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Original Research Article

Knowledge, apptitude and practice: smoking and gutka habits in a lower socio-economic cohort

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ABSTRACT

Background: Smoking and smokeless tobacco use is the major cause of death and disease in South Asia, the use of gutka has surpassed that of smoking in this region thus, acting as a major contributor to oral and esophageal cancer especially in the younger population. Authors have designed this study to explore the knowledge, apptitude and practice regarding smoking and gutka use in a lower socio-economic cohort and observe the impact of education, income and type of profession on the users.
Methods: This cross sectional descriptive survey is conducted in Creek General Hospital, Korangi, Karachi. The study design is non-probability convenience. A questionnaire is used to quantify the frequency of smoking-related knowledge-attitude-practice, knowledge and attitude about tobacco-related disease and, smoking cessation-related thoughts and practice. Data is analysed in SPSS 16.
Results: A total of 250 subjects participated in this descriptive study, 133 subjects (22% females and 62.6% males) were found addicted to smoking or smokeless tobacco product with stress, seeking pleasure and peer pressure being the most convincing factor to initiate their habit.90% of the users want to stop using the substance of abuse and 80 have at least once tried to quit the habit.
Conclusions: This study shows a direct relationship between level of education and socioeconomic status with use of addictive substance. It also resulted in identifying the desire to quit in our cohort and need for formulating a plan specifically for the target population to focus not only to remove the cause, but also to empower them to take responsibility for their own well being.

Keywords: Attitude, Gutka, Knowledge, Practice, Smoking

INTRODUCTION

Use of smokeless tobacco products like gutka, pan, mainpuri etc. has become increasingly prevalent in South Asian countries e.g. Pakistan, Bangladesh and India when compared with cigarette smoking.[1] This has become a matter of great concern regarding public health as tobacco is the biggest cause of death and disease in third world countries. Studies show that it will remain as such throughout 2020, the prediction by Murray about 3 decades ago holds true as tobacco kills almost half of its users worldwide.[2] Cigarette smoking has been found to be the most lethal addictive substance as it results in about 7 million deaths each year out of which, 6 millions are active users and 1 million are passive smokers.[3]

In most second and third world countries men smoke a shocking 5 times more than women, however, the ratio is

almost equal in developed countries like Australia, Canada, USA and Western Europe.[4] Smoking can drastically increase the risk of cardiovascular disease and respiratory disease as it can cause up to ten different types of cancer and not only are the adverse health effects of smoking restricted to its users, but passive smokers or second hand smokers also become the victum of its adversity.[5] While developed countries are taking the necessary steps to educate the public regarding the harmful effects of smoking, conversely there has been less educational efforts regarding the risks of tobacco use in developing countries as a result the incidence of deaths and diseases caused by smoking remains constant while the tobacco epidemic is more popular than ever.[6]

Other than smoking the use of oral tobacco products has become increasingly prevalent in Pakistan and other South Asian countries like India and Bangladesh with oral smokeless tobacco products having a variety of 30 different products including tambaku, paan (betel quid with tobacco), gutka (sun-dried finely chopped tobacco, areca nut, slaked lime, catechu, flavorings and sweeteners), and zarda (boiled and dried tobacco leaves with lime and spices, colorings, areca nut, and flavorings). They are used orally by sucking, chewing or by applying to the teeth or gums.[7] Smokeless tobacco has been recognized as the cause of oral and pancreatic cancers, periodontal disease and cardiovascular events. It has also shown adverse reproductive outcomes in women and aggravates asthma.[8] World Health Organization has classified it as carcinogenic to humans.[9] Tobacco smoking in Pakistan is legal but is banned in public places.[10]

Pakistan has the highest consumption of tobacco in South Asia.[11] According to the Pakistan Demographic Health Survey, 46 per cent men and 5.7 per cent women smoke tobacco. It is most prevalent in farmers and alarmingly in young adults of Pakistan and thus, is a matter of great concern.

The State Bank's Statistical Bulletin reports that in the year 2014 Pakistanis smoked 64 billion cigarettes which costs Rs. 250 billions. Thus, not only has there been increase in the rate of morbidity and mortality due to these addictive habits but also it has a great impact on the economic growth of the country.

Authors designed this study to understand the knowledge, aptitude and practice regarding smoking and the use of smokeless tobacco products in this cohort to better understand their need and thus, help improvise in intervention activities and behaviourial therapies offered to the target population.

METHODS

This descriptive study was conducted in the Creek General Hospital, Korangi, Karachi which is a tertiary care hospital catering a population belonging low socio economic strata to understand the knowledge, aptitude and practice regarding smoking and the use of smokeless tobacco products.

A total of 250 people both patients and attendants participated in this survey and the technique used is non-probability convenience. All subjects gave their informed consent before inclusion in the study. The study was conducted in approval with the ethical research committee. A standardized questionnaire was designed based on tobacco control knowledge-attitude- practice model among the general population including demographic characteristics e.g. age, gender and education. Income category was self-reported, and questions regarding smoking-related knowledge-attitude-practice, knowledge and attitude about tobacco-related disease and smoking cessation-related thoughts and practice, were asked by a single investigator to avoid bias. Education level was categorized as illiterate, primary school, matriculation, intermediate, bachelors and post graduates. Age was categorized as 18-25 years, 26-35 years and 36-45 years,46-55 years and >55 years. The questionnaire was developed based on the knowledge–attitude-behavior model specially designed for the target population and finalized after repeated discussions with experts to establish content validity.

Data was collected in SPSS 16, each question is taken as a single variable and the frequency is quantified as percentages.

RESULTS

A total of 250 people was included in this survey including 161 Males (64.4%) and 89 Females (35.6%) with a ratio of 2:1. The sociodemographic characteristics of the subjects is shown in Table 1. Each question asked is taken as a single variable and the frequency in affirmation or negation is calculated and shown in Table 2.

DISCUSSION

This study provides a snapshot of the knowledge, practice and behaviour of the low socioeconomic people regarding the substance of abuse in the city of Karachi, Pakistan. Authors explored Pakistani adults' experiences and perceptions regarding ghutka, cigarette and other addictive substance use with respect to the factors predisposing its initiation, relation with education, awareness about its lethal effects, addiction, motivation to quit, and tobacco-control messages. Our research has examined factors associated with the social and cultural influences on tobacco-related health disparities. After taking a survey of 250 people authors noticed that the women participants had no major tobacco addiction except for the 17.97% who are addicted to pan and chalyan and the 4.49% women addicted to ghutka, in contrast to the male participants out of whom 42.85% were addicted to cigarettes, gutka, niswar and hukka

while 19.87% were addicted to chalyan and pan. These numbers are not surprising as in a male dominant society such as Pakistan; tobacco use is common, accessable and easily ignored in males when compared to the opposite gender.

Table 1: Demographic characteristics of the Study Participants.

Characteristics	n (%)	n (%)	n (%)	n (%)
Education	Illiterate 56 (22.4%)	Primary 47 (18.8%)	Metric 57 (22.8%)	Intermediate-31 (12.4%) Graduate 13 (5.2%) Postgrduate-2 (0.8%)
Gender	Male-161 (64.4%)	Female - 89(35.6%)		
Age	18-25yrs- 79 (31%)	26-35 yrs. - 69 (27.4%)	36-45yrs. - 40(16%)	46-55 yrs. -28 (11.2%), >56 yrs. -34 (13.6%)
Mother tongue	Urdu-143 (57.2%)	Sindhi 27 (10.8%)	Punjabi 43 (17.2%)	Bilti.13 (5.2%) others 24 (9.6%)
Marital status	Married-190 (76%)	Unmarried-60(24%)		
Occupation	Unemployed 99 (39.6%)	Unskilled-(23.2%)58	Skilled-81 (32.4)%	Professional-12 (4.8%)
Income of the salaried	6000-10000 - 9%	11000-15000 - 37%	16-20000 - 33%	21-25000 - 16% 26-30000 - 5%

The age in which these types of addiction most common is around 18 to 25 where authors found around 31.45% of our addicts, the second most common age group is 26-35 in which the frequency is 27.41% and this gradient of tobacco use gets even smaller as only 0.403% of our participants of age 56 and above were addicts of tobacco. These figures are very alarming because around 60% of the people with addiction are between 18-35 years of age which is the most productive age category in this developing country.

This research also showed that young adults with higher education were more likely to be aware of the hazards of smoking and showed more positive attitudes towards smoking-related hazards. These findings are further endorsed in a study done by demaio that awareness of the health hazards posed by smoking was correlated with education.[12] Similarly Benson in his study proved that those with high levels of education and high socioeconomic status (SES) are more likely to be non-smokers.[13] Another research showed that men with a higher education, when compared with those with minimal education, showed a decreased trend in smoking in various European countries.[14]

Possible reasons are that the people with higher education might be better in understanding adverse effects posed by the addictive substance in use.

Awareness like this can help individuals to have a higher level of control and cognition about the importance of quitting smoking for disease management.[15]

One of the local metacentric study done in 3 professional universities refutes the above observation, it observed the prevalence of addiction to Pan, Chalia (betal nut), Niswar, Cigarette and Gutka in 3 Universities to be higher which were Karachi University - 54.7% (293), Jinnah Sindh Medical University 30.8% (165) and NED University of engineering and technology 14.4% (77), these figures are alarming if correlated with their education level.[16]

This study revealed that in Karachi, gutka is currently the most widely consumed form of tobacco while previously it was beetle nut. According to previous studies it was used by 41.55% males and 12.86 females. The factor which contributed most towards the spread of these addictions was peer pressure followed by, fashion and stress. Addiction for seeking pleasure and family problems were also culprits, it was noticed that students were motivated by their friends.[16] Authors also proved that 37% of those people addicted to tobacco have recommended or shared it with others at some point in their lives. The people who use gutka, only 15% confessed that they truly enjoy it while the rest either do it because they are habitual, feel relaxed or to show off, they also complained feeling of dizziness and nauseous after using it.

Most of the subjects (80%) in the study are aware of the unhealthy effects of the tobacco and gutka use but they are unable to quit the habit because of its strong addictive quality.

Table 2: Frequency of addiction n (%) and Distribution of Knowledge, attitude and behaviours regarding smoking and gutka habits in the cohort.

Addiction -n (%) and queries regarding awareness of adverse effects	n (%)	n (%)	n (%)	n (%)
Addiction	Nil -117 (46.8%), Addicts133 (53.2%) Gutka -44 (17.6%)	Tobacco -9 (3.6m%), pan - 26 (10.4%)	Niswar 5(2%), Cigarette 28 (11.2%) Betal nut 22(8.8%)	Hokka 2 (0.8%) Alcohol 7 (2.8) Sheesha 2 (0.8%)
Cigarette	Current 28(11%), Ex 21(9%) Non-201(80%)	Yrs.# 8		
Gutka	Current 44(17.6%), Ex 11 (4.4%) Non 195 (78%)	Yrs.# 6		
How do u feel after?	Nothing (35%) Dizzy (2%)	Relaxed 15%	Bitter taste and Vomiting - 16%	Show off Excitement and Fun 32%.
Do you know it is bad for your health? n= 250	Yes 208	No 5	Not sure 37	
Did you know tobacco users can die from lung or oral cancer? n= 250	Yes 195	No- 55		
Do you want to stop? n= 133	Yes 41	No 10	Have already 33	Not sure 49
Do you think you're an addict? n= 133	Yes 38(28.5%)	No-42 (31.5%)	Not sure 53	
Have you ever recommended said product to anyone?	Total addicts n#133	No -84 (63%)	Yes 49 (37%)	
Have you experienced any?	Pain in Your heart 13	chronic or heavy coughing 27	anorexia 18	Insomnia 30 Oral ulcers 2
Have you ever received advice against addiction?	Yes - 193 No -57			
How many of your acquaintances smoke?	Average - 16			
Ever received advice to help you stop smoking?	Yes 83 (31%)	No 50 (20%)	Total addicts-133	
Do you want to stop smoking?	Yes 25 (89.285%)	No 3 (10.714%)	Current smokers28 (100%)	
Are you addicted to gutka? n= 55	Yes 38 (18%)	No 17 (78%)		
Do you want to stop gutka?	39 (88.57%)	5 (11.42%)	Total 44 (100%)	
Do you think gutka is bad for you why?	6% cancer	35% - bad for health	Dangerous but reason not known- heart, immunity 15%	Addictive 8%
Do you think tobacco is bad for you why?	No information51 heart attacks- 19 (34%)	Cough 36% Stroke 12%	# COPD 79 (84%)	Cancer 114 (45.6%) (lung 74, larynx 2, mouth 38)
How much money you spent for this addiction?	1000Rs/mth average			
What do you think about your health?	Fair 82 (28%)	Good103 (48%)	Bad 20 (9%)	
Have you tried stopping? n# 121	Yes-68	No-22	Have stopped -31	
If you ever get the chance to smoke again would you?	Yes 21(10%)	No 229 (90%)		
What do you think about banning the product?	Yes-217 No-16 Never thought of it -17			

Compared to smoking and tobacco products people are less aware of the hazards of taking gutka, only 6% of the users know that it is the major contributor of oral cancers in recent years because of a personal experience and 50% have an idea that it is bad for health but are unable to pinpoint the exact problem, whereas among the smokers 84% of them have some idea that it is a cause of obstructive pulmonary disease and Cancer, this is probably because of the fact that use of gutka is more recent than smoking which is used for more than a century in addition, to the lack of education and thus awareness in this cohort. The same response is received in another study done in gutka users in South Asian immigrants.[17]

The use of these addictive substances has also burdened the family of users as nearly all of them belong to a low socioeconomic stratum earning an average of 11000-20000 a month in 70% of the cases with an average of 5-6 dependents, the users spend an average of 1000 rupees per month for its consumption. 60% (n=80) of the total subjects involved in substance abuse belong to unskilled or skilled worker category they explain that they take it to keep them going and boost their energies. Despite of the poor and unhygienic living conditions, the quality of life according to the subjects is good enough in 48% which identifies the lack of motivation to struggle for a better living. 37% of the total addicts have also recommended their substance of abuse to other friends and relatives which is the most common reason how one starts taking these substance, initially as a challenge and after certain period of time as addiction. 217 (87%) of the total individuals strongly agreed that all the addictive subjects should be banned in the public places, which indicates that although they are unable to quit the habit, but they are aware of its addictive effects and also the harm it can do to ones body.

Authors also availed this opportunity for creating self awareness in this cohort as they were questioned, a sense of self-realization was felt among most of the subjects which was boosted further by the interviewer. The intervention activities included raising awareness of the harms of smoking and smokeless tobacco use and benefits of quitting, boosting users' motivation and self-efficacy, and proposing strategies to manage their triggers, withdrawal symptoms, and relapse should that occur.

Pakistan became a party to the WHO Framework Convention on Tobacco Control in 2005 and in accordance with the tobacco control laws smoking is prohibited in all public places as well as while travelling in public transport .In addition, many forms of tobacco promotion and advertising is also prohibited .Government has taken the initiative to ban selling of gutka products in 2011 years however, 7 years after passing the law, the government had still not able to enforce its decision of banning the sale and use of sheesha, gutka, mainpuri and smoking at public places. The reason may be that the interventions needed should be tailored to meet the needs of various segments of our society. Adults, teens and children will need special programs to prevent substance use which will gradually empower them for their attitude about their own well being.

This study has succeeded in highlighting the concern which should be given to this important matter which has become a major contributor of a malfunctioning society. This research is one step forward to help develop tobacco control strategies for this population. Every effort should be made to prevent the use of any form of addictive substance in young teens and adults who would otherwise be a productive asset for our country, attention should be given to formulate a plan to eradicate this menace from our society.

CONCLUSION

Smoking and smokeless tobacco control among South Asians not only presents a national but a global problem. Authors have identified the desire to abstain from the addictive substance in this study population but failure in quitting at the same time. Therefore, the affected population need a strategic plan to encourage and train the individuals how to handle the urge during abstinence it is then only that authors can achieve the target .

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