

## KNOWLEDGE ABOUT SMOKING RELATED HEALTH DISORDERS AMONG MEDICAL STUDENTS OF RAWALPINDI MEDICAL COLLEGE, RAWALPINDI

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All the authors contributed significantly to the research that resulted in the submitted manuscript.

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### ABSTRACT

**Objective:** To assess knowledge of medical students regarding smoking related health disorders among medical students of Rawalpindi Medical College, Rawalpindi.

**Methodology:** This descriptive cross-sectional study was conducted at Rawalpindi Medical College, Rawalpindi in June 2010. A structured questionnaire regarding hazards of smoking was used to know the knowledge of medical students from first year to final years. Data was collected by self administered questionnaire especially pertaining to smoking related health hazards including neonatal death, sudden infant death syndrome, lung and coronary heart diseases with respect to passive smoking, rising prices of tobacco products, banning smoking in health centers, enclosed places and sale of tobacco products. Data was analyzed using SPSS version 20.

**Results:** A total of 957 medical student were enrolled. Among them males were 30.7% while females were 69.3%. 89.2% medical students agreed with association of maternal smoking with Sudden Infant Death Syndrome while 78.6% students acknowledged association of passive smoking with neonatal death. 89.7% students claimed relationship of passive smoking with growing risk of lung and heart diseases. Banning sale of tobacco products and advertising of tobacco products was affirmed by 91.8% and 89.7% medical students respectively.

**Conclusion:** Although majority of medical students were found to be knowledgeable about smoking related health risks, their comprehension still entails further enhancement for up-gradation of existing scenario.

**Key Words:** Smoking, Neonatal Death, Sudden Infant Death Syndrome, Coronary Heart Disease

## INTRODUCTION

Tobacco is established to be the second leading cause of death worldwide.<sup>1</sup> Tobacco epidemic is studied to be the alarming health confrontation today as number of deaths from tobacco related diseases is exceeding the figure attributed to AIDS, TB and malaria added together.<sup>2</sup> If current mortality rate prevails, more than 8 million people will succumb to death from tobacco by 2030 with greatest mortality and morbidity occurring in less developed regions of the world.<sup>3</sup>

A study conducted among health professionals of Kolkata concluded that tobacco consumption was much prevalent among male doctors but most of them also gave up that habit later on.<sup>4</sup> Another study carried out in Argentina revealed that excessive fatty meal consumption among smokers is associated with raised risk for prostate and breast cancers.<sup>5</sup> A prospective randomized study revealed that intrauterine cigarette smoking exposure results in reduced ovarian reserve of female offspring and DNA damage of granulose cells.<sup>6</sup>

Although cigarette smoking has been diminished in developed countries, there is proportional increase in smoking in developing countries where recently about half of the tobacco related deaths have been reported.<sup>7</sup> Cases of lung cancers, chronic obstructive pulmonary disease and myocardial infarction are frequently escalating with

increased sale of cigarettes.<sup>8</sup> The present study is anticipated to assess the knowledge of medical students about smoking related health disorders so that any deficit in their knowledge could be appraised and policy makers could be given appropriate directions for up gradation of current scenario accordingly.

## METHODOLOGY

A descriptive cross sectional study was carried out among total 975 medical students from first year to final year studying during June 2010 in Rawalpindi Medical College, Rawalpindi. Informed consent was taken by all the students before beginning study and anonymity was ensured. Data was collected by means of self administered questionnaire regarding health hazards of passive smoking, maternal and paternal smoking, banning of tobacco sales to children and adolescents, banning of advertisement and sport sponsorships by tobacco industry, prohibition of smoking at public places and health care centers. Data was analyzed using a soft ware of SPSS version 20.

## RESULTS

A total of 975 medical students were enrolled in this study. Viewpoints of the respondents with respect to health hazard and banning of cigarette smoking at various prices along with price augmentation of tobacco products is portrayed in Table 1.

**Table1: Views of Medical Students Regarding Price of Tobacco Products, Health Hazards & Banning of Cigarette Smoking (n= 975)**

Opinion of medical students	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
Smoking is harmful to health	833	89	20	12	21
Smoking in enclosed places should be prohibited	714	163	48	23	27
Tobacco sales to children & adolescents should be banned	781	114	46	22	12
Sport sponsorship by tobacco industry should be banned	683	177	66	31	18
There should be complete ban on advertising of tobacco products	677	198	69	19	12
Hospitals & healthcare centers should be smoke-free	799	148	16	7	5
Price of tobacco products should be increased sharply	656	192	72	43	12
Neonatal death is associated with passive smoking	465	301	190	11	8
Maternal smoking during pregnancy increases the risk of SIDS	573	297	79	14	12
Passive smoking increases the risk of lung disease in non-smokers	599	313	39	7	17
Passive smoking increases the risk of heart disease in non-smokers	546	324	76	16	13
Passive smoking increases the risk of lower Resp.tract illnesses such as pneumonia in exposed children	546	329	76	13	11

## DISCUSSION

In present study, 89.2% of medical students agreed with the fact that maternal smoking during pregnancy amplifies the risk of Sudden Infant Death Syndrome (SIDS) where as another study concluded a causal association between secondhand smoke and SIDS independent of maternal smoking during pregnancy.<sup>9</sup> However, in a study conducted in Netherlands postnatal parental smoking has been evaluated to be a major environmental risk factor for SIDS.<sup>10</sup> Parental counseling in this concern should be carried out for prevention of this adversity in future.

In current study, 89.7% medical students were found to be aware of the role of passive smoking in raising the risk of lung and heart disease in non-smokers. Likewise an Indian study also showed significant association of environmental tobacco smoke exposure with COPD.<sup>11</sup> Both active and passive smoking were also found to be associated with increased risk of breast cancer.<sup>12</sup> Among Europeans, coronary heart disease has also been attributed to passive smoking.<sup>13</sup> Smoking cessation works positively for primary and secondary prevention of coronary heart disease. Risk of coronary heart disease reduces by half after one year of smoking cessation and then falls gradually.<sup>14</sup> Establishment of health education counters by the government in various health centers for patient's counseling pertaining to health hazards of smoking and health benefits of its cessation will be great initiative for tumbling the rising incidence of coronary heart disease in the country.

In current study, 89.7% medical students showed willingness for sharp rise of tobacco products prices. Another research has also concluded that for every 10% increase in price, total cigarette consumption among youth reduces 7%.<sup>15</sup> In addition, tobacco industry has also recognized the pronounced effect of raising tobacco products prices on reduction of youth smoking.<sup>16</sup> No doubt price augmentation of tobacco products will reduce their consumption by middle and lower social class of society but there is an urgent call for other initiatives for betterment of current situation in our community.

In our study, 91.8% students agreed with banning sale of tobacco products to children and adolescents and according to 89.7% respondents advertising of tobacco products should be completely banned. A systematic review by Paynter et al, revealed that tobacco promotion at sale point not only manipulates smoking related behavior and beliefs among youth but also provokes their craving for smoking.<sup>17</sup> No doubt attractive sale points for tobacco products provoke for smoking. However, pictorial health warnings will tremendously nullify the influential element of attractive tobacco products and will lead to decline of smoking prevalence in our set up.

In present study, 78.6% medical students were found to be

conscious of significant association of passive smoking with neonatal mortality. Likewise, an international study concluded that rising incidence of low birth weight infants along with neonatal mortality and morbidity are attributed to cigarette smoking during pregnancy.<sup>18</sup> Apart from health care providers, social and electronic media should play their roles in imparting awareness about health risks of active and passive smoking among youth, adolescents and adults.

## CONCLUSION

Despite of the better response of the medical students about smoking related health devastations, further enhancement of health information is necessitated for better health profile of our country.

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