**The Barriers to Prevent Smoking Behavior of Junior High School Students: A Qualitative Study**

**A Susanto1, Hartono2, I D A Nurhaeni3, D T Kartono3**

1Politeknik Harapan Bersama, Tegal, Indonesia

2Faculty of Medicine, Universitas Sebelas Maret Surakarta, Indonesia.

3Faculty of Social and Political Sciences, Universitas Sebelas Maret Surakarta, Indonesia

**Abstract.** Prevention of adolescent smoking behavior is no progress. This condition is the impact of failure in defining barriers in this activity.  This study aims to explore the barriers to preventing early adolescent smoking behavior.  This study used a qualitative method for 52 selected participants (junior high school students, parents of students, religious leaders, community leaders, representatives of the Office of Health, and representatives of the Office of Education). The researchers carried out data collection using semi-structured interviews. From the interviews, the researchers identified the barriers to the prevention of early adolescent smoking behavior from various perspectives. The researchers divided research results into internal barriers and external barriers. Internal barriers are in the form of attitudes toward smoking behavior and low motivation to not smoke. External barriers are ease of access to cigarettes, lack of parental participation, influence from strong peers, and socio-culture. Barriers to the prevention of smoking behavior spread in various aspects. Identifying its factors that can overcome barriers to preventing smoking behavior in early adolescence. This information can optimize the preparation of health education to adolescents to prevent their smoking behavior.

1. Introduction

Teenage smoking behavior is influenced by many factors. Adolescents smoke because of friendship (1). Peers become a reference group for early adolescents (2)**.**  Adolescents have a potent influence on the development of early adolescent smoking behavior (3)**.** Adolescent smoking behavior is also associated with a lack of knowledge of the negative impact of smoking on health (4). The adolescents assume they are young, so the negative effects of the cigarettes will not affect them. Furthermore, it relates to parental behavior. Most early adolescents who smoke have parents or relatives who smoke (5)**.** Parents are the initial models for shaping children's behavior. Often the society's norm system also has a big influence in shaping this behavior. An apathetic society tends to make it easier for teenagers to smoke (3).

In Indonesia, the prevalence of smoking among adolescents between the ages of 10-18 is increasing. Basic health study findings in 2018 found that teen smokers aged 10-18 years had increased by 1.9 percent over five years. In 2013, the prevalence of adolescent smoking in Indonesia was 7.2 percent and increased to 8.8 percent in 2016 and 9.1 percent in 2018 (6)**.**

The growing number of teen smokers is not because no attempt is made to avoid it. Various interventions to solve the smoking prevalence are introduced with various strategies. Public regulations on the sale and promotion of cigarettes are made using behavior change communication, for example. It is an intervention to make sustainable changes to public health behavior. Contact focuses on the cycle of understanding and encourages people to have healthy habits that promote a better state of health (7).

Health promotion was carried out by various parties through different platforms, including face-to-face and the media. Health contact performed to influence smoking activity in youth, however, is still not having any major effect. These various preventive efforts start from the National to the regional levels (8). The government has adopted the MPOWER program that has been issued by the WHO. In 2013, the central government issued regulations regulating advertisements and sponsorship from cigarette companies. Furthermore, through the same regulations, the government also encourages regional regulations to regulate smoking-free areas. This program prohibits the sale of cigarettes and smoking in public spaces, one of which is school (9). Besides, the government has also launched a Community Movement for Healthy Living (GERMAS) program in 2016.

Following multiple attempts to discourage smoking activity in early teens, no substantial reduction was observed (10). Failure to minimize early teen smokers is due to challenges from different groups. To discourage early adolescent smoking behavior, the researchers conducted this study to summarize some barriers that exist in the area. The methodological approach was used to investigate barriers to avoidance of smoking activity in early adolescents.

Most of the previous studies focused on analyzing barriers to helping adolescents quit smoking. There are still fewer studies that explore qualitative barriers to preventing smoking behavior in adolescents (11). Due to the limited number of qualitative studies that examine the barriers that occur in preventing early adolescents from smoking comprehensively, this study aims to complement the study of the prevention of smoking behavior in early adolescents qualitatively. Therefore, the study aims to explore the various barriers to preventing smoking behavior in early adolescents from the perpetrators’ point of view.

**2. Methods**

The researchers conducted this research in Tegal City, Central Java Province, Indonesia. The study period was October-December in 2019. The study was focused on junior high students because the prevalence of adolescent smokers in Tegal City is relatively high. Research conducted by the Tegal City Health Office in 2014 showed that 33.61 percent of 123 junior high school students smoked (12)**.**

The researchers compiled this guideline based on theories from previous references (13). The guidance questions were divided into two parts: one for students and the other for stakeholders. When required, probes and follow-up questions were added during the interview process to facilitate elaboration and clarification of answers. Specific questions were introduced as the method of interviewing concepts evolved in response.

The participants in this study came from some elements, which were divided into junior high school students, parents of students, junior high school teachers, religious leaders, community leaders, representatives of the education office, and representatives of the health office. The students who became the focus of the study were male junior school students who had experience dealing with cigarettes. The recruitment of participants from other parties was based on their central roles in the prevention of adolescent smoking behavior and was partly developed from the previous participants (in this study: snowball sampling). At the start of the study, we did not determine the number of participants. The number of participants is determined based on saturation data. This is by the principles of qualitative research so that data is collected simultaneously (14).

Protocol for this study was approved by the Ethics Committee for Health Research of Sebelas Maret University Surakarta, Indonesia (registration number 344/ UNS27.06 /KEPK /EC/2019). The goals of the study were explained to the participants, and after giving informed consent they decided to voluntarily participate in the study. Data confidentiality was maintained at all stages of the analysis, and results were reported as aggregated rather than individual individuals. Every of the information collected was kept confidential and only used for academic purposes.

**3. Results**

The researchers divided early adolescent research into barriers to prevention in two main topics: internal and external. Internal barriers are that of the students, while external barriers are beyond learning barriers. Then, the researchers built two topics into seven more comprehensive topics.

***Theme 1: Attitudes of teenagers to smoking***

Most young people have a low smoking attitude. Some young people are still smoking although they are unhealthy. The finding of the following extract from the interview shows this:

When I smoke, my chest is tight, but I keep smoking because it is tasty. (Teenager 12)

Another opinion is an attitude that does not believe that smoking can kill. Teenagers of this opinion think that life or death is God’s destiny. This attitude is expressed in the following interview passage:

I know cigarettes can kill me. But I do not believe that, for to me life and death are in the hands of God (Teenager. 14).

Some teenagers are even more assertive that they will not stop smoking even though they have known the danger of smoking to health. This attitude appears in their statement:

I do not believe cigarettes can kill. I do not want to stop smoking and don't want to stop. (Teenager 20).

***Theme 2: The motivation of adolescents to not smoke***

Some students experience health problems when they smoke, but they find it difficult to stop smoking because their friends smoke, so in brief, these students do not want to stop smoking. They express this experience in following transcripts:

I was hospitalized for 2 days, the doctor forbids me to smoke, I am afraid of being relapsed if I am smoking, but it is hard to avoid smoking when together with friends. (Teenager 6).

My asthma has recurred because I smoke, but my friend provoked me to smoke continuously. I often smoke when I play games with my friend. Now I try to stop, but it is so hard. (Teenager 24).

Another experience is that these students can not stop it, so they struggle to reduce the frequency of smoking, as stated below:

I have once tried to stop smoking because my chest is tight, but I can not stop smoking. Sometimes, I reduce smoking frequently. Now, I smoke if there is a problem. (Teenager 11).

***Theme 3: Ease of access to cigarettes***

A significant barrier in preventing the smoking behavior of junior high school students is the access to cigarettes. Many stalls sell cigarettes to teenagers and the price of cigarettes can be affordable. Many stalls around the school sell cigarettes at retail (per stick). The participants reveal this in the following interview excerpt.

I sometimes buy cigarette bars by setting aside my allowance. (Teenager 14).

I buy it in a stall if there is no money to buy bars. (Teenagers 15).

Adolescent access to cigarettes sometimes comes from home. Some parents give cigarettes to their children. The following participants stated this:

I once smoked with parents, I asked for a cigarette from the father and was given. (Teenager 9).

I once took a parent's cigarette because my parents put the cigarette on the table. (Teenager 27)

***Theme 4: Low parental assistance***

Barriers arise in the home environment due to the parents’ less time to spend for their the children at home with the excuse of busyness. The participants revealed this in the following interview:

I hope parents often sit together at home. Most parents rarely gather with family, just to chat. (Health Office Representative)

My parents never talked about smoking before they knew I was smoking (Teenager 6)

Another barrier is the permission from parents to smoke when the children are adults. The following participants revealed this:

I can not smoke because I am still a child, but if I am already working, they allow me to smoke. (Teenager 7)

When I grow up, I may smoke. (Teenager 8)

The last barrier is the parents’ smoking behavior at home. Many parents smoke carelessly at home. This indirectly provides a poor example for teens. The following participants revealed this condition:

My parent often smokes when at home, he puts it on the table, and he asks me to buy cigarettes. (Teenager 20)

My parents and brother smoke at home. Sometimes I am asked to help buy cigarettes in a stall. (Teenager 21)

***Theme 5: Strong peer impact***

Peers are a powerful factor influencing the formation of behavior in adolescents. Most of the student smoking behavior is because of friendship, as revealed in the following interview:

My older friend asked me to smoke in the 4th grade. (Teenager 20)

My friend offered me in grade 5 elementary school. I refused, but a friend forced me. (Teenager 26).

Peer influence is stronger when the participants gather. They claim it is difficult to avoid this behavior at the moment, as expressed by the participants in the following statement:

I once tried to quit smoking but I could not because my friends always offered me cigarettes. (Teenager 4)

I once tried to quit smoking when not playing with friends, but often failed because friends asked me to smoke. (Teenager 10)

***Theme 6: Lack of teacher understanding***

Barriers to the prevention of smoking behavior in the school environment are that there are still many teachers who smoke at school. Several participants from the teachers revealed this condition in the following interview excerpt:

There are still one or two teachers who smoke in the school environment. (Teacher 1)

Here, one obstacle is teachers who smoke, even the principal of school smokes. Several times, students look at them smoking in the school environment. (Teacher 7)

Another barrier in schools is that schools cannot control the smoking behavior outside the school environment. Schools do not have responsibilities related to student behavior when these students are out of school. The behavior outside of school is the responsibility of the parents, as stated by the following participants:

There have been reports of children smoking in stalls around the school. It also happened outside of school hours, although still wear school uniforms. We need evidence to create the summons. (Teacher 2)

***Theme 7: Community attitudes toward teen smokers***

Most people are apathetic with student smoking behavior. They prefer silence when they see school children who are still wearing school uniforms smoking. They revealed this in the opinion of the following participants:

Many children still use smoking uniforms on the side of the road. But no one rebuked. (Teacher 6)

Some people do not want to reprimand smoking students because they do not know these students. They will just rebuke the proven one, as the following participants put it:

I have never rebuked teenagers who smoke on the street. I only advise teens who are my responsibility. (Religious Leader 1)

I advise teenagers only in school where I teach. I did not consciously counsel teenagers extensively. (Community Leader 1)

There are even some people who do not care and protect students who smoke in case of raids from schools. The attitude of the community assesses that school students smoking is common and not a big problem. The following participants expressed this:

People around here are mostly ignorant when they see children smoking. They even sometimes like to protect when there are raids from school. (Teacher 7)

**4. Discussion**

Research by Kumboyono et al. has shown that barriers to smoking behavior prevention in early adolescents in school are closely related to parents, teachers, and peers (15). Meanwhile, Rozema's research results indicate that the failure of adolescent smoking prevention activities is related to socio-political characteristics, school characteristics, individual characteristics and smoking ban characteristics (16). This current study adds to what has been studied in previous studies. The area of this ​​research does not only examine barriers to preventing outside smoking behavior of the perpetrators. The researchers discuss the barriers to preventing the smoking behavior of adolescents from two sides, namely from the youth side and from the stakeholder and community side. Besides, the uniqueness of this research is that it uses the grounded theory method. The results of the study resulted in a direct experience of barriers to smoking prevention, which then formed a theory that explained the barriers to preventing teenage smoking.

The first major theme that emerged was low attitudes and motivation in adolescents. The results of this study are in line with strengthening the results of the quantitative research that has been conducted, which shows that adolescents who smoke have positive attitudes and motivations towards smoking (17). This theme is related to the theme of the strong influence of peers who smoke. It also reinforces the findings that friends have an important position in the formation of adolescents (1,18). Most teenagers can avoid smoking if they don't hang out with their playmates.

Furthermore, the internal theme is related to the low level of parental and teacher guidance. Parents and teachers are the figures responsible for educating the adolescents. Parents are the first model for their children, while teachers are tasked with educating adolescents formally. Their role is very central in shaping adolescent behavior. Unfortunately, the research findings found the opposite. Many parents and teachers are not the role models for these adolescents regarding smoking behavior. They often smoke in front of their children and cannot limit themselves to smoking (19,20)**.** This is a bad percentage for the prevention of smoking behavior. The parents are positively supposed to be the driving force behind adolescent avoidance of smoking (21).

The theme of easy access to cigarettes is closely related to special programs to prevent smoking in adolescents and weak enforcement of regulations. Smoking behavior prevention needs a strong regulatory support. Weak enforcement of regulations gives adolescents access to smoking (22)**.** This has led to a tendency to consider smoking a very common thing. The impact is that there is an opinion that the smoking prevention program is an urgent matter. This study suggests that the government conducts a field survey, so that it knows that a comprehensive and specific adolescent smoking behavior prevention plan is urgently needed (23)**.**

Next, the theme of apathetic society with the behavior of teenagers who smoke. This study confirms that the socio-culture in society has a significant effect on behavior prevention.The socio-cultural climate has a strong impact on the production of adolescent smoking behavior (11). Public attitudes that ignore early adolescent smoking hinder the prevention of adolescent smoking behavior. This attitude provides opportunities for adolescents to shape their smoking behavior.

**5. Conclusion**

Research findings consistently show that the prevention of adolescent smoking behavior is not a simple matter. It takes patience, effort, and partnership with all parties. Efforts to prevent adolescent smoking behavior from an early age must be started early at home. Schools must also continuously campaign for preventive action by involving students. Education for adolescents should not only emphasize short-term health risks but also emphasize other disadvantages of this behavior. Prevention of smoking behavior of early adolescents also requires programs and budget funds from the government to refine regulations and enforce community regulations. Failure to prevent smoking is due to the absence of cooperation from stakeholders. Each stakeholder tends to act independently. Besides, there are no competent figures who intensively guide parents and adolescent health education. This study provides information for health educators to identify various barriers in the preparation of health education and promotion plans to prevent adolescent smoking behavior. Exploring existing barriers can support solid health education planning. In the future, a sustainable smoking behavior prevention program that involves many parties is needed. Besides, health education activities should be not only at the individual level but also at the institutional level.

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