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Smoking Pattern and Determinants among Adults Attending Anti-Smoking Clinic in Aseer Region, Saudi Arabia

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ABSTRACT

Objective: *To evaluate smoking pattern and associated factors related to smoking for patients attending anti-smoking clinic in Aseer region, Saudi Arabia.* ***Methods:*** *A Cross-sectional study design used to carry out this research using Arabic questionnaires to gather the data from anti-smoke clinics, Abha, Aseer region, KSA. The total 695 respondents included in this study and data were analyzed by using SPSS software.* ***Results:*** *The study revealed that majority of respondents attended anti-smoke clinics were educated (Secondary level 41.4% and university level 46.8%). Cigarette smoking (61.6%) was observed among patients and mostly was motivated to initiate smoking by friends (47.5%). Impulse to cessation of smoking was due to religious and health reasons both contributed 21.9%. And this study also showed that married respondents (56.1%) were more interested to participate in cessation trials than unmarried.* ***Conclusion****: There is an urgent need of equity based health intervention programs, tobacco control programs to be implemented effectively in order to provide counselling and guidance to quit smoking, training, capacity building and more anti-smoke clinics should be established.*

Keywords: Smoking pattern, Anti-smoking clinic, Saudi Arabia.

INTRODUCTION

World Health Organization (WHO) anticipated by 2030 more than 8 million preventable deaths caused by smoking worldwide every year and 80% premature deaths from low and middle-income countries bearing hundreds of billion dollars economic burden each year [1]. And one in ten adults will die due to smoking related diseases [2]. Smoking represented by risk factors leading to chronic diseases, formulation of different approaches to reduce tobacco use and identification of factors related to initiation of smoking and cessation may help to make the effective strategies to stop the smoking and its implantation, social pressure and old friends found main factors in the initiation of smoking [3]. The reasons for the maintaining the smoking habits once started have been well established including addiction, stimulation anxiety, habits and social rewards [4].

Moreover, personal resources like family support, emotional and physical abuse, self-esteem and substance abuse were also reported to be associated with smoking behaviour [5]. Socio-demographic factors associated with smoking have been well understood in those country led to success in combating smoking [6,7]. Early initiation of smoking before reaching to age of 18 years is a factor for continuing the smoking for life long, for those cessation is very difficult [8,9]. Current status of smokers in Saudi Arabia covering almost half of the population with annual increase of tobacco consumers nearly by 3% and at present there are no regulations made to prevent purchasing of tobacco [10].

Tobacco use in Saudi Arabia has the significant impact on health causing morbidity and mortality leading to high economic burden [11,12]. In this study smoking referred to all forms of tobacco including cigarette, shishah, cigar, Tinbak and chewing. Keeping in the view of above background our study was aimed to explore the pattern of smoking and also factors associated with smoking.

MATERIALS AND METHODS

The target population included only Saudi patients living in Aseer Region of Saudi Arabia, 14 years of age and more. This was a cross-sectional study and the data were collected using self-administered structured questionnaire. The final sample size of 695 was gathered to be 95% confidence that true value of estimate will be within 5 percent. The sample was collected by simple random sampling technique from the different anti-smoking clinics present in Aseer region. Anti-smoke clinics were present in the tertiary care hospitals as well as in PHCC mostly available in Abha city. The questionnaire used contained 2 parts. The first part contains information regarding socio-economic profile (age, gender, nationality, income and residence). The second part contains cigarette consumer information consisting types of smoking, number of cigarette per day, history of smoking, impulse to smoke and impulse to cessation. The mean, standard deviation and chi square test applied at 5% level of significance to observe the association between the variables. Approval from ethical committee was granted. The data were coded, entered and analysed by using IBM SPSS version 20.

RESULTS

This study included total 695 respondents completed the questionnaire with response rate out of 830 showing the response rate 83.8%. Mean age ± SD for the participants was 31 ± 10.236 ranging from 14 to 80 years of age groups. Majority of the smokers 99.3% (693) were males whereas very few smokers were females. Most of the respondents attained higher qualification like secondary 41.4% (288) and university level 46.8% (325). Students and government employee were smokers 22.6% and 51.1% respectively (Table 1). Smoking was seen more 24% in those respondents whose income was high (more than 6000 SR). Married participants 58.6% had more smoking habits compared to unmarried.

Table 1 The basic socio-demographic characteristics of smokers attending the anti-smoking clinics

Characteristics	N=695	%
Gender		
Male	690	99.3
Female	5	0.7
Education Level		
Illiterates	7	1
Primary	18	2.8
Intermediate	40	5.8
Secondary	288	41.4
University	325	46.8
Postgraduate	17	2.4
Work		
Unemployed	11	1.6
Student	157	22.6
Govt. Job	355	51.1
Private	104	15
Others	68	9.8
Income		
No fix income	165	23.7
< 3000 SR	101	14.5
3000-6000 SR	118	17
6001-10000 SR	167	24
>10000 SR	144	20.7
Marital Status		
Married	407	58.6

Single	288	41.4
Home		
Own	342	49.2
Rented	353	50.8

Cigarette smoking 61.6% was found to be common among the respondents who attended anti-smoking clinics whereas second most common was Tinbak (21.65) and cigarette and shishah both was 34%. 54.4% participants had smokers in their family. The common cause of initiation of the smoking were motivated by friends (47.5%) and stress (17%). Both reasons (Friends and stress) for initiation of smoking contributed 62% (Table 2).

Table 2 Smoking status of the respondents attending anti-smoking clinic

Characteristics	N=695	%
Age		
>20	70	10.1
20-29	256	38.1
30-39	242	34.8
40-49	74	10.6
>50	44	6.3
Types of smoking		
Cigarette	428	61.6
Shishah	21	3
Cigar	3	0.4
Tinbak	150	21.6
Cigarette and Shishah	34	4.9
Cigarette and Tinbak	32	4.6
More than two types of smoking	27	3.9
Cigarette consumption per day		
1-10	190	27.3
11-20	283	40.7
21-30	134	19.3
>31	88	12.7
Smoker in family member		
Yes	378	54.4
No	317	45.6
Morning Smoking		
Within first five minutes	321	46.2
After 31-60 min. from waking	203	29.2
After one hour	171	24.6
Smoking during sickness		
Yes	398	57.3
No	297	42.7
Initiation of smoking		
Friends	330	47.5
Co-workers	65	9.4
Family	20	2.9
Stress	118	17
Advertisement	28	4
Combination of the above	41	5.9
Friends and coworkers	31	4.5
Friends and Stress	62	8.9
Impulse to cessation		
No impulse	15	2.2
Religious	82	11.8
Health	107	15.4

Economic	20	2.9
Social	26	3.7
Religious and Health	152	21.9
Religious and Economic	11	1.6
Religious and Social	38	5.5
Religious, Health and Social	127	18.3
Religious, Health, Social and Economic	117	16.7
Desire to cessation		
Already stopped	89	12.8
Certainly ready	375	54
Undecided	231	33.2

Majority of participants (15.4%) had impulse to cessation of smoking due to health concern, religious 11.8%, religious and health both 21.9% and other factors like economic, social, health and religious altogether were 16.7%. About 33.2% were not sure about the cessation and 54% were ready to stop the smoking.

Table 3 Smokers characteristics with previous cessation trial according to age, education level, job and marital status

Variables	N	%	p-value*
Age			
>20	58	10.7	0.174
20-29	216	39.7	
30-39	186	34.2	
40-49	52	9.6	
50 up	32	5.9	
Education level			
Illiterate	6	1.1	0.778
Primary	13	2.4	
Intermediate	28	5.1	
Secondary	227	41.7	
University	256	47.1	
Postgraduate	14	2.6	
Income			
No fix income	129	23.7	0.47
Less than 3000	82	15.1	
3000-6000	98	18	
6001-10000	127	23.3	
More than 10000	108	19.9	
Job			
Jobless	10	1.8	0.066
Student	126	23.2	
Government	264	48.5	
Private	90	16.5	
Others (e.g. Retired)	54	9.9	
Marital status			
Married	305	56.1	0.011
Single	239	43.9	
*Significance ($p<0.05$)			

Mostly youth (39.7%) aged between 20-29 years had taken the previous trial to cessation the smoking habits and other age group (>20 years) and aged (30-39 years) were 10.7% and 34.2% respectively. Previous cessation trial compared to education level showing the secondary level (41.7%), University (47.1%) and intermediate (5.1%). Respondents who earning more (>6000 SR) and those are having no fix income both participated in cessation trials 23.7% and 23.3% respectively. Majority government employees (48.5%) took cessation trial compared to Students (23.2%) and private job (16.5%). Married respondents (56.1%) were more involved in cessation trial than unmarried (43.9%) (Table 3).

DISCUSSION

Tobacco control programs are effectively carried out by health care providers and professionals play very important role to provide the information about the toxic and adverse effects of the tobacco use and also helping in how to smoke [13]. Smoking among age 18-24 years increased despite of increased awareness of harmful effect, tobacco campaigns and tobacco focused research [14]. In our study all smokers (male 99.3% and female 0.7%), the prevalence of smoking was found very high in young people compared to old people. Married people were more smokers compared to unmarried as other studies showing the prevalence of smoking is seen in married persons [15]. The present study revealed that 61.6% were cigarette smokers, 21.6% Tinbak smokers, shishah 3% and both cigarette and shishah were 9%. the mainly cigarette smoking seen in similar trend compared to other studied previously done in Abha showing cigarette 74.5% and Shishah 51.9%. Current study revealed more smoking habits whose who had smokers in their family than non-smoker family, other studies also supporting that if family member is smoker increasing the risk of developing smoking habits [16]. Our study reveals that friends (47.5%) were the main source to initiate the smoking comparing to other sources like stress, co-workers, family and advertisements etc. compared to other studies reported friends had the greater influence to initiate the smoking [17,18].

Our present study showed that impulse to cessation of smoking due to health reason were seen more than other reasons religious and economic etc. in accordance of guidelines emphasized on encouragement of smoking cessation, tobacco taxation and advocacy [19] and parents to be more encouraged to quit the smoking may be an effective method to increase the cessation among youth and adolescent, early quit of parents leading to children to have less smoking habits [20].

WHO emphasized on two interventional strategies to facilitate community based tobacco users' cessation, first is face to face counselling advice by the health care providers with regular medical care, health programs and second is, the access to the low cost pharmacological treatment [21,22].

CONCLUSION

It is an urgency to focus on equity based interventions in community like tobacco health education, health promotion, counselling and youth related activities. Parents should be involved in the anti-smoking activities may help in smoking cessation. More anti-smoking clinics should be established to enhance the affectivity of tobacco control program.

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