



Knowledge, Reasons, Barriers, and Self Reported Co-Morbidities associated With Smoking Behaviours Among A Cohort of Smoking Rationalizers

Pratibha^{1*}, Shourya Tandon², C M Marya³, Sakshi Kataria⁴, Ruchi Nagpal⁵

¹PhD scholar, Dept of Public Health Dentistry, Faculty of Dental Sciences, SGT University, Gurgaon

²Faculty of Dental Sciences, SGT university, Gurgaon, Haryana

^{3,4,5}Dept of Public Health Dentistry, SudhaRustagi College of Dental Sciences and Research, Faridabad, Haryana

Email: Pratibhataneja3@gmail.com

ABSTRACT

Assessment of knowledge, reasons, barriers behind their smoking behaviors and self reported comorbidities linked with its use among cohort of smokers with high rationalisation. Present cross-sectional descriptive study was conducted among 18-45 years old smokers. A cohort of smoking rationalizers were chosen based on Chinese smoking rationalization scale criteria. Among subjects with high rationalization scores, knowledge, reasons, barriers and self reported co-morbidities were assessed. Descriptive statistics were performed using Statistical Package for Social Sciences (SPSS) v-21. A total of 576 subjects were analyzed out of them 319 subjects were found to be the smoking rationalizers. Almost all the subjects with high smoking rationalizations were aware about the health problems associated with active smoking. More than one fourth of the study population had information about the health hazard which smoking alone brings, which was found to be the major reason of them to quit. There were found to be multiple barriers which stopped study population from quitting hence yielding high rationalization tendencies among them. More than 1/3rd of the study population reported to have some kind of breathing issues. The most crucial methods for lowering the prevalence of smoking in the young population is not letting them start only. There is practically paucity of educational and smoking cessation services in India. Although pharmacotherapy (Nicotine patches/gums/lozenges) is available in the market, but their high cost and more frequency of use make their compliance limited. Hence there is a need for more stringent fiscal policies to be implemented by the Govt. of India.

Key words: Smoking rationalizers, knowledge, reasons and barriers of smoking.

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INTRODUCTION

Nationwide and Worldwide, one of the main reason for high mortality and morbidity is found to be tobacco use. Approximately more than seven million of deaths are due to active tobacco use[1]. Its use pose direct impact on quality of life. By implementing the WHO MPOWER strategy, more nations are prioritising tobacco control in order to save lives[2]. Currently, tobacco use results in 3 million fatalities per year, or about 6% of all mortality, in the world[3]. But by 2020 or early 2030's it is anticipated to cause approximately 10.9% of all deaths in developing countries and 17.7% of those in developed countries, more than any single disease.¹ Cigarette smoke contains more than 7000 chemicals. Exposure to this chemical mixture causes immediate adverse physiologic effects. Additionally smoking and tobacco use are associated with number of negative effects[4-6]. They are associated with CVD's that include CHD, Atherosclerosis, cerebrovascular diseases and abnormal aortic aneurysms.

Despite high prevalence of comorbidities associated with the tobacco use, many people continue to smoke and tend to defend their habit by certain belief and excuses. Thus Smoking rationalisation is a psychological concept referring to a defence mechanism in which contentious or undesirable behaviours or feelings are presented in such a way that they seem acceptable and are explained in a seemingly rational or logical manner. Most of the Smokers are certainly mindful of the adverse health consequences, but obstinately put forward habitual rationalizations. They have confidence that they can control over the dose, frequency and intensity of tobacco use and however are sure of that they will not experience fatal consequences[7]. When they try to quit smoking, their mind comes up with all sorts of excuses.

Smokers who are high in rationalization show less interest in quitting and are less likely to make quit attempts. Hence present study was conducted among a cohort of smokers with high rationalisation to assess their knowledge, reasons, barriers behind their smoking behaviors and self reported comorbidities linked with its use [8].

MATERIAL AND METHODS

Present cross-sectional descriptive study was conducted among 18-45 years old smokers who were ready to be a part of the present research after listening to the aim and objectives of the study. Subjects with any cognitive or tertiary impairment were excluded from the present research. Prior to commencement, informed written consent was taken from each participant. Ethical clearance (SGTU/FDS/79/398) was taken from the institutional review committee of one of the reputed dental institution of North India. Data for the present research was collected using a pre-validated questionnaire and a structured interview. Structured interviews were conducted before their recruitment to assess the history of tobacco consumption, their willingness to quit and quit attempts made by them earlier.

A cohort of smoking rationalizers were chosen based on Chinese smoking rationalization scale criteria. Rationalization scale value ranged from 0-130 among six domains of rationalization i.e smoking functional beliefs, risk generalization belief, social acceptability belief, safe smoking beliefs, self exempting beliefs and quitting is harmful beliefs domains. Cut off was decided based on calculated median. Subject above the median cut off value were considered to be eligible for chosen as study population. Among subjects with high rationalization scores, knowledge, reasons, barriers and self reported co-morbidities were assessed. Descriptive statistics were performed using Statistical Package for Social Sciences (SPSS) v 21.

RESULTS

Demographic profile

A total of 576 subjects were analyzed out of them 319 subjects were found to be the smoking rationalizers. Majority of the married male subjects were found to be smoking rationalizers with the mean age of 27.72 ± 2.3 years (Table 1)).

Knowledge regarding detrimental effects of active smoking, second hand smoking and smoking policy

Almost all the subjects with high smoking rationalizations were aware about the health problems associated with active smoking (98%), harmful effects of second hand smoke (95), and also about ban policy against tobacco use at public places (100%) (Figure 1).

Reasons to quit

More than one fourth of the study population (26.6%) had information about the health hazard which smoking alone brings, which was found to be the major reason of them to quit. a reasonably high proportion of subjects intended to quit because of restrictions at school or work place. total of 17.9% of the study subjects wanted to quit because they were not allowed to smoke at home or because of high cost of smoking products. Physical fitness, their friend or relative illness were found to be of low priority reason for them to quit (Figure 2).

Barriers to quit

There were found to be multiple barriers which stopped study population from quitting hence yielding high rationalization tendencies among them. Majority of the subjects though that its really hard for them (22.6%) to quit that's why they don't intend to quit. Yet less than 20% of the subjects though they can not have a successful quit attempt because of unavailability of definitive treatment, weight gain concerns, withdrawal symptoms (illness/worse feeling) or cravings (Figure 3).

Self reported comorbidities

More than 1/3rd of the study population reported to have asthma or any kind of breathing issues(68.7%) followed by cholesterol, Blood pressure and diabetes issues (Figure 4)

Table 1: smoking rationalizers Demographic profile

	Number	%
Low rationalization	257	44.62
High rationalization (study population)	319	55.38
Male	279	87.5
Female	40	12.5
Married	286	89.7
Unmarried	33	10.3

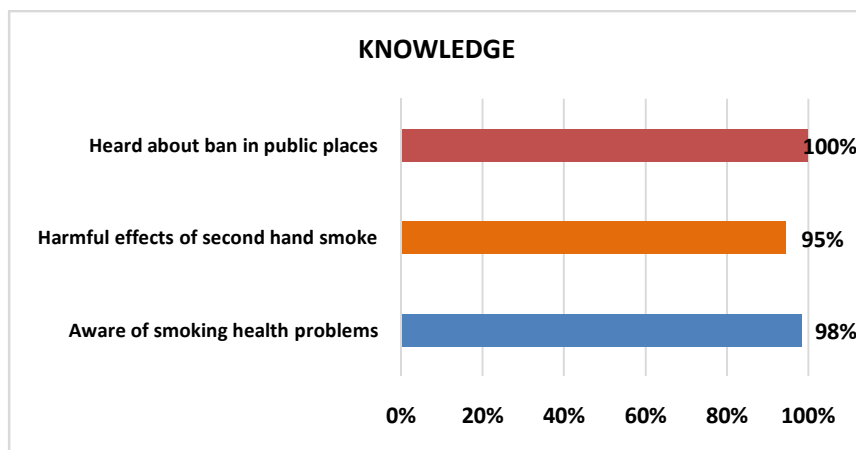


Figure 1: Knowledge regarding harmful effects and smoking policy



Figure 2: Reasons to quit

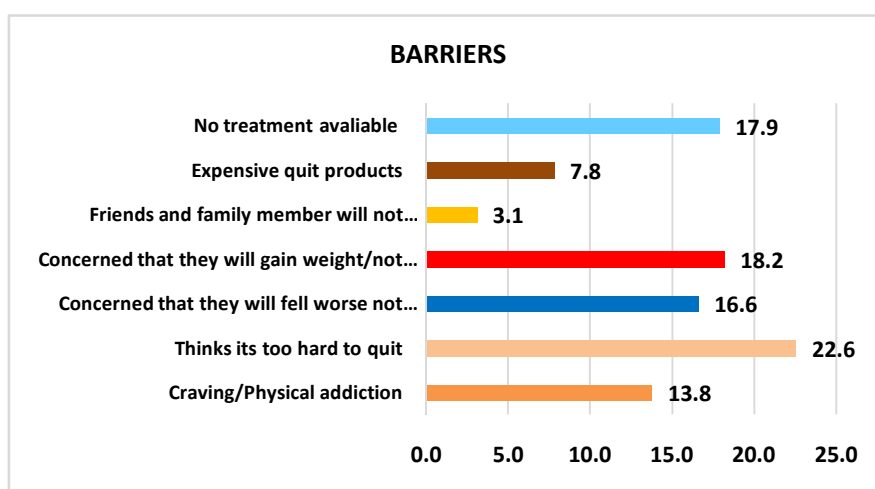


Figure 3: Barriers to quit

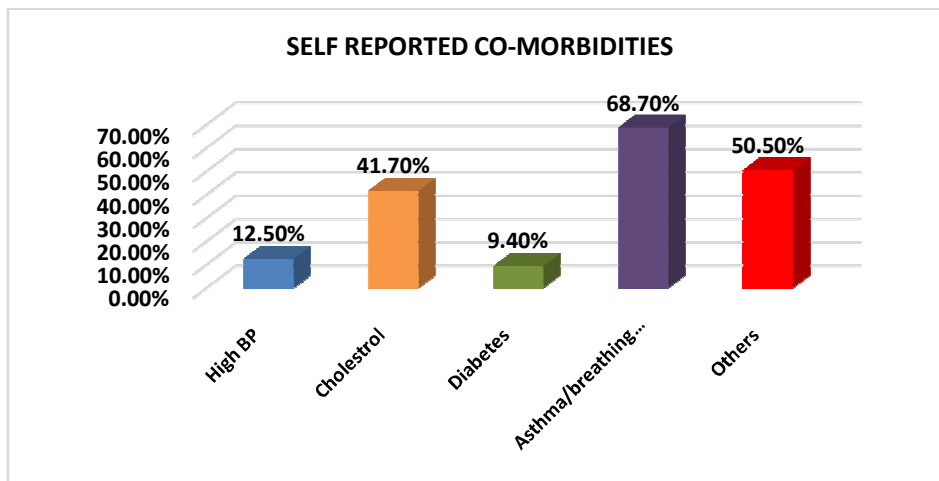


Figure 4: Self reported co-morbidities

DISCUSSION

Use of different types of tobacco products pose various level of health risk i.e combustible tobacco products are considered to be more harmful than non combustible health products. Despite knowing various health risk pertaining to tobacco use, many users rationalize tobacco use by presenting their reasons or explaining their barriers in quitting which exacerbated their rationalization tendencies. Hence present study was conducted among a cohort of smoking rationalizers to know their reasons, barrier and knowledge regarding harmful effects of tobacco use yet their tendencies to continue smoking.

The research findings of the present study showed gender poses great impact of excuses made by smokers to defend their habit. Majority of the male subjects were found to have high tobacco rationalizations. In India, use of tobacco is more prevalent among men and their peers. It could be due to easy access of men to shops that sell tobacco products. Men buy these products despite of the warnings on these cigarette packets. In a study by Gupta and Kumar[9] 91.5% of males and 88.5% females were aware of serious illness caused by smoking. Nevertheless, this difference of tobacco use among men and women is questionable and arises the need to advance the awareness about the detrimental effect of smoking through a gender-neutral approach. Women can play a vital role in abstaining the men from this life threatening habit. They typically perceive high risk of fatality from smoking than men do and hence can impact the smoking behaviours of the men in their family[10]. Approximately all the study subjects had good knowledge about the harmful tobacco use, its ill effect on health/oral health and policies which implemented against its use. Satisfactory awareness regulates the effectiveness of access to cessation programmes, quit attempts/rate. Countering the various health related comorbidities associated with tobacco use, the present study underlines the urgent need to improve knowledge on the harmful effects of tobacco use among socially disadvantaged populations majorly.

As a large proportion of study subjects had knowledge regarding the ill effects posed by smoking and many of them wanted to quit. The barriers to quitting are tempered by rationalisations. Restrictions at work places/health hazards/economic loss/friend's or doctor's advice were found to be the major reasons behind the willingness to quit among present study population. Berg et al[11] in their study found out that the main intentions among college student to quit the habit were found to be economic gain, health reasons, social pressure/stigma and fear of getting addicted to the habit which could be very much related to the reasons found in the present study.

Despite having good intention to quit, many smokers do not even take initiative to quit this habit. They assume that there are many barriers in their way to quit. Difficult quitting process, high cost of deaddiction products, weight gain/inability to cope up with stress, no specific treatment availability, cravings or withdrawal symptoms were found to be the major concerns. In a qualitative study by Hameed et al[12] self-reported need, intentions, reasons and causes for smoking behaviors were derived from the barriers of quitting tobacco. Most smokers wanted to quit but they had failed quit attempts. It could be due to their inability to cope up with withdrawal symptoms or intense stress. While they recognize smoking as a health hazard, they continue to do so based on their beliefs, priorities, and lack of knowledge about medical assistance. Lack of self efficacy, Physiological barriers, cravings, peer pressures, marginalised communities were presented as a major barrier against quit attempts. "Rather than quitting smoking, smokers quit treatment" Tobacco use significantly worsens other major health challenges such as diabetes, hypertension, cardiovascular disease, tuberculosis, HIV infection and mental illness. These

illnesses need to be treated by a synergistic approach of addressing tobacco use, particularly by encouraging tobacco cessation services.

CONCLUSION

One of the most crucial methods for lowering the prevalence of smoking in the population is to stop the initiation of this habit only among young adults. To do this, educate them about the negative effects of tobacco use and show them how to rationally get beyond obstacles to quitting. Because school settings are established institutions where adolescent behaviour may be targeted and where social behaviours are rewarded, school-based methods are one of the major components of adolescent tobacco control. There is practically paucity of smoking cessation services in India. Although pharmacotherapy (Nicotine patches/gums/lozenges) is available in the market, but their high cost and more frequency of use make their compliance limited. Hence there is a need for more stringent fiscal policies to be implemented by the Govt. of India.

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