Effects of Smoking Perception and Health Lifestyle Behaviour on Nursing Student Smoking Status

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Abstract

Oblective: This study was prepared as descriptive-cross sectional in order to determine effects of smoking perception and health lifestyle behaviour on nursing student smoking status**. Method**: Sampling of the study was composed of 120 students who were selected from all classess of a school of nursing with a stratified random sampling method and voluntarily accepted to participate in the study. Permissions were taken both from indviduals and institution to conduct the study. Data were collected with Demographic Survey Questionnaire Decisional Balace Scale and Health Promotion Lifestyle Profile II. Data analysis consisted of percentages, mean, Chi-square test and Odd Ratio **Findings:** Students participating in the study were 72.5% famale, 61.7% had tried at least one cigarette use, 50 % of the students using smoking, who smoke of students 32% a pack a day and 12.6% using a half pack of cigarettes. 57.5% is a relative smoking use, 45% of student started smoking after nursing education. Smoking status was affected by the students pros (p=0.000) and cons (p=0.000) perception smoking, and not affected by health promotion lifestyle (p=0.653). Finding smoking pros and cons perception of students increase the risk to use smoking 10.4 and 11 folds, respectively. **Results:** Students pros- cons perception to smoking effected to smoking status. Students healthy lifestyle behaviors level don't effect of smoking status.

Key Words: Nursing, Students smoking, Smoking perceptions, hHealthy lifestyle, Behaviors and smoking.

Introduction

Being one of the most important preventable mortality and morbidity causes, smoking affects human health in a negative way throughout their lives starting from the fertilization period. It is estimated that millions of people lose their lives due to smoking annually. According to estimations, almost half of these deaths is seen in developing countries (32). World Health Organisation (WHO) emphasizes that the most important step to be taken at this point is to prevent smoking or at least reduce the use of cigarettes. Such tasks as informing people about the harms of smoking and the reducing risk when it is quitted, creating healthy environments, helping people recently starting to quit smoking and preventing people who have never smoked from starting to smoke are responbilities of the healthcare personnel (19.25.26). On the other hand, data published by WHO indicate that the ratio of smoking among heatlhcare personnel is equal or highly above when compared to the ratios of individuals in the community (32). A majority of the healthcare personnel is composed of nurses. Nurses provide the healthy individuals and patients with care and meanwhile, they pass the most time

with them. Thus, nurses play a key role in preventing and reducing smoking due to the fact that individuals can get in contact with them easily and trust them. Furthermore, nurses set a role model to the society with their positive or negative health behaviors as they are healthcare professionals who are always in the public eye. Studies show that cessation of smoking by nurses reduces the ratio of smoking in the society as they set a model for the other people. It was also detected that nurses who are smoking participate in attempts to prevent and reduce smoking less than the nurses who do not smoke or have once smoked (10,11,22,23,24). Researches indicate that many nurses start smoking at schools of nursing or their ratios of smoking increase in the school years and their attitutes towards smoking are shaped at this period (9,28). Thus, it is really important to determine smoking status of nursing students and the factors causing them to start and continue smoking. In global tobacco epidemic report, 2010, it was stated that while the ratio of smoking was 29.6 % throughout Turkey, this ratio was 52.3 % among nurses. As researches show that smoking ratios vary between 15-40 % among the nursing students in Turkey, the range of smoking ratios is 3-97 % among the nursing students throughout the world. It is reported that students who are smoking have positive opinions and low level of health promotion behaviour as regards to the use of cigarettes by healthcare personnel when compared to those who do not smoke. Thus, it is necessary to reduce the ratios of smoking of student nurses (7,12,14,20,28,29,30). While it was detected in various studies that two of most important factors effecting smoking status

of nursing students are pros and cons perceptions regarding smoking, and health lifestyle behaviour, no enough study indicating how the perceptions of nursing students as regards to smoking effect their use of cigarettes is available in the literature (6,7,14,16,17,18,20,30).

This study was planned as descriptive-cross sectional in order to determine of smoking perception and health lifestyle behaviour on nursing student smoking status.

Material and Methods
Sampling

Sampling of the study was composed of 120 students who were selected from all classes of a faculty of nursing in the academic year of 2012-2013 through a stratified-simple random sampling method and who voluntarily accepted to participate in the study. After permission was taken from the relevant institution in order to conduct the study, participants were informed about the study and those who voluntarily accepted to participate in the study were included in the sampling of the research. Instead of individuals who did not accept to participate in the study, substitutes were reached and included in the study after being informed.

Data Collection

Data were collected with socio-demographic informations form, Decisional Balance Scale and Healthy Lifestyle Behaviour Scale II and Fagerstrom test for nicotine dependence between December 1st, 2010- January 15th, 2013. ***Decisional Balance Scale (DBS):*** This scale has 24 items and was developed by Velicer, DiClemente, Prochaska and Brandenburg in 1985 to assess adult perceptions of benefits

and harms of cigarettes. DBS for children was adopted from the original scale in 1998 by Pallonen, Prochaska, Velicer, Prokhorov and Smith and was reduced to 12 items. Children's DBS has six items addressing the 'pros' sub-scale and 6 items addressing the 'cons' sub-scale and covers each of 12 situations that involve the benefits and harms of smoking. The instrument is a 5-point Likert scale. Sub-dimension scores of Children's DBS range between 6 and 30. High mean scores in the 'pros' sub-scale indicate high perceptions of benefits of smoking and high mean scores in the 'cons' sub-scale indicate high perception of the harms of smoking. The reliability and validity of the scale for Turkish children was done by Bektaş, Öztürk ve Armstrong (2010). The Cronbach's Alpha coefficient related to the benefit and harm sub-dimensions of the scale are .74 and .78 respectively while test-retest reliability coefficients are r=.848 and r=.698 respectively. Total variance explained by each factor was %22 for benefit and %28 for harm sub-dimensions. Confirmatory factor analysis yields a correlation coefficient of .49 between the benefit and harm sub-dimensions of the scale. As a result, DBS was found to be a reliable and valid instrument for use in the Turkish culture (4). *Fagerstrom test for nicotine dependence:* It was developed by Fagerstrom, Heatherton and Kozlowski in 1992 and its validity and reliability tests were performed in Turkey by Uysal et al. in 2004. The highest score to be received in this scale which is composed of six questions and measures the physical dependence level of nicotine is 11. A score between 0-2 means the lowest level of nicotine dependence, a score between 3-4 means a low level of dependence, score of 5 means a moderate level, 6-7 scores indicate a high level of dependence and score of 8 and over show a very high level of dependence (25). *Health Promoting Lifestyle Profile II:* The scale was developed by Walker et al. (1987) and revised again in 1996 (16). It is composed of 52 items and 6 subscales. It is 1-to-4 response scale. Alpha coefficient reliability of the scale was .92 and alpha coefficient reliability of the subscales varied from .70 to .90. The scale was adapted Turkish population by Bahar et al (2). Alpha coefficient reliability of the scale was .92 in Bahar et al (2008) study. The total score reflects the healthy life-style behavior.

Statistical Analysis

Data analysis consisted of percentages, mean, Chi-square test and Odd Ratio. Statistical significance was set at 0.05.

Results

72.5 % of nursing students participating in the study was female, 27.5 % of them was male and their age average was 20.9±1.6. . 57.5 % of the relatives of the students was smoking and fathers smoked at the most within the families where cigarettes were consumed. 61.7 % of them has tried smoking at least once in their life times and smoking ratio was 50 % among students. 32% of students who smoke a pack a day and 12.6% of them using one and a half pack of cigarettes. 45% of the students' perceptions wasn't change about smoking after starting nursing education, Only 15% of students who smoke quit smoking, but 85% of smokers reported that not thinking quit smoking.

Table 1: Comparison of Smoking Status of Students by Pros Perception of Smoking

Pros Perception	Smoking Status				x^2	p
	Smoker		Non-smoker			
	n	%	n	%		
Low	8	12.7	55	87.3	73.818	.000
High	52	91.2	5	8.8		
Total	60	50.0	60.0	100.0		

12.7 % of the students who low pros perception of smoking and 91.2 % of the students who high pros perception of smoking use cigarettes. Difference between the low pros perception of smoking and the group high pros perception of smoking is statistically highly significant (Table 1, p=.000). Finding smoking pros perception status of students increase the risk to use smoking 10.4 folds (OR: 10.4, IC:%95, 4.467-24.2).

Table 2: Comparison of Smoking Status of Students by Cons Perception of Smoking

Cons Perception	Smoking Status				x^2	p
	Smoker		Non-smoker			
	n	%	n	%		
Low	4	6.8	55	93.2	86.724	.000
High	56	91.8	5	8.2		
Total	60	50.0	60.0	100.0		

6.8 % of the students who low cons perception of smoking and 91.8 % of the students who high pros perception of smoking use cigarettes. Difference between the low cons perception of smoking and the group high cons perception of smoking is statistically highly significant (Table 2, p=.000). Finding smoking cons perception status of students increase the risk to use smoking 11.2 folds (OR: 11.2, IC:%95, 4.826-25.9).

Table 3: Comparison of Smoking Status of Students by Health Promoting Lifestyle Profile Level (HPLP)

HPLP Level	Smoking status				x^2	p
	Smoker		Non-smoker			
	n	%	n	%		
Low	31	51.7	29	48.3	0.075	.784
High	29	49.2	30	50.8		
Total	60	50.4	59	49.6		

51.7 % of the students who low level of HPLP and 49.2 % of the students who high level of HPLP use cigarettes. Difference between the gropu low level of HPLP and the group high level of HPLP is not statistically significant (Table 3, p=.784).

Finding HPLP level of students increase the risk to use smoking 1.1 folds (OR: 1.106, CI% 95:0.539-2.269).

Discussion

This is a descriptive study conducted in order to examine the effects of perception about smoking and healthy lifestyle level on nursing students' smoking status.

Pros/Cons of Smoking and Smoking Status

A significant difference was found in the status of smoking according to pros perception level of smoking (p=0.000, Table 1). The low level of pros perception score of the nursing students smoking status were significantly lower than those who high level of pros perception score (Table 1). Finding smoking high level of pros perception status of students increase the risk to use smoking 10.4 folds (OR: 10.4, IC:%95, 4.467-24.2). These findings indicate that nursing student's smoking status are influenced by his/her views on the benefits perception of smoking. Studies shown that smoking status of nursing student who were high level of pros were higher than nursing student who were low level of pros perception (4,18).. Lenz (2008) also detected in his study that smoking perceptions of individuals affect the use of cigarettes. It is thought that nurse student possibly find smoking beneficial due to temporary physiological-psychological relaxing effects provided by nicotine at the stresful student days and positive perceptions of the social environment towards smoking (6,7,14,16,17,18,20,28,30). Moreover, Bandura (1989) argues that the frequency of a behavior increases when individuals perceive a behavior to be beneficial. The finding of this study that the smoking ratio of the individuals finding smoking beneficial is high supports this argument of Bandura. Thus, negative perceptions to be developed in the nursing students a regards to smoking will be effective in reducing the smoking ratio.

The nursing student smoking status showed significant differences according to cons level of smoking (p= .000, Table 2). The findings of this study indicate that nursing student's perceptions of the disadvantages of smoking influence their smoking status. Finding smoking cons perception status of students increase the risk to use smoking 11.2 folds (OR: 11.2, IC:%95, 4.826-25.9). Additionally, The nursing student smoking status wasn't showed significant differences according to HPLP level (Table 3, p=.784). King et al., (1996) study results demonstrated that more positive beliefs about smoking were directly associated with negative beliefs about exercise and that more negative beliefs about smoking were directly related to positive beliefs about exercise. However, it is expected that nursing education should change perceptions regarding such a negative behavior as smoking and increase the HPLP level. The most important reasons of this situation are thought to be that courses directly aimed at preventing and reducing the use of cigarettes are not available in the curriculum of nursing education and the high ratio of smoking among educators and nurses sets a model to the nursing students. Researches indicate that many nurses start smoking at schools of nursing or their ratios of smoking increase in the school years and their attitutes towards smoking are shaped at this period

(9,18). Thus, it is really important to determine smoking status of nursing students and the factors causing them to start and continue smoking. In global tobacco epidemic report, 2010, it was stated that while the ratio of smoking was 29.6 % throughout Turkey, this ratio was 52.3 % among nurses. As researches show that smoking ratios vary between 15-40 % among the nursing students in Turkey, the range of smoking ratios is 3-97 % among the nursing students throughout the world (6,7,14,16,17,18,20,28,30). It is reported that students who are smoking have positive opinions as regards to the use of cigarettes by healthcare personnel when compared to those who do not smoke. Thus, it is necessary to reduce the ratios of smoking of student nurses (29). It was detected in various studies that the factors effecting smoking status of nursing students are HPLP level and pros/cons perceptions regarding smoking (7,14,16,17,20,28,30). Bandura (1989) stresses that as individuals and their demeanour are influenced by their environments, positive environments will support the development of positive behaviours in person, while those raised in negative environments will be at risk of developing unhealthy behaviour patterns. Many students live in the university dormitories. Bandura (1989) has emphasized that structured or unstructured environment has direct impacts on negative and positive health behaviors of individuals. No matter how much effort is exerted in order to create a healthy environment in the university dormitories, problems arousing from communal life, coping skills inabilities caused by these problems as well as financial difficulties of the students pave the way for the students to develop negative health behaviors (1,3,8). Certainly, smoking directly increases in such an environment. On the other hand, nurse students faced a lot of stressor like exam, practice and term work at the university. Many students can not deal with these stressor. And this stressors create a negative environment for nursing students. Thus, Negative environments, high academic and clinic nurse smoking ratio will be at risk of developing unhealthy behaviour patterns like smoking among the nursing students. Therefore, despite nursing students got high level of HPLP, their smoking status equal or highly above when compared to the ratios of individuals in the community.

Conclusion

In conclusion, low pros and high cons perception of smoking positively impact the *reduction* of smoking. Healthy lifestyle behaviours did not affect Smoking status. As there have been few studies in Turkey and around the globe on how pros and cons perception of smoking and HPLP level affect smoking status in nursing students, it is recommended that further such studies are conducted within various regions and throughout various cultures.

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