



PREVALENCE OF SMOKING AMONG ADULT MALES IN THE FIELD PRACTICE AREA OF RURAL HEALTH TRAINING CENTRE, PERUVAZHIKADAVU - A COMMUNITY BASED STUDY

Community Medicine

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ABSTRACT

Background: Globally Non Communicable Diseases (NCDs) are the leading causes of death with major public health concern of smoking both active and passive.

Objectives: To assess the prevalence and factors related to tobacco smoking among rural male adults in Peruvazhikadavu, Kanyakumari District.

Materials&Methods: A cross-sectional study using semi-structured questionnaire was conducted among 130 rural male adults in Peruvazhikadavu. Statistical analysis to find frequencies, percentages and chi-square test were done using SPSS trial version-20.0.

Results: The prevalence of smokers was 63.1 % where majority of them reported stress with peer-pressure (18.5%) and enjoyment (11.5%). In addition, most of the participants were aware of the ill-effects of tobacco use.

Conclusion: Prevalence of tobacco use in our study was high which concerns to increase the disease burden of this community. The study suggests the increasing trend of smoking that too among younger generation which warns to imply the policy and legislations to control smoking tobacco.

KEYWORDS

Prevalence, Smoking, Cessation, Stress.

INTRODUCTION:

Globally Non Communicable Diseases (NCDs) are one of the leading causes of death among adults. The major risk factors of NCDs include tobacco usage, consumption of alcohol and intake of unhealthy diet, inadequate physical activity and psychological stress¹. The usage of tobacco still remains one of the public health concerns for both active and passive smokers and it is the leading cause of preventable mortality worldwide². Even though majority of the smokers are males, the numbers of women smokers are also increasing worldwide³.

There are about 1.1 billion smokers worldwide which is expected to rise to more than 1.6 billion⁴ by 2025. Usage of tobacco kills one person every 6 seconds and it causes more than 6 million people die a year, causes excessive health care costs, loss of productivity and reduces life expectancy of the individuals^{5,6}.

In India, when considering tobacco usage, smoking is more common among individuals of younger age group causing easy addiction. Addictions are due to nicotine content that leads to dependence, tolerance and with-drawl effects⁷. Also once addicted, quitting smoking is very difficult. Tobacco contains more than 1000 chemicals among which 401 are poisonous, and 43 are carcinogenic⁷. Habit of smoking usually starts in adolescent age group and proceeds into adult life. Children and young adults are future victim smokers, who are more often targeted by the tobacco industry for marketing^{8,9}. Adult smokers continue to smoke tobacco as they think, cigarette smoking would relieve stress, and gives feel of enjoyment. They should be made aware that smoking tobacco is highly at the risk of developing lung diseases, coronary artery disease, emphysema, oral cancer and stroke¹⁰.

The change in demographic pattern of smoking especially the unfavourable smoking patterns among adult population may contribute to future burden of smoking related illness among adults and hence the present study was planned to estimate the prevalence and factors related to smoking among rural adult males residing in the rural area of Peruvazhikadavu, the field practice area of the Rural Health Training Centre in Kanyakumari district.

METHODOLOGY

Study Design: A community based cross-sectional study.

Study Period: 3 Months from January 2020 to March 2020.

Study Setting: The area under the Rural Health Training Centre, Peruvazhikadavu, Kanyakumari district.

Sampling Technique: Multi stage random sampling.

Study Participants: All Adult males aged 18 years and above in the study setting.

Sample Size Calculation: 130 adult males of age 18 years and above were selected by random sampling method with prevalence 42.4% and

relative precision 20%^[2]

Inclusion Criteria:

Adult males aged more than 18 years and are residing in the study area for the past 6 months.

Exclusion Criteria:

Adult males who were not willing to participate, who were unable to respond to the questions due to hearing problems or any other reasons and those who were absent on three repeated visits

Definitions¹⁸:

As per WHO a person who smokes any tobacco either daily or occasionally is classified as "SMOKER", and the person who doesn't smoke as a "NON-SMOKER". Persons who had smoked 100 cigarettes in their life time and currently smoking everyday/some days are classified as "CURRENT SMOKERS". Individuals who had not smoked a cigarette or who had smoked less than 100 cigarettes in their lifetime are classified as "NEVER SMOKERS".

Data were collected using a semi-structured questionnaire by interview method after obtaining informed consent and Ethical clearance from the ethical committee of the parent institution.

Data were entered in MS Excel and Proportions and percentages were made out. Data compilation and chi square analysis was done using SPSS trial version 20.0.

RESULTS:

The study was conducted in Peruvazhikadavu region among 130 adult males. Smoking was highest among early adult (18-25 years) age group, followed by age group > 45 years, age of 26-35 years and age of 36-45 years with 34.6%, 25.4%, 23.9%, 16.1% respectively. The study participants in the study area with their socio demographic characters [Table-1] indicate 27.7% Hindus, 58.5% Christians and 13.8% Muslims. 67.7% were married and in joint family (69.2%) and (23.1%) in nuclear family. Their educational qualification reported majorities were literate and above, intermediate /diploma courses (33.1%) and only 11.5% were illiterates. Among them 29.2% were skilled, 29.3% were semi-skilled workers and 27.7% were professionals. On considering socio-economic status 42.3% belong to upper middle and 36.9% to lower middle class.

Table -1 Socio-demographic Characteristics Of Study Participants

Sl.No	Variables	Frequency(N)	Percentages (%)
1.	Religion		
	Hindu	36	27.7

	Muslim	18	13.8
	Christian	76	58.5
2. Marital status			
	Unmarried	42	32.3
	Married	88	67.7
3. Family type			
	Nuclear	30	23.1
	Joint	90	69.2
	Extended	10	7.7
4. Socio-economic status			
	Upper	14	10.8
	Upper middle	55	42.3
	Lower middle	48	36.9
	Upper lower	13	10

Among 130 participants the prevalence of smokers (63.1%) and non-smokers was (36.9%) [Fig: 1]. Among the participants, 78.1% started the smoking habit at the age of 18- 20 years because of their friends (53.6%), in view of their stress and peer pressure (29.2%) and for enjoyment (18.3%). Their smoking habits were known to the family members (57.3%). They were smoking 1-5 cigars per day (41.46%) and 6-10 cigars per day (37.8%) with spending around Rs 2000 monthly (37.8%). Notably 62.3 % of the participants were not allowed to smoke inside their houses.

SMOKING STATUS

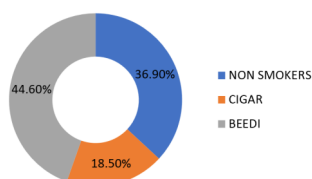


Fig: 1- The Prevalence Of Smoking Habits.

Among the affected or addicted participants, only 26.8% visited doctors in the past one month for different health problems, and many of them were advised (86%) for the quitting of smoking habit by health professionals and only 33.8% were having intention to quit for improving health. The reasons for initiation of smoking habits were given in Fig-2.

78.5% were known about the risk of second hand smoke, 83.8 % had noticed the warning signs in the cigar pack. The attitudes towards smoking habits are shown in Table No.2.

The socio demographic characters such as religion, marital status, family type, education, occupation, socioeconomic status were not showing statistically significant association using chi square test with p value < 0.05 with the smoking habits.

Significant association was found between smoking and addiction and ill effects with significant p value < 0.05 (Table-4)

Table No.4. Association Of Smoking Habits With Attitude Towards Smoking

SNO		SMOKERS	NON SMOKERS	df	P value
1.	Causes Illness				
	Yes	61	74.4%	35	72.9%
	No	21	25.6%	13	27.1%
2.	Causes Addiction				
	Yes	61	74.4%	44	91.7%
	No	21	25.6%	4	8.3%
3.	Will have More friends				
	Yes	41	50%	25	52.1%
	No	41	50%	23	47.9%
4.	Causes Mind Relaxation				
	Yes	48	58.5%	34	41.5%
	No	29	60.4%	19	39.6%
5.	Causes good Bowel Movements				
	Yes	37	45.1%	45	54.9%
	No	25	52.1%	23	47.9%

*Significantly associated – p value < 0.05

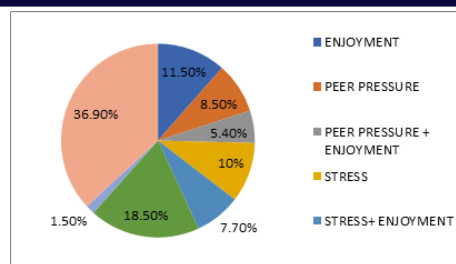


Fig: 2. The Distribution Of Smokers According To Reason's For Smoking

Table-2 Attitude Towards Cessation Of Tobacco Use And Health Impact

Questions	Findings
Willing to quit	33.8% says No
Want to quit tobacco to improve health	50% says Yes
Want to quit tobacco in view of his family and friends	13.1% says Yes
Anti - tobacco messages in media gives warnings	47.7 %
Banning of smoking in public places	61.5 % says Yes
Understanding about warning picture in pack	83.8 %
Smoking affects cardio vascular system and respiratory system	73.8%
Smoking is an addiction	80.8% says Yes
Smoking helps in bowel movements and stress relieving	52.3% says No

Table-3 Association of socio demographic characters with smoking habits.

SNO		SMOKERS	NON SMOKERS	df	P value
1.	Religion				
	Hindu/Muslim	36	66.7%	18	33.3%
	Christianity	46	60.5%	30	39.5%
2.	Marital status				
	Unmarried	23	54.8%	19	45.2%
	Married	59	67%	29	33%
3.	Family type				
	Nuclear	21	70%	9	30%
	Joint	61	61%	39	39%
4.	Education				
	Illiterate	12	80%	3	20%
	Literate	70	60.9%	45	39.1%
5.	Occupation				
	Profession, Clerk	27	56.2%	21	43.8%
	Skilled / Semi skilled	55	67.1%	27	32.9%
6.	Socio-economic status				
	Upper and upper middle	41	59.4%	28	40.6%
	Lower middle / Lower	41	67.2%	20	32.8%

*-significantly associated – p value < 0.05

DISCUSSION

The cross sectional study was conducted among 130 participants in the field practice area of rural health training centre, Peruvazhikadavu, Kanyakumari district and found the overall prevalence of smokers (63.1%), Cigar smokers (18.5%) and Beedi smokers (44.6%) respectively which is higher when compared to the study of Rajiv Kumar Gupta et al¹¹ who found prevalence of cigar smokers (53.8%) and beedi smokers (28%). Narayan KV et al¹² showed the prevalence of smokers (45%), with higher proportions of cigar smokers than beedi. Danish Imtiaz et al¹³ in their study found the overall prevalence of smokers (28.4%) mostly among males with cigar (5.2%) and beedi (23.1%). Divyang kumar et al¹⁴, Anand M dixit et al¹⁵, Garg Bansal et al¹⁶, Santha krishnan et al¹⁷ and Kollappan C et al¹⁸ found that the prevalence of smoking were 31.8%, 52.4%, 39%, 13.3%, and 28.4% respectively. In the present study the age of initiation of smoking was 18-20 years (81.7%). Similarly Rajiv Kumar Gupta et al¹¹ found majority (53%) of the participants initiated smoking at the age of 16-25 years, Danish et al¹³ (41.6%) and Bhimara setty et al¹⁷ (43.9%) observed majority initiated smoking at the age of 19-25 years. Kollappan et al¹⁸ found that

participants initiated smoking at the age of 15-34 years (8.5%).

In the present study the majority of smokers initiated for stress plus peer pressure (29.2%), and enjoyment (18.3%). Similarly Divyang kumar et al⁵ shows smoking for enjoyment (38.4%) and peer pressure (20.93%). Santha Krishnan et al¹⁵ shows smoking initiated for peer pressure (50.6%) and stress (17.7%). Gupta RK et al¹¹ observed that the primary reason for smoking was pleasure and enjoyment (100%) and 42.4% were depressed if they don't smoke.

In the present study 60.9% of the participants belonged to the category of daily smoker which is similar to the finding by Narayan KV et al³ as tobacco products are easily available in all shops and were cheaper. In our study majority of the smokers had intention to quit in view of their family members (31.7%). 97% had not known about de-addiction centre as similar to Gupta RK et al¹¹ who found 91.7% had not known about it. Also our study reveals pictorial warning (84%) that helped (60-70%) to quit smoking but majority of them didn't quit, 73.8% knew about the risks of smoking habits, similar to the finding by Santha krishnan et al¹⁵ (64%) and study by Anand Dixit et al¹³ found only 24.8% were aware about the harmful effects of smoking. Among 130 individuals, 80.3 % had known the fact that smoking causes addiction. The limitation of the study was not generalizable as it doesn't represent the whole rural population of Kanyakumari district in view of random sampling method and possibility of interviewer and recall bias.

CONCLUSION

Prevalence of tobacco use in the present study was high among male rural population which concerns to increase the disease burden of this community. The study suggests the increasing trend of smoking primarily among younger generation which implies the policy to control smoking tobacco among all age groups especially younger adults. Also for providing smoking cessation programmes, tobacco counselling services and strict prohibition of smoking in public places through warning letters, posters and banners in good spirit.

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Conflicts of interest: None

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