Research Article

Attitude and determinants of female smoking among older female subjects in the selected rural areas of Uttarakhand, India

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Abstract

Background: Smoking is a globally leading risk factor for different types of diseases. Smoking by women is culturally unacceptable in India; still, women smoke tobacco at various times of their life.

Objective: To explore the attitude and determine the factors about smoking among older female subjects in rural areas of northern state of India.

Materials and Methods: Quantitative nonexperimental approach with exploratory descriptive design was used to attain error-free outcomes. Eighty older female subjects aged older than 55 years and living in rural areas were selected by snowball sampling technique from selected rural areas. Semistructured interview was conducted to explore the attitude and determine the factors about smoking among older female subjects in rural areas of northern state of India. A self-developed practice checklist was used during the data collection. Ethical committee permission was obtained from the concern authority, and informed consent was taken from the study participants.

Result: In this study, we found that 20% disagreed for quitting smoking as they felt that is good for health, 80% that it is a self-decision, 19.25% disagreed that family members are also affected by smoking, 22.50% disagreed that smoking causes any serious respiratory problems, 80% strongly agreed that smoking helps to reduce stress and it is an acceptable manner of relaxation, and 46.25% were not aware about the side effects of smoking. Majority of older female subjects started smoking at the age of 20 years along with friends and owing to other associated factors [i.e., habit, enjoyment, gastrointestinal (GI) problems, etc.]. GI and respiratory problems were found as common health problems among these female subjects.

Conclusion: Awareness regarding adverse effects is quite less. So, there is a need of proper intervention to educate them to decrease further health complications and frequency in coming generation.

KEY WORDS: Attitude, determinants, older females, rural areas, smoking

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Introduction

According to the WHO Report 2002, amid industrialized countries, where smoking is usual, the practice is expected to cause over 90% of lung cancer in men and about 70% of lung cancer among women. Moreover, in these countries, the attributable fractions are 56%–80% for chronic respiratory disease and 22% for cardiovascular diseases.[1] Globally, 20% of

smokers are women, and tobacco smoking causes 1.5 million deaths in women. Among them, more than 75% live in low- and middle-income countries.[2]

Information on occurrence of tobacco use in India is obtainable from studies conducted in general community. According to the national cross-sectional household survey, India has over 200 million tobacco consumers. However, occurrence of smoking and tobacco chewing differs extensively between different states and shows a strong relationship with individual's sociocultural characteristics. A recent nationwide study on smoking and mortality in India estimated that smoking in persons between the ages of 30 and 69 years is responsible for about one in 20 deaths of women and one in five deaths of men, with a totality to one million deaths per year.[3]

In India, smoking is more predominant in men than in women and among older people. While men smoke all through their lives, women incline to turn into smokers at an older age.[4] Diverse cultural, psychosocial, and socioeconomic factors can be the reasons for tobacco use. Usage of customary tobacco products such as bidi smoking, khaini, chutki, and betel quid use by women in India is poorly understood and studied.[2]

Moreover, it is found that smoking was more prevalent among less-educated, poorer, rural, and lower-caste men and among women in urban areas. They also acknowledged a larger reduction in smoking over time among more-educated women. Health behaviors such as smoking and physical inactivity are risk factors for many chronic diseases and leading causes of death and disability.[4] Smoking also increases the incidence of clinical tuberculosis and is a cause of half the tuberculosis deaths in India.[3]

The data on cigarette consumption do not reflect the extensive usage of smokeless tobacco among rural women. In India, for example, 22% of rural women in Kerala chew tobacco in pan (betel leaf). Women also smoke bidi (small indigenous cigarettes) and hookahs, as in Bihar, parts of Punjab, and Haryana. Rural women in Goa are known to rub and plug the inside of their mouths with burnt powdered tobacco.[5]

Hence, this study was designed to explore the attitude and determine the factors about smoking among older female subjects in rural areas of northern state of India.

Materials and Methods

A quantitative approach with exploratory descriptive design was carried out to explore the attitude and determine the factors about smoking among older female subjects in rural areas of northern state of India. The universe of study population comprised older female subjects above 55 years of age who were selected by using snowball method. Participants who were practicing smoking presently were included in the study. Eighty participants were recruited for the study after exclusions. The investigator had used self-developed checklist to explore the attitude and determine the factors about smoking among older female subjects in rural areas of northern state of India. Ethical committee permission was obtained from the concern authority, and informed consent was taken from the study participants. The data were analyzed by using descriptive and inferential statistics.

Result

Approximately, half (53.7%) of the study participants belonged to the joint family. Maximum (92.5%) number of the study participants was illiterate. Two-thirds (68.8%) of the study participants were married, and (30%) were widows. Around half (48.8%) of the study participants were housewives and 27.5% labor. Majority (88.8%) of the study participants were using bidi for smoking. Approximately, half (51.3%) of the study participants spend Rs. 300 per month on smoking [Table 1].

One-fifth (20%) of them strongly disagree that it is good to quit smoke for health, 22.5% strongly disagree that smoking cause adverse effect on other family members, 22.5% strongly disagree that smoking causes respiratory problem, most (80%) of the older female subjects agree that smoking helps in reducing stress, 73.75% strongly agree that smoking is an acceptable manner of relaxation, majority (87.5%) of the older

Table 1: Frequency and percentage-wise distribution of sociodemographic characteristics of participants (n = 80)

Sample characteristics	Smoker older females, *N* (%)
Type of family	
Nuclear	19 (23.8)
Joint	43 (53.7)
Extended	18 (22.5)
Education	
Illiterate	74 (92.5)
Primary	5 (6.3)
	1 (1.2)
Graduation	0 (0)
Marital status	
Married	55 (68.8)
Unmarried	1 (1.2)
Widow	24 (30)
Divorced	0 (0)
Occupation	
Farmer	18 (22.5)
Housewife	39 (48.8)
Labor	22 (27.5)
Any other	1 (1.2)
Type of smoking	
Bidi	71 (88.8)
Cigarette	0 (0)
Hookah	1 (1.2)
Bidi and hookah	8 (10)
Monthly expenditure on smoking (rupees)	
300	41 (51.3)
<300	27 (33.7)
>300	12 (15)

Table 2: Positive attitude of smoking among older female subjects ($n = 80$)

Item	Agree		Strongly agree		Disagree		Strongly disagree	
	N	%	*N*	%	*N*	%	*N*	%
Quitting smoking is good	48	60	16	20	12	15	4	5
Adverse effect of smoking on family member	49	61.25	16	20	13	16.25	2	2.5
Smoking cause respiratory problem	51	63.75	11	13.7	12	15	6	7.5
Smoking reduces stress	56	70	8	10	14	17.5	2	2.5
Smoking is an acceptable manner of relaxation	56	70	3	3.75	17	21.2	4	5
Quitting smoking is a self-decision	60	75	10	12.5	6	7.5	4	5
I do not like if anyone smokes in front of me	32	40	5	6.25	40	50	3	3.75
Everyone has the right to breathe in fresh air	58	72.5	7	8.75	13	16.25	2	2.5

Table 3: Negative attitude of smoking among older female subjects ($n = 80$)

Item	Agree		Disagree		Strongly agree		Strongly disagree	
	N	%	*N*	%	*N*	%	*N*	%
Smoking is a good habit	25	31.25	48	60	2	2.5	5	6.25
Above 55, smoking is very common	54	67.5	18	22.5	7	8.75	1	1.25
More concentration in worktime	56	70	19	23.75	2	2.5	3	3.75
Helps in reducing GI problem	43	53.75	26	32.5	6	7.5	5	6.25
If anyone offers to smoke, I want to do	54	67.5	10	20	5	6.25	5	6.25
Bidi/cigarette is too costly	58	72.5	15	18.75	5	6.25	2	2.5
Everyone has the right to smoke	45	55	18	22.5	10	12.5	8	10

female subjects strongly agree that quitting smoking is a self-decision, 53.75% disagree that they do not like if any one smokes in front of them, and 81.25% agree that everyone has the right to breathe in fresh air [Table 2].

About 62.5% of older female subjects agree that smoking is a good habit; three-fourth (76.25%) of the older females strongly agree that smoking is very common in people older than 55 years; 72.5% agree that smoking helps to concentrate more during worktime; 61.25% agree that smoking helps in reducing gastrointestinal (GI) problem; 73.75% agree that if anyone offers the participant to smoke, then they want to do; 21.25% disagree that bidi/cigarette is very costly; and two-thirds (67.5%) agree that everyone has the right to smoke [Table 3].

Most (21.25%) of the older female subjects were inspired by friends, 17.5% by husband, 3.75% by relatives, 10% get relieved from stress, 20% feel enjoyment, 17.5% of older female subjects smoke to get relief from abdomen distention, and 10% for other reasons. Presently, most (71.25%) of the participants smoke to prevent abdomen distention, and others smoke for enjoyment and stress. About 27.5% were smoking since adolescence, 45% started after 20 years of age, and 17.5% did not know the exact duration of their smoking. In majority (56.25%) of older female subjects, GI and respiratory problems are still present, and 46.25% are still not aware about the side effects of smoking.

According to the distribution of the data, the inferential statistics such as χ^2 and Fisher's exact tests were used to analyze the data. All the demographic variables such as type of family, education, occupation, marital status, type of smoking, and monthly expenditure on smoking were not significantly associated with the negative attitude score (i.e., level of $p < 0.05$) [Table 4].

The data presented in Table 5 shows the proportion of the demographic variables with positive attitude of smoking older female subjects. According to the distribution of the data, the inferential statistics such as χ^2 and Fisher's exact tests were used to analyze the data. All the demographic variables such as type of family, education, and type of smoking were not significantly associated with the positive attitude score; only type of occupation, marital status, and monthly expenditure on smoking were statically associated with positive attitude score at the level of $p < 0.05$ [Table 5].

Discussion

In this study, positive attitude of older female subjects regarding smoking was examined. In this, majority of older female subjects in rural areas strongly agree for quitting smoking is good for health, and it is a self-decision, which was correlated with the study by Donze et al.[6] that majority population to quitting smoking was beneficial at an advanced age, smoking few or light cigarette yield no negative health consequences, and smoking does not increase osteoporotic risk. Willingness to quit is associated with a low-education level.

Most of the older female subjects in rural areas strongly agree that family members are also affected by smoking as measured by Likert scale. These findings were correlated with the study by Seema et al.[7] that majority women recognized smoking to be harmful to women health, child health, and other family members.

Table 4: Association between sociodemographic variables and negative attitude of smoking of older female subjects (*n* = 80)

Demographic variables (smoker older females)	<14	>14	χ^2	*P*
Type of family				
Nuclear	17 (21.25)	2 (2.5)		0.2365
Joint	35 (43.75)	8 (10)		
Extended	12 (15)	6 (7.5)		
Education				
Nonformal	58 (72.5)	16 (20)		0.3403
Formal	6 (7.5)	0 (0)		
Marital status				
Married	45 (56.25)	10 (12.5)	0.3636	0.5465
Widow	19 (23.75)	6 (7.5)		
Occupation				
Farmer	14 (17.5)	4 (5)		0.3788
Housewife	33 (41.25)	6 (7.5)		
Labor	16 (20)	7 (8.75)		
Type of smoking				
Bidi	57 (71.25)	13 (16.25)		>0.9999
Hookah	8 (10)	2 (2.5)		
Monthly expenditure on smoking (rupees)				
>300	35 (43.75)	6 (7.5)	0.935	0.335
>300	30 (37.5)	9 (11.25)		

Table 5: Association between sociodemographic variables and positive attitude of smoking of older female subjects (*n* = 80)

Demographic variables (smoker older females)	<24	>24	χ^2	*P*
Type of family				
Nuclear	1 (1.25)	18 (22.5)		0.4934
Joint	6 (7.5)	37 (46.25)		
Extended	3 (3.75)	15 (18.75)		
Education				
Nonformal	10 (12.5)	64 (80)		>0.9999
Formal	–	6 (7.5)		
Marital status				
Married	4 (5)	52 (65)	4.5386	0.0331
Widow	6 (7.5)	19 (23.7)		
Occupation				
Farmer	2 (2.5)	16 (20)		0.0572
Housewife	2 (2.5)	37 (46.25)		
Labor	6 (7.5)	17 (21.25)		
Type of smoking				
Bidi	8 (10)	62 (77.5)		0.605
Hookah	2 (2.5)	8 (10)		
Monthly expenditure on smoking (rupees)				
<300	2 (2.5)	37 (46.25)	4.7698	0.029
>300	9 (11.25)	32 (40)		

Many of the older female subjects in rural areas strongly agree that smoking causes serious respiratory problem; this finding correlated with the finding by Seema et al.[7] that one-third of women knew that active smoking can cause respiratory disease and lung disease, but only a small percentage knew that it could lead to heart disease.

Maximum of older female subjects in rural areas strongly agree that smoking helps to reduce stress, and it is an acceptable manner of relaxation. These findings correlated with the findings by Azagba and Sharaf[8] that effect of stress on smoking and drinking may largely depend on unobserved characteristics, and stress shows a positive and statistically significant impact on smoking intensity.

Three-fourth of older female subjects in rural areas strongly agreed that smoking is very common in subjects aged older than 55 years. These findings correlated with reports by Ary and Biglan[9] that nicotine use begins at a very early age in US, and nearly all smokers aged 35 years or younger began using cigarette sometime in early adolescence, and few people take up smoke after the age of 18.

Many of the older female subjects in rural areas strongly agree that bidi/cigarette costs are very high. These findings correlated with the findings by Bader et al.[10] that price responsiveness in less-developed countries is likely to be greater than in more-developed countries.

This study found that the reasons to start smoking for participants, majority of population started by friends and other associated factor are habit, enjoyment, GI problem, and others. Majority of population started smoking after the age of 20 years. GI and respiratory problems were found in major population after awareness about the side effects of smoking, which was found to be concurrent with the findings by Jindal et al.[11] that bidi was the commonest form of smoking in the rural areas. Increasing age, low socioeconomic status, friends, and rural residence were the important factors of smoking. Nearly 14% of ever smokers showed some respiratory symptoms.

This study was limited with few points. First, investigator had to rely on the information taken from the older female subjects. Second, investigator did not have any control on other factors such as relationship between family members and psychosocial status of older female subjects. Third, as the study's sample size was small, the scope of the generalization of findings will be questionable.

Conclusion

This study highlights about the attitude and factors determining smoking in older female subjects, in which older female subjects strongly agree that quitting smoking is good for health. Most of older female subjects in rural areas strongly agree that family members are also affected by smoking. Many of the older female subjects in rural areas strongly agree that smoking causes serious respiratory problems. Majority of population started by friends and other associated factors are habit, enjoyment, GI problems and others, and many of the older female subjects started smoking after the age of 20 years. Awareness of adverse effects is very less; so, there is a need to do proper intervention and educate them to decrease further health complications and frequency in coming generation.

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