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A Study on Tobacco Abuse among the Rural Population of Hebbal Village

Singh Madhavi L.H *, Singh H.K.G.**

Abstract

Background: Tobacco use is widely regarded as the most preventable cause of death and disease among adults. **Materials & Method:** A cross-sectional community based study was conducted among 155 tobacco consumers in the rural community of New-Hebbal village of Gulbarga district to know the factors responsible for initiating tobacco abuse and its impact on health. The pre designed and pre-tested pro-forma was used to collect the data. **Results:** The study showed that the highest prevalence of Tobacco abuse in its all forms was in illiterate people (71.62%); among labourers (50.49%); in the age group 31-50 years (47.10%) and in farmers (33.54%). A smokeless form of tobacco was consumed more in the form of Khaini (25.81%) and smoked form as Beedi (40.00%). Among 80% of the population studied, ignorance about hazardous health effect of tobacco usage was noted. Initiation of tobacco abuse was observed in adolescent age group (74.19%). Other prominent factors were peer pressure (56.13%) and pleasurable activity (31.62%). The most common complication was periodontal disease (50.96%) followed by acidity (30.33%). About 41.29 % of the population had tried to quit tobacco due to health complications. Restlessness (28.38%) & irritability (27.75%) were a prominent withdrawal symptom. **Conclusion:** Hence, effective intervention should be directed towards adolescent age to impart knowledge regarding the harmful consequences of tobacco abuse.

Key words: Tobacco abuse; Khaini; Beedi.

Introduction

Tobacco abuse is most extensively distributed in India. However, there are significant variations in tobacco types and using techniques. According to World Health Organisation (WHO), about 194 million men and 45 million women use tobacco regularly in smoked or smokeless forms in India [1]. Approximately 90% of Oral Cancers in South East Asia Region are linked to tobacco chewing & smoking [2]. WHO predicts that deaths related to tobaccos in India may exceed 1.5 million annually by 2020 [3]. Tobacco consumption has been identified as the single most significant cause of preventable morbidity and premature death. Therefore, present investigations were carried out to know the pattern of sociodemographic factors associated with tobacco use and initiating tobacco abuse factors and its effect on health among rural population.

Material and Methods

To assess the influence of tobacco on health of tobacco abusers and factors responsible for initiating tobacco addiction, a population based cross-sectional study was conducted in field practice area of Rural Community Health Training Center, New-Hebbal Village in Gulbarga District. The study was performed in between 15th Sept. 2008 to 14th Dec. 2008 period. This area is under the Department of Community Medicine, M. R. Medical College Gulbarga. Rural Community Health Training

Authors affiliation: *Professor. Dept. of Community Medicine, KBNIMS, Roza- B, Gulbarga. **Professor and HOD, Dept of Pediatrics, KBNIMS, Roza- B, Gulbarga.

Reprints requests: Madhavi Singh, C/o Prof (Dr.) H. K. G. Singh House No.3 Qt. No.2/851 Sedam Road, Opp. MRMC Gulbarga-585105, Karnataka.

E-mail: mhksing@yahoo.com

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Center, Hebbal has 15 villages under its jurisdiction. Among these villages, New-Hebbal village was selected for house to house survey. The population of the New - Hebbal village is about 1440. New-Hebbal village has better health education and health services by virtue of it being Community Health Training Center served daily by Health workers, Medico social workers, nursing student, interns & postgraduate students from the Department of Community Medicine, M R Medical College. 155 tobacco consumers (10.76%) and 450 non tobacco consumers (28.15%) i.e. total 605 persons (42.01%) were included from the people willing to participate in the study. More than 6 months old tobacco abusers such as smokers and smokeless form of tobacco (Guthka, Khaini etc.) were chosen and clinically examined. Clinical examination was carried to detect the impact of tobacco abuse on health scenario. Afterwards, guidance & advice regarding quitting and prevention were also explained to them. Subjects were interviewed using pre-structured, pre-tested and pre-designed questionnaire and collected data by trained investigators. A pilot study was conducted using modified & validated questionnaire. All data entered on the questionnaire was tabulated and analysed for interpretation. Detailed information regarding the profile of the demographic characteristic of the study population, substance abuse history, abuse type, tobacco abuse initiation factors, abuse duration, influenced by whom, reason to quit, health problems and withdrawal symptoms etc. were collected during the course of interviews. Details of associated personal habits like alcohol consumption were also included in the investigation.

Results

In this study, 605 (42.01%) persons were participated as study population which comprised of 155 (10.76%) tobacco consumers and tobacco non-consumers 450 (28.15%). Maximum members of the study population were male (52.00%), illiterate (47.00%), farmer (31.00%), age group 10 to 20 years (27.00%). They lived in nuclear families (53.00 %) with socioeconomic status (SES) IV (78.00%). Table 1 showed the socio-demographic characteristics of the study population. Results indicated that maximum number of tobacco consumers were males (74.19%), in the age group of 31 – 40 years (28.52%), Illiterates (71.62%), farmers (33.54%), labourers (50.49%), & in SES status IV (94.84%). Equal distribution of tobacco abusers was observed in nuclear type (48.39%) and joint type (50.60%) family. Minimum 14.19% tobacco abusers were found in the age group of 20-30 years. Abusers increased to maximum24. 52 % as age group was increased to 31-40 years. Afterwards it decreased to 22.58 % at age group of 41-50 years. In the age group of < 20 years, smoking habit was also less i.e. 16.77 %. Table 2 summarized the various other features in relation to tobacco consumption. It showed that 40.64% of tobacco abusers used smokeless form of tobacco while 59.36% was consumed smoking form of tobacco. Most prevalent smoking forms of tobacco were Beedi (40.00%) followed by Cigarette (19.35%). However, Khaini (25.81%) & Gutkha (14.84%) were common in smokeless form. Alcohol consumption (58.06%) was noticed as most common associated habit among tobacco abusers. Maximum tobacco addiction was started in adolescent age of <20 years among 74.19% of subjects followed by 21.29% subjects in the age group 20-40 years. The reason may be attributed to fact of high risk behaviour and vulnerability at adolescent age. Maximum numbers of study subject i.e. 27.75% were addicted for more than 20 years followed by 25.16% in 6-10 years. Equal numbers of study subjects 16.77% were abused tobacco since 1-year and 16-20 years. Among various factors initiating tobacco habit; majority 56.13% persons were started tobacco abuse with their friends while 25.16% initiated by relatives. Maximum 31.62% of persons were started tobacco abuse for enjoyment, while 15.75% abused tobacco to get rid of mental tension. The reason for being tobacco abusers were desirous for experimentation and easy availability. 21.29% tobacco abusers claimed desire for experimentation while 23.87% were due to easy availability. Post abuse effects experienced by

the subject were as follows: 58.07% felt relaxed; 16.77% felt again in power; 14.19% felt fresh; 6.45% felt euphoric; and 6.45% developed an interest in work during or after tobacco chewing or smoking. Attempts to quit tobacco abuse were made by 69.68% subjects. A majority of abusers was trying to quit tobacco addiction mainly for health related problems (41.29%). However, 20% and 8.39% were due to hazardous consequences and cost, respectively. Only 20.00% were got positive attitude to quit tobacco abuse due to knowledge regarding the hazardous effects of tobacco use. 80% of abusers were not familiar about the hazardous effects of tobacco. Table 3 was depicted the health problem due to tobacco abuse. Periodontal diseases were prevalent and found in 50.96% subjects. However, others 30.33%, 6.45%, 6.45%, and 05.81% subjects were suffering from acidity, dryness of the mouth, loss of taste and oral ulcer, respectively. Withdrawal symptoms such as restlessness (28.38%), irritability (27.75%), nervousness (3.87%) and impaired concentration (05.16%) were experienced by 101 subjects. 34.84% subjects did not feel withdrawal manifestations after quit the tobacco abuse. However, these subjects were used less amount of tobacco.

Table 1: Socio-demographic characteristics of the study population

Demographic characteristic		Tobacco consumer n =115 No (%)	Tobacco non-consumer n=450 No (%)	Total n=605 No (%)	?² value	P-value
Age	10 – 20	26 (16.77)	137(30.44)	163(26.94)	202.00	P>0.05
	21 – 30	22 (14.19)	90(20.00)	112(18.51)		
	31 – 40	38 (24.52)	75(16.66)	113(18.67)		
	41 – 50	35 (22.58)	68(15.11)	103(17.02)		
	50 – 60	18 (11.62)	42(9.33)	60(9.91)		
	> 60	16 (10.32)	38(10.32)	54(8.92)		
Sex	Male	115 (74.19)	200(44.44)	315(52.06)	26.12	P>0.05
	Female	40 (25.81)	250(55.55)	290(47.93)		
Education	Illiterate	111 (71.62)	275(38.88)	286(47.27)	217.89	P>0.05
	Primary	17 (10.96)	140(31.11)	157(25.95)		
	Secondary	14 (9.04)	75(16.66)	89(14.71)		
	Higher Secondary	07 (4.51)	31(6.8)	38(6.28)		
	Graduation	06 (3.87)	29(6.4)	35(5.7)		
Occupation	Farmer	52 (33.54)	139 (30.88)	191(31.59)	235.42	P>0.05
	Unemployed	16 (10.33)	104 (23.11)	120(19.83)		
	Labourer	73 (50.49)	77 (17.11)	150(24.79)		
	Business	04 (2.58)	106(23.55)	110(18.18)		
	Skilled worker	10 (6.46)	24(5.33)	34(5.16)		
SES Status	II	2 (1.29)	50 (11.11)	52(8.59)	208.5	P>0.05
	III	6 (3.87)	80 (17.7)	86(14.21)		
	IV	147 (94.84)	320(71.11)	467(77.19)		
Type of family	Nuclear	75 (48,39)	250 (55.5)	325(53.71)	2.38	P>0.05
	Joint	80 (51.60)	200 (44.4)	280(46.28)		

Table 2: Various features in relation to tobacco consumption

Tobacco consumption		Number	%
Forms of tobacco	Gutka	23	14.84
	Khaini	40	25.81
	Beedi	62	40.00
	Cigarette	30	19.35
Alcohol	Yes	90	58.06
	No	65	41.94
Duration of consumption in years	< 1	4	2.58
	1 – 5	26	16.77
	6 – 10	39	25.16
	11 – 15	17	10.97
	16 – 20	26	16.77
	> 20	43	27.75
Reason for consumption	Enjoyment	49	31.62
	Tension	21	13.55
	Experiment	33	21.29
	Easily available	37	23.87
	Others	15	9.67
Influenced by whom	Friends	87	56.13
	Relatives	39	25.16
	Others	29	18.71
Feeling experience after consumption	Relaxation	90	58.07
	Fresh	22	14.19
	Interest in work	07	4.52
	Euphoria	10	6.45
	Gain in power	26	16.77
Reason to quit	Health problem	64	41.29
	Hazardous	31	20.00
	Cost	13	8.39
	Others	47	30.32
Onset of tobacco consumption habit (age in yrs)			
	< 20 years	115	74.19
	20 – 40 years	33	21.29
	> 40 years	07	04.51

Table 3: Health problems in tobacco users

Health Problem	Number	%
Periodontal disease	79	50.96
Acidity	47	30.33
Oral ulcer	09	05.81
Dryness of mouth	10	06.45
Loss of taste	10	06.45
Withdrawal symptoms		
Nervousness	06	03.87
Restlessness	44	28.38
Irritability	43	27.75
Impaired concentration	08	05.16
No symptoms	54	34.84

Discussion

The present study is showing that, in 31-40 years age group, tobacco abusers were prevalent i.e. 24.52%. These were followed by 22.58% in the age group of 41-50 years. Bala et al. [4] in Gujarat state and Venkat et al. [5] in Delhi were also shown that tobacco consumption was maximum 43.31% in the age group of 26-35 years and 35-44 years, respectively. In the present study, most of tobacco abusers were male i.e. 115 (74.19%). However, only 40 (25.81%) abusers were found to be female. Similar results were reported by another researcher. Sinha et al. [6] showed that most smokers were males (74.10%) in rural area of Bihar. Bala et al. [4] also observed that tobacco habit were prevalent in men (61.89%) in Gujarat state. Maximum numbers of tobacco abusers were Illiterates (71.62%). Similar findings were also reported by Venkat et al. [5] in Delhi. They showed that education is the strongest predictor of smoking. 66.1% Illiterate men were 1.8 times more likely to be smokers than literate. However, Illiterate women were 3.7 times more susceptible to tobacco abuse. Bala et al. [4] also reported that tobacco use was high in illiterates (50.60%) in Gujarat state. Among occupational groups, tobacco consumption was more at farmers (33.54%) and labourers (50.49%). Likewise, Bala et al. [4] were reported in labourers and farmers (59.88%) Of Gujarat. Majority of tobacco abusers was associated with other abuses also such as alcoholic (58.06%), beedi smoker (40.00%) & use Khaini (25.81%). However, Sinha et al. [6] noted that 80% smokers were smoked beedi over the smokeless form of Khaini (57.1%) in rural area of Bihar. In contrast Narayan et al. [5] showed that 66.77% tobacco consumers were also consumed alcohol in Delhi. Similarly, Dhupdale et al. [7] were studied the prevalence and pattern of alcohol consumption in rural Goa. Their results were also shown that alcoholic subjects are 1.9 times more likely to use tobacco (34.8%) than non consumers.

Maximum 31.62% persons were started tobacco abuse for enjoyment while 15.75% used tobacco to get rid of mental tension. Desire for experimentation was reason amongst 21.29%. 23.87% of tobacco abusers were started because of easy availability. However, maximum 56.13% subjects were initiated tobacco in influence of friends. Bala et al. [4] were also shown in Gujarat state that the majority of the tobacco users were consumed tobacco to decrease mental tension and for enjoyment. Half of all men and one third of women were started tobacco use by imitating their friends. Only 40.29% subjects were tried to quit tobacco due to health reasons. Similar finding were reported by Bala et al. [4] in Gujarat state. They were showing majority 95% try to quit tobacco due to health reasons. Current findings also indicated that 56.96% study subjects were suffering from periodontal disease. Jagadeeshan et al. [8] were also reported periodontal diseases in 70.70% chewers.

Conclusion

This study revealed that the initiation of tobacco abuse is prevalent in adolescent age group as they are soft targets for high risk behaviour and lack of knowledge about effect of tobacco abuse.

Recommendations

Knowledge should be imparted regarding harmful effects of tobacco abuse which create awareness among smokers and passive smokers. This will help to quit Tobacco. Enforce bans on Tobacco advertisement, promotion and sponsorship. Statutory warnings like "smoking is injurious to health, should be highlighted on sachets and packets. Tobacco abuse should be monitored with preventive policies. The penalty should be followed strictly for smoke and spit in public places. Taxes should be raised on tobacco sale and devised strategies to intervene at the initiation level of tobacco abuse i. e. early adolescent age.

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