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ABSTRACT

Smoking is a worldwide problem affecting the people beyond their age, sex race or community. Smoking in medical students has reached up to an alarming level

Objectives: To determine the psychosocial determinants related to smoking among students of KEMU

Subjects and methods: Fifty cases were randomly selected from students of King Edward Medical University. Fifty controls were selected and interviews were conducted. Data was collected, compiled and analyzed.

Result: After bivariate analysis, it was found that influence of negative advertisements (OR=3.857, CI=1.278-11.68) continuity of negative advertisements (OR=3.778, CI=1.3432-10.628) parental smoking (OR=2.263, CI=1.013-5.052) fake belief of athletic performance enhancement restlessness (OR=4.935, CI=1.986-12.26) friends offering cigarettes (OR=6.0641, CI=2.076-15.92) fake belief of opposite gender attraction (OR=6.682, CI=2.610-17.104) lack of sound sleep (OR=0.899, CI=0.363-2.224) not offering prayers (OR=4.529, CI=1.952-10.508) fake pleasure (OR= 10.028, CI= 4.005-25.108) are found to be significantly associated with smoking among students of KEMU. However after multivariate analysis, influence of negative advertisements OR=3.857, CI=1.278-11.68) continuity of negative advertisements (OR=3.778, CI=1.3432-10.628) parental smoking (OR=2.263, CI=1.013-5.052) fake belief of athletic performance enhancement, restlessness (OR=4.935, CI=1.986-12.26) friends offering cigarettes (OR=6.641, CI=2.076-15.92) fake belief of opposite gender attraction (OR=6.682, CI=2.610-17.104) lack of sound sleep (OR=0.899, CI=0.363-20.224) not offering prayers (OR=4.529, CI=1.952-10.508) fake pleasure (OR=1.631, CI=0.681-3.909) were significantly associated with smoking among students of KEMU.

Conclusion: Further investigations are required to find out various psychosocial factors leading to smoking and frequency of smoking.

Key words: Smoking, psychosocial factors

INTRODUCTION

Smoking is a worldwide problem affecting the people beyond their age, sex race or community. Smoking in medical students has reached up to an alarming level. This study is mainly focused upon distribution, determinants and frequency of smoking among the students of KEMU. Keeping in view the enormous number of male students indulging in Tobacco smoking, this problem is the main stream of our research. Influence of negative advertisements was associated with smoking in students¹. Continuity of smoking was associated with smoking due to advertisements². Smoking was not associated with relieving depression³. Lack of awareness was associated with increased smoking⁴. Lack of role of parents was not associated with increase chance of smoking⁵. Smoking of students was associated with their parent's smoking⁶. Smoking was associated with increased athletic performance⁷. Mental stress

was not associated with increase d incidence of smoking⁸. Smoking was not associated with increased feeling of independence⁹. Smoking was associated with relieve of restlessness¹⁰. More smoking of students was associated with their friends offering them cigarettes¹¹. Students smoking was associated with attraction of opposite gender¹². Lack of sound sleep was associated with increased smoking¹³. Broken families was associated with increased chance of smoking¹⁴. Lack of rest after lunch was not associated with increased smoking¹⁵. Lack of exercise was not associated with increased smoking¹⁶. Not offering prayers was associated with increased smoking¹⁷. Smoking of students was not associated with the fake pleasure¹⁸. Smoking friends was not associated with increased chance of smoking¹⁹.

MATERIAL & METHODS

The study was carried out randomly among students of King Edward Medical Univeristy, Lahore from 8th of August 2008 to 10th of September 2008. Fifty cases were randomly selected from students of KEMU. Fifty controls were selected and interviews

Final Year Students of King Edward Medical University
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were conducted. Data was collected, compiled and analyzed.

a) Dependent variables: Psychosocial determinants of smoking among the students of KEMU

b) Independent variables: Influence of advertisements¹, continuity due to advertisements², parental smoking⁷, fake belief of athletic performance enhancement⁸, restlessness relief¹¹, offering of cigarettes by friends¹², fake belief of opposite gender attraction¹³, lack of sound sleep¹⁴, not offering of prayers¹⁸, fake pleasure¹⁹, lack of exercise¹⁷, depression⁴, lack of awareness about side effects⁵, lack of role of parents⁶, fake relief of mental stress⁹, broken families¹⁵, lack of rest after lunch¹⁶, smoking friends²⁰.

Study Design was Case control. Study area was King Edward Medical University. Study universe was student community of KEMU.

Study subjects selection criteria:

Inclusion Criteria for the cases & controls: medical students of King Edward Medical University

Exclusion Criteria for the cases & controls: Medical students of other medical colleges

Social and Ethical Considerations:

- (a) Observing cultural ethics
- (b) Consent was obtained for interview

Sample size was calculated through Epi-info. Sampling Technique was random sampling.

The data was compiled and analyzed through SPSS. Before carrying out the actual exercise of data collection, questionnaire was tested on some subjects on experimental basis to observe:-

- Any deficiency in questionnaire.
- Ethical and social acceptability of questionnaire.

RESULT

Distribution: A total of 100 individuals (50 cases and 50 controls) were recruited in the study. 65% were male and 35% were female. 100% were above matric whereas 0% below matric. 30% were skilled whereas 70% unskilled

Multivariate Analysis: The bivariate analysis showed some of the socio demographic factors exhibiting statistically significant association with smoking including influence of negative advertisements, continuity due to negative advertisements, lack of awareness about side effects, parental smoking, fake belief of athletic performance enhancement, restlessness, friends offering cigarettes, lack of sound sleep, fake belief of opposite gender attraction, not offering prayers, fake pleasure. Multivariate logistic regression model was used to control for the possible confounding effect of these socio demographic factors on each other. It was

observed that after the controlling for the socio demographic factors, only influence of negative advertisements (OR=3.857, CI=1.278-11.68) continuity of negative advertisements (OR=3.778, CI=1.3432-10.628) parental smoking (OR=2.263, CI=1.013-5.052) fake belief of athletic performance enhancement restlessness (OR=4.935, CI=1.986-12.26) friends offering cigarettes (OR=60.641, CI=20.76-15.92) fake belief of opposite gender attraction (OR=6.682, CI=2.610-17.104) lack of sound sleep (OR=0.899, CI=0.363-2.0224) not offering prayers (OR=4.529, CI=1.952-10.508) fake pleasure (OR=1.631-0.681-3.909). exhibited a statistically significant relationship with smoking whereas lack of awareness (OR=2.374, CI=1.035-5.444) about side effects did not exhibit a statistically significant relationship with smoking.

Similarly in the bivariate analysis some of the socio demographic factors did not exhibit statistically significant association with smoking including depression, lack of role of parents, fake relief of mental stress, fake feeling of independence, broken families, lack of rest after lunch, lack of exercise, smoking among friends. However after Multivariate analysis only lack of exercise did not exhibit a statistically significant relationship with the smoking whereas depression, lack of role of parents, fake relief of mental stress, fake feeling of independence, broken families, lack of rest after lunch, smoking among friends exhibited a statistically significant relationship with the smoking among medical students (Table).

DISCUSSION

In multivariate analysis, advertisements increased smoking in students. Similar association was found in previous studies¹. Students kept on smoking due to advertisements. Similar association was found in previous studies^{2,3}. Smoking relieved depression. Similar association was found in previous studies⁴. Lack of awareness did not increase smoking. However, similar association was not found in previous studies⁵. Lack of role of parents increased chance of smoking. Similar association was found in previous studies⁶. Students smoked because their parents smoked. Similar association was found in previous studies⁷. Smoking increased athletic performance. Similar association was found in previous studies⁸. Mental stress increased incidence of smoking. Similar association was found in previous studies⁹. Smoking increased the feeling of independence. Similar association was found in previous studies¹⁰. Smoking relieved restlessness. Similar association was found in previous studies¹¹. Students smoked more because their

friends offered them cigarettes. Similar association was found in previous studies¹² Students smoked to attract opposite gender. Similar association was found in previous studies¹³. Lack of sound sleep increased smoking. Similar association was found in previous studies¹⁴ Broken families increased chance of smoking. Similar association was found in previous studies¹⁵ Lack of rest after lunch increased smoking. Similar association was found in previous studies¹⁶ Lack of exercise did not increase smoking. However, similar association was not found in previous studies¹⁷. Not offering prayers increased smoking. Similar association was found in previous studies¹⁸. Students smoked because they felt pleasure in smoking Similar association was found in previous studies¹⁹ Smoking friends increased chance of smoking. Similar association was found in previous studies²⁰.

Our study was limited by the fact that it was single centre study and had a small sample size.

Further investigations are required to find out various psychosocial factors leading to smoking.

CONCLUSION

After bivariate analysis, it was found that influence of negative advertisements, continuity of negative advertisements, parental smoking, fake belief of athletic performance enhancement restlessness, friends offering cigarettes, fake belief of opposite gender attraction, lack of sound sleep, not offering prayers, fake pleasure are found to be significantly associated with smoking among students of KEMU. However after multivariate analysis, influence of negative advertisements, continuity of negative advertisements, parental smoking, fake belief of athletic performance enhancement restlessness, friends offering cigarettes, fake belief of opposite gender attraction, lack of sound sleep, not offering prayers, fake pleasure were significantly associated with smoking among students of KEMU.

Table: Relationship of psychosocial determinants with smoking

Variables	Crude OR	95%CI	Adjusted OR	95% CI
Lacking exercise	1.632	0.736-3.616	0.607	0.274-1.342
Not offering prayers	4.529	1.952-10.508	0.180	0.704-0.436
Lack of rest after lunch	1.379	0.628-3.029	0.291	0.124-0.681
Lack of sound sleep	0.899	0.363-2.224	0.595	0.241-1.419
Lack of awareness of side effects	2.374	1.035-5.444	0.039	0.013-0.116
Offering cigarettes by friends	6.641	2.769-15.927	0.136	0.042-0.445
Smoking among friends	2.577	0.891-7.448	0.165	0.050-0.544
Parental smoking	2.263	1.013-5.052	0.032	0.007-0.149
Lack of role of parents	1.339	0.563-3.189	0.049	0.013-0.181
influence of advertisements	3.857	1.278-11.638	0.724	0.329-1.594
Restlessness	4.935	1.986-12.262	0.087	0.032-0.236
Continuity due to advertisements	3.778	1.343-10.628	0.021	0.007-0.071
Depression	1.102	0.464-2.615	0.114	0.035-0.368
Fake belief of opposite gender attraction	6.682	2.610-17.104	0.032	0.010-0.101
Fake relief of mental stress	1.631	0.681-3.909	0.210	0.085-0.518
Fake belief of athletic performance enhancement	3.273	1.372-7.806	0.210	0.040-0.123
Broken families	0.542	0.202-1.452	0.072	0.024-0.214
Fake feeling of independence	0.583	0.252-1.348	0.105	0.038-0.294
Fake pleasure	10.028	4.005-25.108	0.016	0.002-0.125

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