

# Assessment of Knowledge about Side Effects of Tobacco use among Elderly Population of Rural Field Practice Area, North Karnataka

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## ABSTRACT

**Introduction:** Tobacco use is a major public health problem around the world, especially in developing countries.

Currently, 5.4 million people die from tobacco-related diseases each year and 80% of those deaths occur in developing countries. Aging is most important risk factors for most chronic diseases. Tobacco cessation in older persons reduces the risks of cardiac disease, COPD, Cancer, functional impairments & improves tolerance for exercise.

**Objective:** To assess the perception about the side effects of tobacco use among elderly people of rural field practice area.

**Methods:** A Cross-sectional study was conducted in rural field practice area among old age (>60yrs) people for period of two months interviewed by using structured proforma containing questionnaires on socio-demographic profile, pattern of tobacco use, knowledge & perception about side effects of tobacco.

**Results:** Among 106 elderly 38% found using tobacco (smokeless > smoking) with mean age 68±5 years. Awareness about side effects was low like tobacco causes cancer (40%), cardiac problem (41%), stroke (55%) and COPD (30%). Nearly half of the participants agree about tobacco in any form produces side effects, tobacco is addictive & cessation will improve the health. Both knowledge & perception was found low among all elderly interviewed. **Conclusions:** Elderly population are more vulnerable to engaging in risk behaviors like alcohol & tobacco use due to social & psychological reasons. It is need of the hour to educate them regarding relation between tobacco & health problems of old age people and benefits of cessation.

**Key words:** Knowledge, Old age people, Side effects, Tobacco

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## INTRODUCTION

Tobacco use is a major public health problem around the world, especially in developing countries. At present, it is estimated that tobacco kills over 3 million people per year. Based on current trends, however, the death toll will rise to 10 million deaths per year by the 2020s or 2030s, with 70% of those deaths occurring in developing countries. According to WHO estimates, there are approximately 1.1 thousand million smokers in the world - about one-third of the global population aged 15 years and over [1].

It is the single most preventable cause of cardiovascular diseases (CVDs), which comprise many conditions and are the leading cause of death globally, accounting for an estimated 17.3 million to 17.5 million deaths yearly. Tobacco is also the leading cause of premature death from CVD (deaths before age 70 years), accounting for an estimated 5.9 million premature deaths in 2013. Generally, high rates of tobacco use mean a higher burden of CVD. This association is compounded by population growth and

aging, both of which are major contributors to the absolute number of CVD sufferers [2].

Smoking is now recognized as a major public health problem also among the elderly. Risk of death among older smokers is higher than among their non-smoking counterparts. Morbidity and mortality from cancer, stroke, cardiovascular, and respiratory diseases are also higher among elderly smokers 3,4. Some data suggest that, as a group, the elderly not only smoke for a longer period of time than younger smokers but are also less aware of the potential harms of tobacco use. As a result, they are more resistant to quit smoking, do not report a greater number of quitting attempts or methods, and tend not only to underestimate the risks but also to overestimate the benefits of smoking.3 The present study was planned to assess the knowledge about the side-effects of tobacco use among elderly people of rural field practice area.

## METHODOLOGY

A Cross-sectional study was conducted in Rural Field Practice Area of Community Medicine department among old age (>60yrs) people for period of two months. Old age people were interviewed after taking informed verbal

consent by using structured proforma containing questionnaires on socio-demographic profile, history and pattern of tobacco use, knowledge about side effects of tobacco use.

Percentage of population age 60 years and above were 8% in India whereas 8.6% in Karnataka according to census 2011 [3-5]. Sample size of 125 was derived by taking proportion of old age people as 8.6% with allowable error of 5% at 95% confidence.

All participants were explained about the purpose of the study and informed verbal consent was taken prior to Interview. Institutional Ethics Committee permission was also obtained.

**RESULTS**

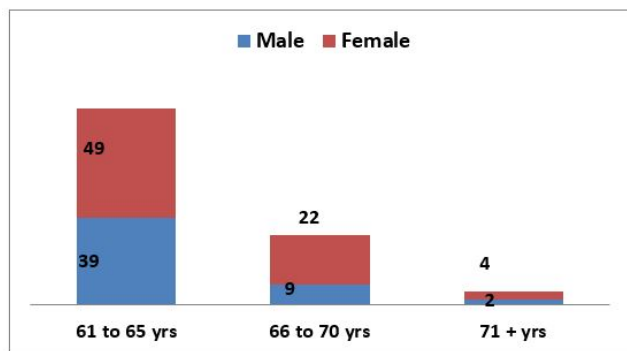
Total 125 old age residents of Rural Field Practice area were randomly enrolled in to the study and interviewed by using proforma. Analysis of the information collected showed following observations (Table 1).

**Table 1: Socio-demographic distribution of participants.**

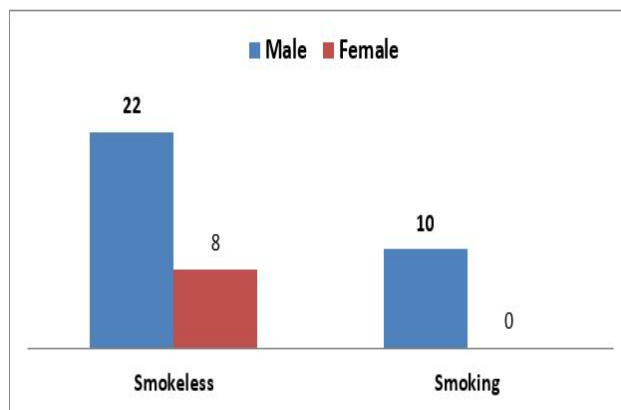
Variables		Male		Female		Total
		No.	%	No.	%	-106
Age group	61 to 70 yrs	45	69	20	31	65 (61%)
	71 to 80 yrs	26	66	13	34	39 (37%)
	> 80 yrs	1	50	1	50	02 (02%)
Education	Literate	31	76	9	24	40 (38%)
	Illiterate	48	72	18	28	66 (62%)
Socio-economic status	Class III	11	65	6	35	17 (16%)
	Class IV	37	62	23	38	60 (57%)
	Class V	10	34	19	66	29 (27%)
Religion	Hindu	40	55	33	45	73 (69%)
	Muslim	21	63	12	37	33 (31%)

Among all the participants majority were in the age group of 61 to 70 years (61%), Illiterate (62%), class IV (57%) and Hindu (69%) by religion.

Among 125 old age people 60% (75) were female and 40% (50) male whereas nearly 25% (31) were in the age group above age ≥ 65 to 70 years and 5% (06) were >70 years. Remaining 70% (88) were in the age group of 61 to 65 years (Figure 1) and mean age found was 66 ± 4.2 years. Among 125 old age people 38% found using tobacco (smokeless 80% >smoking 20%) whereas proportion of male among smokeless tobacco users was more than females (Figure 2).



**Figure 1: Distribution of participants according to age group & gender.**



**Figure 2: Distribution of participants according to pattern of tobacco use.**

Awareness about side effects was low like tobacco causes cancer (40%), cardiac problem like heart attack (41%) and COPD like Asthma (30%).

Only 52% agrees about tobacco in any form produces side effects & cessation will improve the health (57%). Average knowledge regarding side effects of tobacco use found was 53% among the participants (Table 2).

**Table 2: Distribution of responses to Knowledge questionnaires of Side Effects of tobacco use by Participants.**

Knowledge Questionnaires	YES	%	NO	%
1 Tobacco use is dangerous to health	55	52	51	48
2 Smokeless tobacco is less dangerous than smoking	83	78	23	22
3 Tobacco use causes Asthma	32	30	74	70
4 Tobacco use causes heart attack	43	41	63	59
5 Tobacco use causes cancer	42	40	64	60
6 Tobacco causes stroke	59	55	47	45
7 Tobacco cessation will improve the health	60	57	46	43

### DISCUSSION

Lim KH et al [6] studied, the prevalence of non-smokers, ex-smokers and current smokers among Malaysians aged 60 years and above were 36.3 % (95 % CI = 32.7–39.8), 24.4 % (95 % CI = 21.2–27.5) and 11.9 % (95 % CI = 9.5–14.3), respectively. Current smokers were significantly more prevalent in men (28.1 %) than in women (2.9 %), but the prevalence declined with advancing age, higher educational attainment, and among respondents with known diabetes, hypertension, and hypercholesterolemia.

Dhadwal et al [7] the mean number of cigarettes smoked were  $9.24 \pm 6.44$  per day. All participants were male, and 94% of them were married. Of 100 participants, there were 55% smokers, 21% consumed oral tobacco, and 24% doing both. Of 24 participants who were consuming both, 9% found smoking most impossible to give up, 5% said its tobacco they cannot resist and rest 10% said both smoking and oral tobacco. Fisher's exact test revealed that there was significant association of education status with the knowledge of the passive harms of smoking ( $P < 0.002$ ), knowledge of ban on smoking in public places ( $P = 0.03$ ), and that Himachal Pradesh is a no smoke state ( $P = 0.045$ ).

Goswami et al [8] the prevalence of smoking was 71.8% in men (n=490) and 41.4% in women (n=497). Among men smokers, 41.5% were light smokers ( $\leq 5$  beedis/day), 42.9% were moderate smokers (6–20 beedis/day) and 15.6% were heavy smokers ( $>20$  beedis/day). Among women smokers, 71.8% were light smokers, 23.8% were moderate smokers and 4.4% were heavy smokers. Regular alcohol intake was seen in 16.3% of the men compared with 0.8% of the women.

Dixit et al [9] found prevalence of tobacco consumers in rural area as 37.8%. It was quite higher among males (48.8%) in comparison to females (14.6%). In smokeless tobacco users Gutkha/pan masala was most popular chewable form of tobacco in young generation. Among the subjects 36 % were willing to quit tobacco at some point. A fewer portion of subject (33.2%) knew that smoking can cause cancer, and only 24.8% and 7.5 % knew of effects on respiratory system and cardiovascular system.

Ibrahim et al [10] Prevalence of awareness regarding health effect of tobacco use was found to be 56.6%. Knowledge of health effects of smoking was significantly associated with age, sex, religion, marital status, literacy & occupation. Prevalence of positive quitting attitude was found to be 35.4%. Positive quitting attitude was significantly associated with gender, literacy, occupation, knowledge regarding health effect of tobacco use & type of tobacco use. In order to make aging healthy, deliberate sensitization & effective public action plans are needed that can alter the adverse consequences of greying.

### CONCLUSION

Elderly populations are more vulnerable to engaging in risk behaviors like alcohol & tobacco use due to social & psychological reasons. It is need of the hour to educate them regarding relation between tobacco & health problems of old age people and benefits of cessation. Also, they are the role model for the young generation not only for not acquiring the habit of tobacco use but also for quitting the use.

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