

## “A Descriptive Study to Assess the Knowledge on Ill Effects of Second Hand Smoke Inhalation Among Adults in Selected Community Area at Puducherry”.

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### ABSTRACT

**Introduction:** Second-hand smoking (passive smoking) is a major public health concern that exposes non-smokers to harmful tobacco smoke, leading to various respiratory and systemic health problems. Continuous exposure adversely affects the health and well-being of individuals in community settings.

**Objective:** To assess the effects of second-hand smoking among adults in a selected community area.

**Methodology:** A quantitative research approach with a descriptive design was adopted among 50 adults using a convenience sampling technique. Data were collected using a structured questionnaire to assess exposure and its health effects. Statistical analysis included descriptive statistics such as frequency and percentage.

**Results:** The findings revealed that a significant proportion of participants were exposed to second-hand smoking, and many reported symptoms such as respiratory discomfort, eye irritation, and other health-related issues associated with passive smoking exposure.

**Conclusion:** Second-hand smoking has a considerable impact on the health of adults, emphasizing the need for awareness, preventive strategies, and community-based interventions to reduce exposure.

**Keywords:** Second-hand smoking, Passive smoking, Health effects, Community exposure

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### I. INTRODUCTION

Second-hand smoking (passive smoking) is a significant public health issue caused by the involuntary inhalation of tobacco smoke by non-smokers. It contains harmful chemicals that can lead to various health problems, including respiratory disorders, cardiovascular diseases, and eye irritation. Continuous exposure, especially in home and community environments, increases the risk of illness and negatively affects the overall health status of individuals. In community settings, particularly in semi-urban and rural areas, awareness regarding the harmful effects of second-hand smoking remains limited. Therefore, understanding its impact on health and promoting preventive measures are essential to protect individuals from avoidable health risks.

### II. STATEMENT OF THE PROBLEM

“A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE ON ILL EFFECTS OF SECOND HAND SMOKE INHALATION AMONG ADULTS IN SELECTED COMMUNITY AREA AT PUDUCHERRY.”  
**OBJECTIVES OF THE STUDY**

1. To assess the ill effects of second hand smoke inhalation among adults
2. To associate the ill effects of second hand smoke inhalation among adults with the selected demographic variables.

### III. METHODOLOGY

The present study was conducted to assess the effects of second-hand smoking among adults in a selected community area. A quantitative research approach with a descriptive design was adopted for the study. A total of 50 participants were selected using a convenience sampling technique. Data were collected using a structured questionnaire to assess the level of exposure to second-hand smoking and its health effects. The data collection was carried out in a single phase, where participants were interviewed and relevant information was obtained regarding their exposure and associated health problems. Data were analyzed using descriptive statistics such as frequency and percentage to summarize the findings and interpret the effects of second-hand smoking among adults.

**Inclusion criteria:**

- Adult residing in community area
- General public including male and female with the age group of 20-50
- People who are willing to participate in the study
- People who are available at the time of data collection.

**Exclusion criteria:**

- Age less than 18year.
- People who are not willing to participate in the study.
- People who are not available at the time of data collection.

**DESCRIPTION OF THE TOOLS:**

**Section A:**

Demographic variables such as age, religion, educational status, occupational status, monthly income, marital status, type of family

**Section B:**

Knowledge questionnaire on second hand smoke. It included 20 multiple choice questions. Each questions has 4 options among which one was the correct answer. 11

**SCORING INTERPRETATION:**

KNOWLEDGE LEVEL	PERCENTAGE
Inadequate	0-50%
Moderate	50-75%
Adequate	75-100%

**DATA ANALYSIS AND INTERPRETATION**

SECTION A: Description of demographic variables of the adults.

SECTION B: Assessment of the level of knowledge regarding the ill effects of second-hand smoke inhalation among adults.

SECTION C: Association of the level of knowledge regarding the ill effects of second-hand smoke inhalation among adults with selected demographic variables

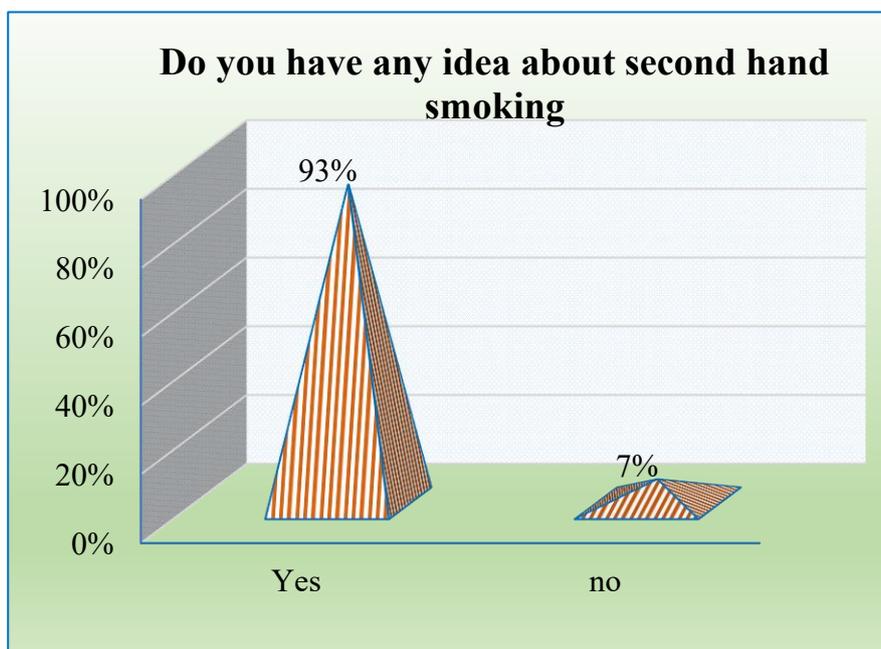
**Table 1: Frequency and percentage wise distribution of demographic variables of the adults.  
n=100**

S.No	Demographic Variables	Number of Frequency	Percentage (%)
1	<b>Age in years</b>		
	a) 20-30years	21	21
	b) 31-40years	46	46
	c) 41-50years	30	30
	d) 51-60 years	3	3
2	<b>Gender</b>		
	a) Male	40	40
	b) Female	60	60
3.	<b>Religion</b>		
	a) Hindu	93	93
	b) Christian	4	4
	c) Muslim	0	0
	d) others	3	3

The above table shows the frequency and percentage wise distribution of demographic variables of the adults such as age, gender and religion.

S.No	Demographic Variables	Number of Frequency	Percentage (%)
1	<b>Occupation</b>		
	a) Government job	15	15
	b) Private job	58	58
	c) Own business	16	16
	d) Unemployed	11	11
2	<b>Education</b>		
	a) Illiterate	24	24
	b) Primary school	38	38
	c) Secondary school	18	18
	d) Graduate	20	20
3	<b>Do you have any idea about second hand smoking</b>		
	a) Yes	93	93
	b) No	7	7
4	<b>Type of residence</b>		
	a) Urban	0	0
	b) Rural	100	100

The Above table shows the frequency and percentage wise distribution of demographic variables of the adults such as occupation, education, idea about second-and smoke inhalation and type of residence.



**Figure 1: Percentage wise distribution of demographic variables of the adults according to their idea about second-hand smoking.**

Regarding second hand smoke awareness, 93% of participants were aware of its risks, while 7% are not.

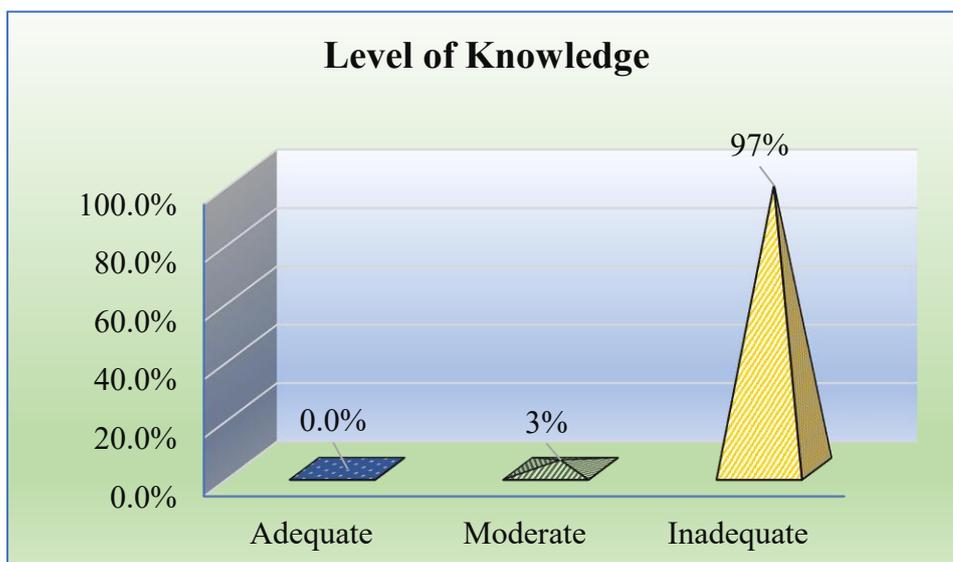
**Table 2: Frequency and distribution of the level of knowledge regarding the ill effects of second-hand smoke inhalation among adults.**

S. NO	Level of knowledge	Frequency (n)	Percentage %
1.	Adequate	0	0
2.	Moderate	3	3

3.	Inadequate	97	97
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Table 2 shows the distribution of the level of knowledge regarding the ill effects of second-hand smoke inhalation among adults. The majority of participants (97%) were found to have inadequate knowledge about the harmful effects of second-hand smoke, indicating a significant gap in understanding. Only 3% of participants possess a moderate level of knowledge, while none of the participants have adequate knowledge on the subject.

This suggests that despite the general awareness of second-hand smoke, there is a lack of deeper understanding of its specific health risks among most individuals in the study.



**Figure 2: Percentage wise distribution of level of knowledge regarding the ill effects of second-hand smoke inhalation among adult**

**Table 3: Association of the level of knowledge regarding the ill effects of second-hand smoke inhalation among adults with selected demographic variables.**

S.No	Demographic Variables	Level of knowledge						X <sup>2</sup> Value
		Adequate		Moderate		Inadequate		
		N	%	N	%	N	%	
1	Age in years							X <sup>2</sup> = 7.910 Df = 3 P = 0.042 (S)*
	a) 25- 30 years	0	0	2	2	19	19	
	b) 31 – 40 years	0	0	1	1	45	45	
	c) 41- 45 years	0	0	0	0	30	30	
	d) 51- 60 years	0	0	0	0	3	3	
2.	Gender							X <sup>2</sup> = 0.096 Df = 2 P = 0.953 (NS)
	a) Female	0	0	1	1	39	39	
	b) Male	0	0	2	2	58	58	
3.	Religion							X <sup>2</sup> = 0.233 Df = 2 P = 0.890 (NS)
	a) Hindu	0	0	3	3	90	90	
	b) Muslim	0	0	0	0	4	4	
	c) Christian	0	0	0	0	3	3	
	d) Others	0	0	0	0	0	0	
4.	Marital Status							X <sup>2</sup> = 2.294 Df = 1 P = 0.130 (NS)
	a) Married	0	0	1	1	71	71	
	b) Unmarried	0	0	2	2	26	26	
	c) Divorced	0	0	0	0	0	0	

5.	Types of family							X <sup>2</sup> = 3.351 Df =3 P= 0.341 (NS)
	a) Nuclear family	0	0	3	3	45	45	
	b) Joint family	0	0	0	0	46	46	
	c) Extended family	0	0	0	0	6	6	
6	Family Monthly income							X <sup>2</sup> = 0.650 Df =2 P= 0.723 (NS)
	a) Rs.20000 and above	0	0	1	1	28	28	
	b) Rs.10001 - 20000	0	0	1	1	52	52	
	c) Rs.5001 - 10000	0	0	1	1	17	17	
	d) >5000	0	0	0	0	0	0	
7	Occupation							X <sup>2</sup> = 2.401 Df =3 P= 0.493 (NS)
	a) Government job	0	0	0	0	15	15	
	b) Private job	0	0	2	2	56	56	
	c) Own business	0	0	0	0	16	16	
	d) Unemployed	0	0	1	1	10	10	
8	Education							X <sup>2</sup> = 9.684 Df = 3 P= 0.023 (S)*
	a) Illiterate	0	0	0	0	24	24	
	b) Primary school	0	0	1	1	37	37	
	c) Secondary school	0	0	0	0	18	18	
	d) Graduate	0	0	2	2	18	18	
9	Do you have any idea about second hand smoking							X <sup>2</sup> = 0.233 Df = 1 P= 0.629 (NS)
	a) Yes	0	0	3	3	90	90	
	b) No	0	0	0	0	7	7	
10	Type of residence							K
	a) Urban	0	0	3	3	97	97	
	b) Rural	0	0	0	0	0	0	

\* Significant at P ≤ 0.05 level ; K - Constant

The above table shows that there is a significance association of age and education with level of knowledge regarding the ill effects of second-hand smoke inhalation among adults. The study depicts that the participants falling between the age 31 – 40 is found to be having the highest level of inadequate knowledge regarding the ill effects of second hand smoke inhalation.

Whereas the adults belonging to the age group 20 – 30 have moderate knowledge regarding second hand smoke inhalation.

The study also shows a significant association between the education of the population and knowledge regarding second hand smoke inhalation. This shows the inadequate knowledge among the people having the level of primary school education.

Therefore, if the population has had adequate level of education, the level of knowledge would have been significantly higher.

In addition to that, the younger age people is comparatively having higher knowledge than the older age people.

#### IV. MAJOR FINDINGS

The study findings revealed that the majority of participants were adults belonging to various age groups, with both males and females represented, and most from low to middle socioeconomic status. A significant proportion of participants were regularly exposed to second-hand smoking, especially within their home environment. Many participants reported symptoms such as cough, breathing difficulty, eye irritation, headache, and throat discomfort, indicating the adverse effects of passive smoking on their health.

The findings further showed that increased exposure to second-hand smoking was associated with a higher occurrence of health-related problems. Participants who were frequently exposed experienced more severe symptoms compared to those with occasional exposure. Certain demographic variables such as age, occupation, type of family, and monthly income showed an influence on the level of exposure and its effects, while some variables did not show significant association. Overall, the study concludes that second-hand smoking has a

considerable negative impact on the health of adults, highlighting the need for awareness and preventive measures to reduce exposure in the community.

## V. RESULTS AND DISCUSSION

This chapter discusses the findings of the study conducted to assess the effects of second-hand smoking among adults in a selected community area. The study included 50 participants selected through convenience sampling, and data were collected using structured tools. The findings revealed that a significant proportion of participants were exposed to second-hand smoking, particularly in home environments, leading to various health problems. Many participants reported symptoms such as cough, breathing difficulty, eye irritation, headache, and throat discomfort, indicating the harmful impact of passive smoking on their health.

Further analysis showed that individuals with frequent exposure experienced more severe health effects compared to those with occasional exposure, demonstrating a direct relationship between exposure level and health outcomes. Significant associations were observed with selected demographic variables such as age, occupation, family type, and income. Overall, the findings conclude that second-hand smoking has a considerable negative impact on the health of adults and highlights the need for increased awareness and preventive measures to reduce exposure in the community.

## VI. CONCLUSION

The study concludes that second-hand smoking is a significant public health concern that adversely affects the health of adults. Exposure to passive smoking leads to various health problems such as respiratory discomfort, eye irritation, and other related symptoms. The findings highlight that continuous exposure, especially in home environments, has a considerable negative impact on individuals. Therefore, reducing exposure to second-hand smoking through awareness and preventive measures is essential for improving community health.

## VII. RECOMMENDATIONS

- Conduct educational programs to create awareness about the harmful effects of second-hand smoking.
- Promote smoke-free environments in homes and community settings.
- Encourage individuals to avoid exposure to tobacco smoke and adopt healthy lifestyle practices.
- Implement community-based screening programs to identify individuals affected by passive smoking.
- Develop IEC materials on the hazards of second-hand smoking and preventive strategies.
- Conduct further studies with larger sample sizes to strengthen the findings.
- Encourage healthcare workers to educate the public about the risks of passive smoking during routine visits.

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