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Study of perceived reasons for initiation and continuation of tobacco use among rural population

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ABSTRACT

Background: Tobacco consumption is a major public health issue and is the major risk factor for causes of death. In India, 90% of the oral cancer patients were tobacco chewers. No of women chewing tobacco is also increasing leading to stillbirth, preterm baby and LBW babies. No of children using the tobacco in their early age is an urgent issue to address. Study was done with an objective of exploring the perceived reasons for initiation and continuation of tobacco usage among rural population Kuppam in A.P.

Methods: Prevalence study was done at field practice area of Kuppam in A.P.

Results: Total 1500 individuals above 15 yrs were studied. The overall prevalence of tobacco use among the subjects was 61.3%. The age at initiation of tobacco use was less than 20 years (54.4%). In our study reasons to start and continue the tobacco usage were, peer pressure 50.4%, influence of family members 16.4%, to overcome the hunger and thirst was 9.6%, relaxation 3%.

Conclusions: Hence it is essential for community based smoking cessation activities, health education, behavioral change communication, focus group discussion, legislative measures should be considered as preventive measures.

Keywords: Tobacco consumption, Initiation, Continuation, Awareness

INTRODUCTION

Tobacco consumption is a major public health issue globally. Majority of smokers (81%) of the world are living in low and middle income countries. is the major risk factor for six leading causes of death namely ischemic heart disease, cerebro-vascular diseases, tuberculosis, lower respiratory tract infections, chronic obstructive pulmonary disease, and cancers of trachea, bronchus and lungs. More than 5 million deaths are due to direct use of tobacco, and about 600,000 non-smokers die due to passive smoking. There is an estimated 12

million cases of preventable tobacco related illnesses each year.² Most of deaths occur in 35 – 69 years age group due to tobacco use and an average loss of 20-25 years of life. It is estimated that the annual death toll may reach 8 million by the year 2030.³ Tobacco use has high impact on growing economy and high expenditure on health.⁴ There are more than 300 million smokers in India.² This includes more than 5 million child smokers, with 55,000 children taking up tobacco use every year.

So to prevent the mortality and morbidity, a substantial proportion of adult smokers have to quit smoking and children should be prevented from acquiring this

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unhealthy habit. It is essential to elicit the route cause that is why do people initiate and continue the tobacco consumption in their life. So the present study was planned to be carried out in this background to throw light on reasons to start and continue the tobacco consumption among the rural people of this region.

METHODS

Community based cross sectional study was done in the rural field practice area of Kuppam, Chittoor District, Andhra Pradesh, from November 2012 to January 2014. Total 1500 participants, above 15 years were included after taking the informed written consent. Pre-tested semi structured performa was used to collect the data. A pilot study was undertaken among 30 subjects (aged 15 years and above) in a village. This helped to fine-tune the performa. The finalized performa was then administered to the study subject.

For the study, the villages having more than 1500 population were noted. Three directions were chosen randomly such as north, south and east. From each direction, one such village was selected randomly for the study. A sample of 500 persons from each village was taken, so that a total sample of 1500 was achieved. By systematic method, the households on the left hand side of the villages were included in the study. House to house visit was made to contact the subjects. After reaching the village, the first house on the left hand side was visited and subsequently the other houses were visited by following the left hand principle, until the target number of 500 persons was reached. In each household, all the individuals aged 15 years and above were selected for the study, who were willing to participate and are of permanent residents of that village. Individuals below 15 yrs and relatives or friends who are not residing in that area and who are not willing to give the consent were excluded WHO definition of current users of tobacco was applied. That is a person who gave the history of consumption of any tobacco product within 30 days preceding the survey. Data was analyzed by using Epiinfo version 7, proportion, percentage, ANOVAs, Chi square test and multivariate logistic regression test. The results were discussed by comparing with similar studies collected as review of literature and detailed report was prepared.

RESULTS

Total number of study subjects was 1500. Male 783 (52.2%) and females 717 (47.8%). Most of them were in the age group of 20-29 years (32.3%), followed by 30-39 years (20.9%). Majority of them were 605 (40.3%) belonged to nuclear family. Most of them were married (72%) and, Illiterates were 780 (52.0%). Majority of them, were agricultural laborers 819 (54.6%) and two third of them belonged to class IV and class V socioeconomic status.

Regarding prevalence of tobacco consumption among the 1500 study subjects it was 61.3% (919 persons) Hindus, 61.2% (1496) were tobacco consumers. And all the 4 Muslims were tobacco consumers, was highest among the subjects belonging to the marital status of separated/divorced/widow/widower group (86.5%).

Table 1: Socio-demographic distribution of study participants.

Variables	No	Percentage (%)
Gender		
Male	783	52.7
Female	717	47.8
Type of family		
Nuclear family	605	40.3
Joint family	580	38.7
Three generation family	315	21.0
Marital status		
Married	1093	72.9
Unmarried	318	21.2
Separated/ Divorced/ Widow/ Widower	89	5.9
Educational status		
Secondary and above	505	33.7
Primary school	215	14.3
Illiterate	780	52.0
Occupational status		
Laborers	819	54.6
House wife	252	16.8
Students	222	14.8
Employers	24	1.6
Business	183	12.2
Socioeconomic status		
Class I	90	6.0
Class II	104	6.9
Class III	327	21.8
Class IV	512	34.1
Class V	467	31.1

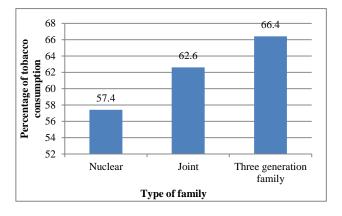


Figure 1: Tobacco consumption by type of family.

Figure 1 shows the prevalence of tobacco consumption was highest among the subjects of three generation

family (66.4%) followed by joint family (62.6%). This difference was statistically significant.

Out of 780 illiterate subjects, 609 (78.1%) were tobacco consumers. consumption was found to be highest among agricultural labors (71.7%) followed by housewife (63.4%). The prevalence of tobacco consumption showed gradual increase from class I (upper social class) to class V (poorer social class). Most subjects (89.9%) were consuming tobacco in two forms such as smoking and chewing.

Table 2: Gender wise prevalence of tobacco consumption (n=1500).

Tobacco consumption			
Gender	Yes (%)	No (%)	
	(N= 919)	(N=581)	
Male	409 (52.2)	374 (47.8)	$\chi^2 = 56.3;$
Female	510 (71.1)	207 (28.9)	p<0.001

Prevalence of tobacco consumption was higher among the females (71.7%) compared with males (52.2%), which was statistically significant (Table 2). Tobacco chewing was very common among most women. 47.1% subjects used chewing tobacco for 10 times or more per day.

Table 3: Gender wise distribution of mean age of initiation of tobacco consumption.

Gender	Mean Age (years)	SD (±)	
Male	21.6	4.1	42 1 5 C
Female	17.6	3.9	't' value=5.6
Overall mean age	19.4	4.0	p<0.001

The mean age at initiation of tobacco use was lower among females (17.6 years) than among males (21.6 years). The difference was statistically significant by applying 't' test (Table 3). About 32.1% of subjects used the chewing products less than 5 times per day, and 47.1% subjects used them for 10 times or more. Most subjects (54.4%) started tobacco consumption below the age of 20 years followed by 28.9% of subjects in the age group of 20-29 years. Only 7.6% of subjects started to use tobacco after the age of 40 years (Table 4).

Table 4: Initiation of tobacco consumption in different age groups.

Age group (years)	No.	Percentage (%)
Less than 20	502	54.6
20 – 29	264	28.7
30 – 39	83	9.1
40 and above	70	7.6
Total	919	100.0

Cultural factors

In our study population, a few cultural practices were noticed. When a mother has delivered a baby, the relatives visit the house with taamboolam (betel leaves and areca nuts with tobacco), fruits, flowers and new dress materials. According to culture, mother should consume taamboolam. Adolescent girls in the house are also given taamboolam. This may be the reason for the higher consumption of tobacco among females.

Reasons for initiation of tobacco consumption

Table 5 depicts the reasons revealed by study for initiation of tobacco consumption. Peer pressure (50.4%) was the most important reason, followed by influence of family members like parents, grandparents and siblings etc. (16.4%), other reasons include the following: curiosity, to overcome sleep during night duty, to get extra energy, to pass the time.

Table 5: Reasons revealed by the subjects for initiation of tobacco consumption.

Reasons	No.	Percentage (%)
Peer pressure	463	50.4
Influence of family members	151	16.4
Tobacco chewing produces salivation and so the subject does not feel thirsty	88	9.6
Relaxation after work	64	7.0
Relief from headache and toothache etc.	29	3.1
Relief from tension	29	3.1
*Other reasons	95	10.4
Total	919	100.0

Table 6: Reasons for continuing the tobacco consumption.

Reason	No.	Percentage (%)
Relief of pain	473	51.4
Tension relief	157	17.1
Pleasure	81	8.8
Not able to come out of the habit	55	6.0
Time pass	39	4.3
Improvement of digestion	25	2.7
Other reasons	89	9.7
Total	919	100.0

Reasons for continuation of tobacco consumption

The reasons given by the subjects for continuation of tobacco consumption were almost similar to the reasons for initiation of tobacco consumption (Table 6). The main

reason for continuation of tobacco consumption was relief of pain in any part of body, head or teeth. Relief of tension was the next important reason. Other reasons include the following: relief from the cold, to get extra energy, to keep alert while working etc.

DISCUSSION

Tobacco consumption is a major public health issue and it is a major risk factor for six leading causes of death. Younger generation also getting addicted to it and increasing the economic burden. Moreover it is preventable so the special attention should be given. If half of the smokers quit tobacco in the next twenty years, one third of tobacco deaths would be avoided. To control the tobacco epidemic in India, the problem should be quantified and various determinants of tobacco use should be identified. The present study was a community based study conducted among 1500 subjects aged 15 years and above in a rural area of Kuppam.

In the present study, males were 52.2% and females were 47.8%. In the present study, most subjects (53.2%) were in the age group of 20-39 years. In the present study, most subjects were illiterates (52.0%).

In our study 1500 study subjects, 919 persons (61.3%) were consuming tobacco that is prevalence of tobacco consumption and, similar findings (63%) were reported by Sinha et al, Chandra (71%).^{6,7} Tobacco chewing in our study was heigh 83.6% in women which is similar to study done at Bombay. Gupta et al prevalence of smoking in our study is about 31.8% and similar findings were reported by Khokhar et al.^{8,9}

In our study it was found that tobacco consumption is directly related to increasing age. Similar findings were reported by Sinalkar et al. ¹⁰ In our study 78.1% tobacco users were illiterate and similar findings were reported by Ansari et al. ¹¹ Our study shows 71.7% were agriculture labourers were tobacco consumers compared to National family health survey 2005-06 with similar findings by. Rooban et al. ¹² Tobacco usage is universally related to socioeconomic status in our study which was also found in NFHS-3 reports. So in our study tobacco use was significantly higher in poor, less educated, and both among men and women is similar to study by Rani, Bonu, et al. ¹³

Our study shows that 54.4% below the age of 20, initiated the tobacco usage where as 33.3% is reported by Sorensen, et al. 14 Studies done in Kolkata' Punjab and in Gujarat, found that subjects had started to consume tobacco by the age of 20 years which is similar to our study findings. 15-17

In our study most common cause of tobacco consumption was peer pressure 50.4% which is similar to study in rural Wardha found that the peer pressure was the commonest reason (47.3%). Family plays a major role in initiation

of tobacco use. Tobacco use by the elders in the family increases the likelihood that a child begins smoking.

The most common reasons for continuation of tobacco consumption included relief from pain (51.4%) and relief from tension (17.1%). A cross sectional study in Sikkim found that 50% of the users and 17.6% of the non-users had wrong belief that there is a benefit from tobacco use by way of relief from stress, toothache and constipation etc. ¹⁹ A study in Allahabad had also noted many reasons for continuation of tobacco use among the subjects and the common reason was improvement of bowel movements (73.0%). ²⁰

CONCLUSION

The study has found a high prevalence of tobacco use (61.3%). The present study has found the initiation of tobacco use before 20 years of age in most of the subjects. The common reasons for starting tobacco use found in this present study were peer pressure, influence of family members and relatives. It was found that there were certain beliefs and misconceptions that tobacco is helpful in relieving pain, tension etc.

Recommendation

Community based smoking cessation activities need to be conducted in this region to explain the adverse effects of tobacco consumption as the prevalence is very high. Attention should be focused on the younger age groups like school children and adolescents to control and prevent the tobacco use in the community. Focused group discussions should be held in the target group so that the tobacco users may quit the habit and non-users do not take up the habit. Health education and behavior change communication by medical and paramedical personnel to dispel the misconceptions. With the help of local and community leaders including celebrities and all types of media may be used.

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Institutional Ethics Committee

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