

PREVALENCE OF ALCOHOL AND TOBACCO ABUSE AMONG THE ELDERLY IN A RURAL AREA OF BANGALORE: A CROSS SECTIONAL STUDY

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ABSTRACT

BACKGROUND

The population of elderly persons in India is the second largest in the world and is steadily growing. Although alcohol and tobacco problems are often under reported, their use remains common among older persons. Cessation of their use can reduce the incidence of cardio-vascular, pulmonary or malignant diseases, and prevent substance-induced problems.¹

OBJECTIVES

The study was conducted to assess the prevalence of alcohol and tobacco usage in the elderly in few villages of Bangalore Urban District.

METHODS

A Study was conducted over the period of 2 months in the calendar year 2014 on a sample of 295 people belonging to 14 villages under two sub centers. Data was collected using pretested structured questionnaires (CAGE, SMAST-G, AUDIT and Fagerstroms). The collected data was analysed. Our inclusion criteria >60 years, exclusion criteria were elders with cognitive defects and sensorineural deafness and bed ridden patients.

RESULTS

Among 295 subjects, 28.84 % of them used alcohol, 6.5% of females used alcohol. 15.5% of males of 33.3% of females out of them were found to be dependent on alcohol. 47.13% of males used tobacco and 47.11% of females used tobacco or tobacco products.

Reasons for usage were to forget their problems or losses or due to loneliness. Many of them skipped meals, had tremors or sustained injuries to themselves or others because of their drinking.

CONCLUSION

Prevalence of alcohol use was 18.3% and that of alcohol dependence 15.5%. Prevalence of tobacco usage was 47.11%, prevalence of high dependency tobacco was 22%.

KEYWORDS

Alcohol, Tobacco, Elderly, Rural, India.

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INTRODUCTION: Help age India – NGO – indicates that currently there are 77 million elderly persons in India and this will raise to 177 million by 2025 as life expectancy is likely to reach 75yrs by 2025 while death rate will be 7.7%. The population over 55 is growing rapidly. They have losses and grief, waning health and multiple medical needs and fear of the future.¹ Remedies are tried, alcohol and tobacco are consumed frequently leading to mental

states that are confused with senility, dementia, and Alzheimer's.² Although alcohol problems are often under reported, alcohol use remains common among older persons.³

Most of the studies on tobacco and alcohol use focus on the prevention of problems related to the use of these substances in adolescents and youngsters. However, studies focusing on the elderly are comparatively infrequent. Thus, there is a need to study this aspect in India. Some community-based rural studies have shown the prevalence of tobacco and alcohol use as 31%–42% and 10%, respectively in those ≥60 years of age.^{3,4} As almost three-fourths of the elderly live in rural India,⁵ there is a need to know the prevalence of tobacco and alcohol use in these

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areas to plan for educational efforts directed towards this group. Cessation of tobacco and alcohol use can further reduce the incidence of cardio-vascular, pulmonary or malignant diseases, and prevent substance-induced problems.⁶

OBJECTIVES: The study was conducted to assess the prevalence of alcohol and tobacco usage in the elderly and to assess the associated factors in the study area.

METHODOLOGY: This cross sectional study was conducted from 8th November 2013 to 8th January 2014 in 14 villages belonging to two sub centers of Sarjapur PHC, Bangalore Urban District. The demographics each village were available at anganwadi center of the particular village. From the anganwadi center the population of each village was obtained from which the total population elderly in the sub centers were obtained. The sample size was calculated using the formula Z^2pq/d^2 . All the villages in the two sub centers were included in the study. The sample size for individual villages was calculated based on the population proportionate to size of that particular village.

Convenient sampling method was used to obtain study unit. People more than 60 years of age and residing in the village for more than one year in the villages were included in the study. Elderly with cognitive defects were excluded from the study. Informed written consent was obtained from all the participants. Questionnaire consisting demographic details, standard Questionnaires CAGE,⁷ SMAST-G,⁸ AUDIT⁹ and Fagerstroms was administered to the elderly in their respective houses and in the regional language.^{10,11}

The obtained data was analyzed using SPSS version 16 and results were expressed in frequencies, proportions and Chi Square test was done to know the significance between the associated variables.

RESULTS:

Sl. No.	Parameters	Categories	Frequencies (Proportions)
1	Gender	Male	157 (53.22%)
		Female	138 (46.78%)
2	Education	No	207 (70.4%)
		Primary	35.7 (12.1%)
		Middle	22 (7.5%)
		High	21 (7.1%)
		college	9 (2.9%)
3	Family type	Nuclear	90 (30.5%)
		Three generation	180 (61.1%)
		Joint	25 (8.4%)
4	Current Occupation	Agriculture	101 (34.24%)
		Manual laborers	53 (17.97%)
		Self employed	5 (1.69%)
5	Economic status	BPL	252 (85.3%)
		APL	43 (14.7%)

Table 1: demographic details of the elderly subjects of the study

Of the collected sample size of 295, males outnumbered females. Most of them were illiterates, followed by primary, middle school, high school education and attained college education respectively. Most of them were living in third generation families followed by joint families and nuclear families. Majority of the males were agriculturists followed by manual labourers and petty shops owners. 33.1% were unemployed. Most of the females were homemakers followed by agriculturists, manual labourers and petty shops owners. Most of them had BPL cards.

Alcohol use:

Prevalence: Out of the 295 people interviewed 54 (18.3%) consumed alcohol. The prevalence of alcohol use was high in males compared to their female counterparts (28.84% vs 6.5%) and it was statistically significant with a p value of less than 0.001. Out of those who used alcohol 15.5% of males and 33.33% of females were alcohol dependent based on CAGE Questionnaire.

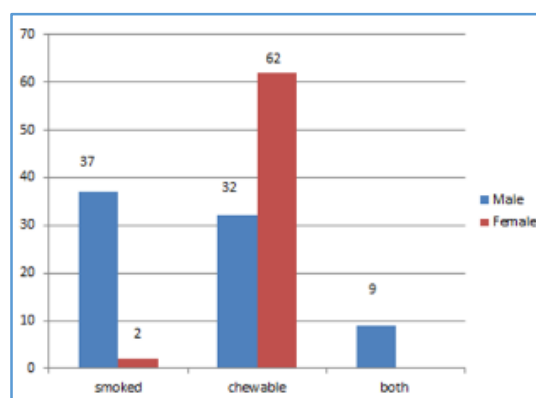
Reasons for Alcohol Use: Most common reason for the consumption of alcohol as reported was to forget problems (71.07%), the next main reasons were to forget losses in life and loneliness.

Impact on Life: Most of the people who consumed alcohol (72%) skipped meals due to drinking. 40.7% sustained some sort of injury by themselves or caused harm to others (accidents, spousal abuse). 14.8% experienced difficulty in working due to their drinking habits. 48.15% had tremors.

Tobacco Use:

Prevalence: Out of the 295 people interviewed 47.11% used tobacco in any form. The prevalence of tobacco use was almost equal in males and females (47.13% among males vs 47.1% among females).

Types of Tobacco Use: The prevalence of tobacco use was high (47.11%), 66.18% of those who used tobacco were tobacco chewers. 27.33% used tobacco in the form of cigarettes or beedis. Few (6.4 %) smoked and chewed tobacco too. Among the female tobacco users most (95.3%) chewed tobacco and few (4.61%) smoked tobacco. Among males 47.21% smoked tobacco, 40.54% chewed tobacco and few (12.16%) chewed and smoked tobacco too.



Graph 1: Types of tobacco use among the tobacco using elderly

Tobacco Dependency: Majority of the tobacco users were moderately dependent on it. The prevalence of high dependency was 22%.

DISCUSSION: A higher prevalence of alcohol use 18.3% was found in this study compared to a study done in north India 8.5%. The prevalence of tobacco smoking among elderly was found to be 13.22% (23.56% among males and 1.5% among females), this was significantly lower than in north India where prevalence of tobacco smoking was 56.5% (71.8% males 41.4% females)⁶ whereas it was observed that tobacco chewing is more common in our study 31.86% against 5.3% in north India, probably due to the social desirability of tobacco chewing by women folks.

In another north Indian study addressing the same issue the prevalence of alcohol consumption among the elderly men was 17% and 7% among their female counterparts.¹²

Even among the south Indian states there seems to be a variation in tobacco consumption, in rural Andhra Pradesh tobacco smoking is more prevalent than chewing,¹³ where as in our study tobacco chewing was more common.

In our study it was observed that most women started using tobacco post marriage once they started working in the fields, chewing tobacco during their breaks in between their work and this trend carried later in life.

CONCLUSION: Tobacco use is very common and is also socially acceptable among the elderly population in rural south India. Most of them are unaware of the serious side effects of long term use hence do not feel the need to quit. This is of serious concern as the elderly population is steadily increasing. The prevalence of alcohol use is also high and many are unaware of the cessation therapies available. Thus awareness about the ill effects of tobacco and alcohol use should be increased through national and local media and facilities be made available for those wishing to quit.

RECOMMENDATIONS: Health education to control the substance abuse (tobacco and alcohol) targeting children, adolescents in order to inculcate healthy lifestyle and to reduce social desirability regarding socially acceptable forms of substance abuse. Educating the pre geriatric population about healthy aging.

LIMITATIONS: Questionable external validity of the study due to smaller sample size and also because of the convenient sampling method.

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