about the dangers of smoking. From these results, it can be seen that the intervention activities carried out can increase respondents' knowledge about the dangers of smoking. There are differences in knowledge before and after being given health education regarding the dangers of smoking on health [21].

Table 1. Paired t Test Results

| Variable | Normality test | Paired t test (sig) | CI 95% |
|--|----------------|---------------------|-------------|
| Knowledge regarding the dangers of smoking | 0,213 | 0,000 | 2,681-3,959 |

The intervention activities in Pringgolayan Hamlet RT 08 aim to increase knowledge and awareness of the dangers of smoking and the impacts it causes. Good knowledge means that family members are important in reminding them not to smoke in the house. This effort is carried out promotionally, namely by providing a stimulus so that smoking behavior can be prevented [22]. The importance of health promotion about the dangers of smoking provides increased knowledge and attitudes [23]. The intervention will influence people's attitudes because of good knowledge. Interesting material accompanied by posters or leaflets can influence participants' interest and attention [24]. Providing education as an effort to increase knowledge and attitudes needs to be carried out continuously so that it will raise awareness and the decision to stop smoking. Continuous education will provide benefits not only when counseling activities are provided but can continue in the future [25].

4. Conclusion

Based on the results of community service activities regarding the dangers of smoking, with counseling providing good understanding to the community, this can be seen in the evaluation results; there is a difference in the average score of community knowledge about the dangers of smoking before and after being given the education. Providing education about the dangers of smoking can be carried out on an ongoing basis in the Pringgolayan hamlet so that positive attitudes and public awareness can be formed to make changes by quitting smoking.

Declarations

Author contribution. All authors contributed equally to the main contributor to this paper. All authors read and approved the final paper.

Funding statement. None of the authors have received any funding or grants from any institution or funding body for the research.

Conflict of interest. The authors declare no conflict of interest.

Additional information. No additional information is available for this paper.

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