Background of study

Smoking and alcohol consumption are the two paramount high risk behaviours among adolescents of this era. One of the greatest challenges for nurses in 21st century is promoting healthy behaviour and protecting adolescents from smoking and alcohol consumption, especially when they are exposed to such behaviours in the environment. Adolescent period can be taken as an opportunity to help them understand the consequences of high risk behaviours and implementing primordial prevention and preventing adolescents from developing these behaviours. Hence the researcher taken up this project to provide adolescents with necessary information and skills to protect themselves from smoking and alcohol consumption and preventing the long term consequences associated with it.

Methods

An evaluative approach using the non equivalent control group time series design was used for the study. A total of 200 adolescents between the ages 10 to 13 years from the selected schools were recruited with 100 in the experimental and 100 in the control group. Pre test was conducted to assess the knowledge, perception and risk status regarding smoking and alcohol consumption. Risk reduction strategies were implemented to the adolescents in the experimental group. It included four components. First one, a video on the harmful effects of smoking and alcohol consumption which was screened for the adolescents. The second one, the researcher made the subjects to perform a role play on techniques to respond to peer pressure and to say ‘No’ to smoking and alcohol consumption, The third component
was speech and sharing of experience by a chronic smoker and alcoholic and as a fourth component various posters on the harmful effects of smoking and alcoholism were hung in schools throughout the data collection. The adolescents in experimental and control group were followed up for 9 months. At the end of six months a follow up session was conducted by the researcher. Three post tests were conducted in experimental and control group at the end of one month, six months and nine months. The data was compiled and analyzed through descriptive and inferential statistics.

**Results**

With regard to baseline characteristics, the mean age of subjects in experimental and control group was 12.040 ± 0.89 and 11.99± 0.88 years respectively. The results revealed that in the experimental group during the pre test majority (84%) of the subjects had inadequate knowledge which is reduced to as low as 1% in the post test III. During the pre test, none of the subjects in the experimental group had adequate knowledge, whereas majority of the subjects (87%) had adequate knowledge in the post test III. In the control group majority of the subjects had inadequate knowledge consistently in the pre and post tests. Majority of the subjects in the experimental (98%) and control group (85%) had moderate perception regarding selected high risk behaviour in the pre test. In the experimental group none of the subjects had good perception in the pre test whereas in the post test III more than half of the subjects (56%) had good perception. With regard to the level of risk status, in the experimental group during the pre test, 33% of the subjects had no risk whereas in post test III, 73% of subjects have fallen in to no risk category. In the control group there was no change in the level of risk status, consistently 3% of subjects in the pre and post test had high risk. It was also revealed that none of the adolescents in experimental group engaged in smoking and alcohol consumption during the study period and their intention to smoke and consume alcohol in future also greatly reduced after the intervention. There was a positive
correlation found between knowledge and perception ($r=0.225$) and a negative correlation between perception and risk status ($r=-0.183$). There was an association found between the age and the knowledge score ($p=0.035$) of adolescents.

**Conclusion**

This study was conducted with an aim to evaluate the effectiveness of risk reduction strategies on two high risk behaviours namely smoking and alcohol consumption. The study found that the intervention was effective in terms of reducing adolescent high risk behaviours. The study concluded that nurses can initiate programs to educate and empower adolescents and make them responsible for their behaviour. Preventing adolescents from smoking and alcohol consumption safeguards them from being vulnerable to risk factors for various diseases and prevents morbidity and mortality. This study finding has a direct implication for the prevention of non communicable diseases in India.

**Keywords**

Adolescents, High risk behaviours, Smoking, Alcohol Consumption, Risk reduction strategies, Knowledge, perception, risk status