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Comparison of Peer Education and the Classic Training Method for School Aged Children Regarding Smoking and its Dangers

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The aim of the present study is to compare the knowledge levels acquired from two different methods of teaching (peer education and a classic training method) about smoking and its dangers to school aged children. This study was an experimental design with pre- and post-tests. A total of 354 students, 253 of whom were from the peer education school, and 101 of whom were from the classic training school, were included. The study results found that the mean post-test scores of the students in the peer education school were significantly increased, indicating a greater level of knowledge ($p < .05$).

SMOKING HABIT NEGATIVELY affects the health of individuals, and is a major public health concern to the whole of society. Tobacco use causes approximately 5 million deaths per year. According to the World Health Organization, tobacco-related deaths will increase to more than eight million per year by 2030. More than 80% of those deaths will be in low- and middle-income countries (World Health Organisation, 2014). Smoking is also a major problem in Turkey, where 31.1% of all people, 15 years old and above are smokers (Turkish Statistical Institute, 2010). In recent studies, it was shown that the smoking rates among adolescents vary between 10 and 26% (Çuhadar and Bahar, 2007; İnal and Yıldız, 2006; Khuder, Price, Jordan, Khuder, & Silvestri, 2008; Rudatsikira, Muula, & Siziya, 2009; Ünsal and Sezgin, 2009).

Background

Across the world, the age when people start to smoke is constantly dropping (İnal and Yıldız, 2006; Khuder et al., 2008; Ünsal and Sezgin, 2009). Every day over 3200 children try their first cigarette and another 2100 youth and young adults become daily smokers. Nearly 9 out of 10 smokers have started before at the age of 18 (U.S. Department of Health and Human Services (2014). The traditional role models for children such as family members and teachers are very likely to be smokers and among friendship groups there is a perception that smoking is a sign of being grown up, and both of these factors play an important role in young people starting to smoke. In addition, factors such as the physical and emotional changes that occur during puberty, family structure, socio-economic status, peer pressure, and the need to be a member of a group all have an effect on starting to smoke (Kristjansson, Sigfusdottir, Allegrante, & Helgason, 2008).

Because of the increasing rate of smoking, and the decreasing age at which smoking starts, the entire community, especially families, teachers and health professionals have an important role in the struggle against smoking (Chalmers, Seguire, & Brown, 2002). Parents should be informed about the reasons why children start smoking, and the precautions that should be taken. Nurses should coordinate with families and organize health education programs for adults and children.

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Smoking is a socially learned behavior so it is affected by social factors such as parental and sibling smoking behavior, peer smoking, and perceived acceptance of friends (Altay, Kilicarslan Toruner, & Akgun Citak, 2014; Harakeh, Engels, Vermulst, De Vries, & Scholte, 2007; Kristjansson et al., 2008; Story, Lytle, Birnbaum, & Pery, 2002). The peer effect is an important factor in influencing this age group, and it would be developmentally appropriate for education on healthy behavior to be presented as a group study (Green, 2001; Story et al., 2002). Children and adolescents are at risk not only from active smoking, but also from passive smoking, so peer education is considered important in avoiding the dangers of smoking (Doğan and Ulukol, 2010; Khuder et al., 2008). Nurses should be involved in the development of these educational programs.

On the other hand, adolescents' attitudes also effect their smoking behaviors. Hogg and Cooper (2007) reviewed decades of studies on this topic and concluded that there is a definite relationship between attitude and behavior. Attitudes sometimes do not predict the behavior. The individual feautures (self-awareness, self-efficacy etc.), situation (subjective norms, economic effect) and the attitude itself can influence these associations. Chassin, Presson, Sherman, Seo, and Macy (2010) determined that attitudes predict smoking cessation behavior. For peer education, smoking attitudes and behaviors are consistent with some behavioral theories is explained below.

Theories for Peer Education

Peer education is the process whereby well-trained and motivated young people undertake informal or organized educational activities with their peers (those similar to themselves in age, background, or interests). These activities, occurring over an extended period of time, are aimed at developing young people's knowledge, attitudes, beliefs, and skills and at enabling them to be responsible for and to protect their own health (Green, 2001; Szilagyi, 2002; United Nations Interagency Group on Young People's Health Development & Protection, 2014). Peer education is now viewed as an effective behavioral change strategy, and it draws on several well-known behavioral theories—Theory of Reasoned Action, Social Learning Theory, and Diffusion of Innovation Theory (United Nations Office on Drugs [UNODC], 2014).

The peer education intervention model is based on the Diffusion of Innovation Theory. This theory posits that certain individuals (opinion leaders) from a given population act as agents of behavioral change by disseminating information and influencing group norms in their community. The opinion leader's role as educator is especially important in informal peer education, where the target audience is not reached through formally planned activities but through everyday social contacts (UNODC, 2014). Health professionals, especially nurses with educational and consulting roles, have important responsibilities in the implementation of these programs. In studies in which peer education has targeted different age groups and topics, peer education has been shown to be effective. There have been relatively few studies in which peer education has been used in relation to smoking issues (Aslan and Şahin, 2003; Doğan and Ulukol, 2010; Szilagyi, 2002). In the study of Doğan and Ulukol, two different education programs (peer education and a conference given by a pediatrician) opposed to smoking were given to adolescents about the harms of smoking. They found that the knowledge level of students increased: as a result of peer education. Szilagyi examined the effectiveness of peer education in disseminating tobacco related information and demonstrated that peer education is an effective tool to raise awareness on smoking issues in communities of disadvantaged children in Rome. Aslan and Şahin aimed to determine the effect of peer education on smoking and found that the knowledge level of the students increased after peer education. In those studies that have aimed to determine the effect of peer education on smoking behavior, the results showed that the knowledge level of the students improved through peer education (Aslan and Şahin, 2003; Doğan and Ulukol, 2010; Szilagyi, 2002).

The aim of the present study is to compare the knowledge levels acquired from two different methods of teaching (peer education and a classic training method) about smoking and its dangers for school aged children. It is assumed that informing students about this issue will help to convince them to not start the smoking habit. The study was designed to show whether there were any differences between the knowledge levels of students after peer education and after classic training.

Hypothesis of Study

H_0: There is no difference between peer education and classic training method.

H_1: There is a difference between peer education and classic training method.

Methods

Study Design

This study was an experimental design with pre- and post-tests. The participants in the study were students from the 3rd to the 8th grades of the only two schools in one of the many school districts of Ankara. It was determined randomly, by lot, which school would be selected for peer education, and which for classic training.

Participants

From the two schools in this region, all students from the 3rd to 8th grades, who agreed to take part, were included in the study. There were 322 students at the peer education school. Twelve of these students were chosen as peer educators, and they were not included in the test groups. The pre-test was administered to 297 students and the post-test was administered to 289 students, as 13 students and 21 students were absent on the days of the pre-test and post-test, respectively. The pre-tests and post-tests of the students were then matched. In this way, a total of 253