



RESEARCH ARTICLE

THE PREVALENCE OF TOBACCO HABITS AND KNOWLEDGE OF ITS HEALTH IMPLICATIONS AMONG SPINNING MILL WORKERS IN SOUTH-EASTERN DISTRICT OF ANDHRA PRADESH

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ABSTRACT

Introduction: Tobacco use kills about five to six million people annually worldwide, accounting for about 20 percent of all adult male deaths and five percent of adult female deaths, over age 30. On current smoking patterns, annual tobacco deaths will rise to about eight to ten million by 2030. Tobacco use is a medical addictive condition, once addicted most smokers find it difficult to quit even when they develop smoking related diseases.

Aim: The present study was done to determine the prevalence, knowledge about ill effects of tobacco use and willingness to quit tobacco habit among spinning mill workers.

Materials and Methods: A cross-sectional pretested questionnaire study was conducted among 743 spinning mill workers selected by stratified random sampling. Demographic data relating to age, gender, socioeconomic status, experience of working in spinning mills, place of birth, and duration of stay in the study area for migrant workers were collected.

Results: The study population constituted 628 (84.5%) males and 115 (15.5%) females. Of the 743 spinning mill workers, 616 had a self-reported habit of tobacco use with a prevalence of 82.9%. Of these 616 participants with the habit of tobacco, 153 (24.8%) were only smokers, 218 (35.4%) were only tobacco chewers, and 245 (39.8%) had both the habits. Though majority of participants in the present study were aware of the negative impact of tobacco use on general health of an individual, most of them were ignorant on the ill effects of tobacco on oral health.

Conclusion: Most of the respondents had favourable attitude towards quitting tobacco usage and social concern was the main predictor of quitting tobacco usage.

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INTRODUCTION

Tobacco use kills about five to six million people annually worldwide, accounting for about 20 percent of all adult male deaths and five percent of adult female deaths, over age 30. On current smoking patterns, annual tobacco deaths will rise to about eight to ten million by 2030. (Jha, 2012; Rupali A Patle and Gautam M Khakse, 2014; PhinseMappalakayi Philip et al., 2013) Cigarette smoking is said to be responsible for over 25 diseases in humans, some of which include chronic bronchitis, ischaemic heart disease and cancers of the lung, oral cavity, urinary bladder, pancreas and larynx. (Desalu et al., 2008)

Every form of tobacco like cigarettes, cigars, pipe tobacco, snuff and chewing tobacco contain nicotine which is highly addictive and is readily absorbed into the bloodstream when a tobacco product is chewed, inhaled, or smoked. (Soni Preeti and Raut, 2012) Tobacco use is a medical addictive condition, once addicted most smokers find it difficult to quit even when they develop smoking related diseases. (Streptae et al., 2002) There is paucity of information on spinning mill workers related to knowledge on ill effects of tobacco use and willingness to quit in India, so an attempt has been done in the present study. The aim of the present study is to know about prevalence, knowledge about ill effects of tobacco use and willingness to quit tobacco habit among spinning mill workers.

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MATERIALS AND METHODS

A cross-sectional pretested questionnaire study was conducted among 743 spinning mill workers selected by stratified random sampling. A list of spinning mills in and around the study area, within a radius of 10 kilometers was obtained from the Spinning Mill Association, Guntur together with the number of workers in each of the mills. There were 25 spinning mills in the region with 5300 workers. The spinning mills were stratified into four groups based on the direction of location with respect to Guntur city into East, West, North, and South. The stratification was done to ensure that the final sample would be a good representative of all the spinning mills situated around the perimeter of the study. Two spinning mills were randomly selected from each of the geographical strata. The administrators of all the eight mills were contacted for obtaining permission to conduct the research during the working hours. Permission was not obtained from one mill to compensate for which another mill was randomly selected from the same geographical stratum and the administrators were successfully contacted. The total number of workers in the eight selected spinning mills were 1152. All the workers from each of these mills who were present on the days of research were included. Participants with cognitive disabilities and those who were reluctant to participate were excluded. The final sample constituted 743 spinning mill workers, with the response rate being 64.7%.

A pretested questionnaire pertaining to knowledge regarding harmful effects of tobacco use, attempts for and attitudes towards quitting was administered to all the participants. Demographic data relating to age, gender, socioeconomic status, experience of working in spinning mills, place of birth, and duration of stay in the study area for migrant workers were collected. Only those participants who reported current habit of tobacco use either in smoking form or smokeless form were considered as tobacco users in the context of the present study. Ethical clearance for the study protocol was obtained from the institutional ethics committee before the start of the study. Subjects were fully informed about the design and purpose of the study and informed consent was obtained. The data were analyzed using SPSS (version 20 software; IBM Corporation, Armonk, NY, USA). Alpha level was set at 5%.

RESULTS

The study population constituted 628 (84.5%) males and 115 (15.5%) females. Of the 743 spinning mill workers, 616 had a self-reported habit of tobacco use with a prevalence of 82.9%. Of these 616 participants with the habit of tobacco, 153 (24.8%) were only smokers, 218 (35.4%) were only tobacco chewers, and 245 (39.8%) had both the habits. Table - 1 shows the differences in tobacco related habits, knowledge pertaining to harmful effects of tobacco, attitudes towards cessation of tobacco use between males and females.

Table 1. Gender wise differences in tobacco related habits, knowledge pertaining to harmful effects of tobacco

		Male	Female	Total	P-value
Do you smoke or chew tobacco	Yes	559(90.7%)	57 (9.3%)	616(82.9%)	.000
	No	69(54.3%)	58(45.7%)	127(17.1%)	
If yes, indicate the form of tobacco	Smoke form	148(26.5%)	5(8.8%)	153(24.8%)	.000
	Smokeless form	166(29.7%)	52(91.2%)	218(35.4%)	
	Both	245(43.8%)	0(0%)	245(39.8%)	
Reasons to start tobacco	Workload	182(80.9%)	43(19.1%)	225(36.5%)	.000
	Family problem	184(98.4%)	3(1.6%)	187(30.4%)	
	Curiosity	101(92.7%)	8(7.3%)	109(17.7%)	
	Style	92(96.8%)	3(3.2%)	95(15.4%)	
Are you aware of illeffects of tobacco use	Yes	497(88.9%)	50(87.7%)	547(88.8%)	.461
	No	62(11.1%)	7(12.3%)	69(11.2%)	
If yes what type of health problems	Respiratory problems	269(91.5%)	25(8.5%)	294(53.7%)	.018
	Oral cancers	42(87.5%)	6(12.5%)	48(8.8%)	
	Cardiac problems	37(80.4%)	9(19.6%)	46(8.4%)	
	Cancers	97(97%)	3(3%)	100(18.3%)	
	Dental problems	52(88.1%)	7(11.9)	59(10.8%)	

Table 2. Age wise differences in tobacco related habits, knowledge and attitudes relating to harmful effects

		16-24	25-34	35-44	45-54	TOTAL	P-value
Do you smoke or chew tobacco	Yes	137(22.2%)	206(33.4%)	210(34.1%)	63(10.2%)	616(82.9%)	.002
	No	48(37.8)	36(28.3%)	30(23.6%)	13(10.2%)	127(17.1%)	
If yes, indicate the form of tobacco	Smoke form	9(5.9%)	63(41.2%)	70(45.8%)	11(7.2%)	153(24.8)	.000
	Smokeless form	48(22%)	87(39.9%)	50(22.9%)	33(15.1%)	218(35.4%)	
	Both	80(32.7%)	56(22.9%)	90(36.7%)	19(7.8%)	245(39.8%)	
	Workload	41(29.9%)	59(28.6%)	82(39%)	43(68.3%)	225(36.5%)	
Reasons for start of tobacco	Family problem	35(25.5%)	73(35.4%)	72(34.3%)	7(11.1%)	187(30.4%)	.000
	Curiosity	26(19%)	38(18.4%)	37(17.6%)	8(12.7%)	109(17.7%)	
	Style	35(25.5%)	36(17.5%)	19(9%)	5(7.9%)	95(15.4%)	
	Yes	121(88.3%)	181(87.9%)	182(86.7%)	63(100%)	547(88.8%)	
Are you aware of illeffects of tobacco use	No	16(11.7%)	25(12.1%)	28(13.3%)	0(0%)	69(11.2%)	.028
	Respiratory problems	77(26.2%)	99(33.7%)	100(34%)	18(6.1%)	294(53.7%)	
If yes what type of health problems	Oral cancers	6(12.5%)	5(10.4%)	21(43.8%)	16(33.3%)	48(8.8%)	.000
	Cardiac problems	8(17.4%)	19(41.3%)	15(32.6%)	4(8.7%)	46(8.4%)	
	Cancers	25(25%)	41(41%)	26(26%)	8(8%)	100(18.3%)	
	Dental problem	5(8.5%)	17(28.8%)	20(33.9%)	17(28.8%)	59(10.8%)	
	Yes	90(65.7%)	109(52.9%)	82(39%)	16(25.4%)	297(48.2%)	
Are you planning to quit tobacco use	No	47(34.3%)	97(47.1%)	128(61%)	47(74.6%)	319(51.8%)	.000

Significant differences were found between males and females with respect to use of tobacco, form of tobacco usage, reasons for developing the habit, knowledge on health problems caused by tobacco, and attitudes towards quitting the habit. While workload was the main reason for developing the habit among females, family problems were found to be the main reason among males. Females were found to have significantly higher positive attitudes compared to males with respect to quitting the habit. The age group wise differences in tobacco related habits, knowledge and attitudes relating to harmful effects were presented in Table – 2. Though majority of participants in the present study were aware of the negative impact of tobacco use on general health of an individual, most of them were ignorant on the ill effects of tobacco on oral health. None of the study participants with self-reported tobacco habit reported quit attempts and neither were they aware of any kind of Nicotine Replacement Therapy (NRT).

DISCUSSION

Prevalence of smoking and smokeless tobacco was 24.8%(153) and 35.4% (218) respectively and 39.8% (245) both. Majority of them having habit of smoke and smokeless form 245(39.8%) and most of them are in the age group of 35 to 44 years, which is statistically significant. Study conducted by Zakir Anwar Ansari *et al.* (2010) showed prevalence of tobacco use 85.9%. Prevalence of smoking and tobacco chewing were 62.28% and 66.07% respectively, which is more compared to present study. Common reasons for tobacco habit are work load 36.5% (225), family problem 30.4% (187), curiosity 17.7% (109), style 15.4% (95), majority of them are in the age group of 25 to 44 years started the habit due to family problems and workload, results shows statistically significant, and which is slightly different by the study conducted by Mahamad A Gaafar *et al.* (2013) and Anuradha Pai (2014) showed curiosity (29.3%), pleasure (47.6%), Workload (27.2%), social situations (24.1%), boredom (58.3%), frustration (42.2%). Out of 616 study subjects with tobacco habits, 547 (88.8%) are aware of ill effects caused due to tobacco products are respiratory problems 53.7%(294), cardiovascular diseases 8.4% (46), cancer 18.3%(100), oral cancer 8.8%(48), 10.8% (59) dental problems. Majority of them are in younger and middle age group who said tobacco habits leads to respiratory problems and showed less knowledge on oral cancer and dental problems, which are statistically significant. Males (88.9%) were found to be slightly aware of ill effects of tobacco on health when compared to females (87.7%), no significant results found, which is in contrast to study conducted by Danish Imtiaz (2015) 87.4% were aware of the hazardous effects of tobacco, in which 85.1% said consumption of tobacco can lead to oral cancer and 88.6% males were aware as compared to females (80.8%) about the harmful effects of tobacco. In the present study none of the participants did any attempt to quit the habit in the past this may be due to work pressure and lack of success in quitting is often related to withdrawal symptoms, and which is in contrast to the study done by Sushil *et al.* (2013) showed 46% had tried to quit the habit in the past. In the present study only 48.2% (297) showed interest to quit the habit, from which 36.7% (109) showed more interest to quit the habit are in the age group of 25-34 years and 45-54 years age group showed least interest 5.4% (16) which are significant. This is in contrast to the study conducted by Sushil (2013) 73.5% were willing to quit the habit. None of the participants are aware of any Nicotine Replacement Therapy

(NRT) this may be because of not aware of proper education, advertisements, campaigns on NRT but this is different from the study conducted by Shilpi Singh *et al.* (2015) where 4% knows the different NRT available in the market. The present study was restricted to cotton spinning mill workers; therefore, the results are not representative of tobacco users in India as a whole. The data collected from this study was dependent on respondents self-reporting and may be subject to recall bias.

Conclusion

Due to high prevalence of tobacco use among spinning mill workers, most of the respondents had favorable attitude towards quitting tobacco usage. There is a need to develop multifactorial tobacco quitting strategies, especially conducting community awareness programs to educate about the consequences of tobacco use and on counseling for de-addiction of this habit.

Recommendation

- Knowledge of harmful effects of tobacco to be strengthened more and NRT need to be promoted more from government side.
- Effective cessation programmes to be promoted to reduce tobacco use among workers.
- Regular surveys should be done to monitor the situation and the effectiveness of tobacco control and preventive programs.

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