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A STUDY TO ASSESS THE ATTITUDE OF CONSTRUCTION WORKERS TOWARDS PREVENTING AGAINST ASBESTOSIS (OCCUPATIONAL LUNG DISEASE) AT THIRUBHUVANAI, PUDUCHERRY

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ABSTRACT:

Introduction: Asbestosis, also known as "pulmonary fibrosis," is a respiratory ailment primarily affecting construction workers who encounter asbestos fibers and other construction-related particulates. Symptoms can range from mild discomfort and coughing to severe chronic obstructive pulmonary disease (COPD)-like symptoms. Despite advancements in construction hygiene practices, asbestosis remains a persistent occupational health challenge in regions with outdated equipment, inadequate ventilation, and limited protective measures. **Objectives of the study**: The main objective of the study to assess level of attitude among construction workers towards preventing asbestosis. **Methodology:** The research approach used for this study was quantitative research approach. A descriptive research design was adopted for this present study. By using convenient sampling technique, 30 school-age children were selected for the present study. **Results:** The present study reveals that 23 (76.7%) of them had low attitude, 4 (13.3%) of them had very low attitude and 3 (10%) of them had moderate attitude. **Conclusion:** The study findings concluded that there is significance association between education status and year of experience with level of attitude among construction workers towards preventing asbestosis where p<0. 05.

Keywords: Asbestosis, Obstructive Pulmonary disease,

INTRODUCTION:

The construction industry, a key contributor to global economic development, faces significant challenges, including occupational health hazards such as asbestosis, a respiratory disease caused by asbestos

fiber and other construction-related particulates. Asbestosis, a respiratory ailment, is a significant concern in the construction sector, as workers are exposed to airborne particulates, chemicals, pollutants, and plastic materials. Despite advancements in automation, machinery, and production techniques, the risk of occupational lung diseases persists due to inadequate preventive measures and an incomplete understanding of health risks associated with construction work.

Asbestosis, also known as "pulmonary fibrosis," is a respiratory ailment primarily affecting construction workers who encounter asbestos fibers and other construction-related particulates. Symptoms can range from mild discomfort and coughing to severe chronic obstructive pulmonary disease (COPD)-like symptoms. Despite advancements in construction hygiene practices, asbestosis remains a persistent occupational health challenge in regions with outdated equipment, inadequate ventilation, and limited protective measures.

Understanding the attitudes of construction workers towards preventing asbestosis is crucial for developing effective preventive strategies. However, there is a significant gap in research exploring attitudes towards preventing occupational lung diseases, particularly asbestosis, which hinders the development of tailored interventions that address the unique needs, concerns, and attitudes of construction workers.

NEED FOR THE STUDY

Occupational lung diseases are prevalent worldwide, with varying degrees of occurrence based on industries, regions, and exposure levels. Silicosis, a common disease, affects workers exposed to crystalline silica dust, while byssinosis, caused by cotton dust inhalation, is a serious concern in textile industries. Occupational asthma, caused by exposure to sensitizing agents, accounts for 15% of adult-onset asthma cases worldwide. Chronic Obstructive Pulmonary Disease (COPD) is a risk factor, with over 3 million deaths globally attributed to COPD in 2019. Asbestosis, a common occupational lung disease, has decreased in some regions due to improved working conditions and mechanization, but remains a concern in areas with inadequate safeguards. This research aims to inform the development of targeted interventions to improve workplace conditions, enhance preventive strategies, and support comprehensive healthcare programs tailored to the needs of construction workers. Understanding the prevalence and nature of occupational lung diseases among construction workers can influence policy decisions, construction practices, and worker advocacy efforts.

STATEMENT OF THE PROBLEM

A study to assess the attitude of construction workers towards preventing measures against asbestosis occupational lung disease) at Thirubhuvanai, Puducherry

OBJECTIVES OF THE STUDY

- To assess the level of attitude among construction workers towards preventing asbestosis
- To associate the level of attitude among construction workers towards preventing asbestosis with their selected demographic variables.

RESEARCH METHODOLOGY:

A quantitative research approach and descriptive research design was selected for the present study. The present study was on 30 construction workers at Bharathi Devi English High school, Thirubhuvanai, Puducherry who meet the inclusion criteria. Using a convenient sampling technique the samples were selected for the present study. The tool consists of demographic variables and structured questionnaires. The data of the study was evaluated by using descriptive and inferential statistics.

MAJOR FINDING

Regarding the age in years, the majority 10 (33.3%) were in the age group of 20-30 years, 13(43.3%) were in the age group of 30-40 years and 4 (13.3%) were in the age group of 40-50 years. With regards to gender, majority 22 (73.3%) were male and 8 (26.7%) were female. In the aspect of education status, the data shows majority 13 (43.3%) were uneducated and 1 (3.3%) were completed primary level. In the aspect of occupation status majority, 30 (100%) were private employed. In the aspect of religion majority, 28 (93.3%) were Hindu, 1 (3.3%) were Muslim and 1 (3.3%) were Christian. Regarding income per month, the data shows that the majority 13 (43.3%) come under Rs.10000 to Rs.15000 and 9 (30%) were come under Rs. 15000/- to Rs20000/-. With regards to marital status majority, 22 (73.3%) were married and 8 (26.7%) were single. In the aspect of type of family, 12 (40%) had 3-6 years of experience and 6 (20%) had 1 to 5 years of experience. With regards to history of occupation lung disease majority 17 (56.7%) had previous history and 13 (43.3%) had no previous history.

RESULTS AND DISCUSSION

The table 1 reveals the frequency and percentage-wise distribution of level of attitude among construction workers towards preventing asbestosis. The finding shows that, majority 23 (76.7%) of them had low attitude, 4 (13.3%) of them had very low attitude and 3 (10%) of them had moderate attitude.

Table 1: Distribution of the level of attitude among construction workers towards preventing asbestosis.

N=30

S.NO	LEVEL OF ATTITUDE	FREQUENCY (n)	PERCENTAGE %
1.	Very low Attitude	4	13.3%
2.	Low Attitude	23	76.7%
3.	Moderate Attitude	3	10%
4.	High Attitude	0	0

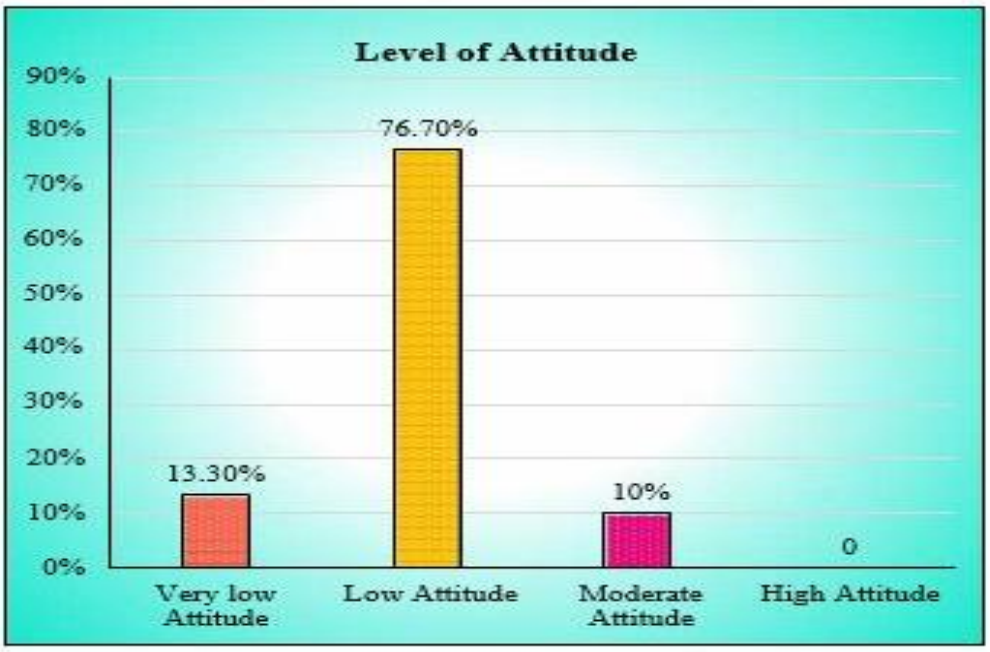

Figure 1: Percentage wise distribution of level of attitude among construction workers towards preventing asbestosis

Table 2: Association of the level of attitude among construction workers towards preventing asbestosis with their selected demographic variables. N = 30

S.No	Demographic variables	LEVEL OF KNOWLEDGE						X^2 value
		Low attitude		Moderate attitude		Very low		
1	Age in years	N	%	N	%	N	%	$X^2 = 5.177$ P= 0.521 (NS)
	a) 20-30 years	1	2	9	18	0	0	
	b) 30-40 years	2	4	10	20	1	2	
	c) 40-50 year	1	2	2	4	1	2	
	d) >50 years	0	0	2	4	1	2	
2.	Gender							X = 2.208

	a) Male	2	4	17	34	3	6	P= 0.331 (NS)
	b) Female	2	4	6	12	0	0	
3.	**Education status**							X^2 = 7.585 p = 0.042 **(S)***
	a) Illiterate	1	2	10	20	2	4	
	b) Primary level	0	0	1	2	0	0	
	c) Higher secondary	1	2	5	10	1	2	
	d) Graduation	2	4	7	14	0	0	
4.	**Occupation**							**K**
	a) Mason	0	0	0	0	0	0	
	b) Brick Layer	0	0	0	0	0	0	

	c) Electrician	0	0	0	0	0	0	
	d) Engineer	4	7	23	46	3	6	
5.	**Religion**							$X^2 = 0.652$ p = 0.893 (NS)
	a) Hindu	4	8	21	42	3	6	
	b) Muslim	0	0	1	2	0	0	
	c) Christian	0	0	1	2	0	0	
	d) Others	0	0	0	0	0	0	
6.	**Monthly Income**							$X^2 = 4.845$ p = 0.564 (NS)
	a) < Rs. 5000/-	1	2	6	12	0	0	
	b) Rs. 5000/- to Rs.10000/-	2	4	8	16	3	6	
	c) Rs. 10000/- to Rs.15000/-	1	2	8	16	0	0	
	d) > Rs.15000/-	0	0	1	2	0	0	
7.	**Marital status**							X^2 =3.320 p = 0.190 **(S)***
	a) Single	0	0	8	16	0	0	
	b) Married	4	8	15	30	3	6	
8.	**Type of family**							$X^2 = 4.725$ p = 0.094 (NS)
	a) Joint	4	0	10	20	1	2	
	b) Nuclear	0	8	13	26	2	4	
9.	**Year of experience**							X^2 =9.762 p = 0.013 **(S)***
	a) 1 to 5 years	0	0	6	12	0	0	
	b) 5-10 years	3	6	9	18	0	0	
	c) 10-15 years	1	2	5	10	1	2	

	d) > 15 years	0	0	3	6	2	4	
10.	**Any history of occupational lung disease**							$X^2 = 0.195$ p = 0.907 (NS)
	a) Yes	2	4	13	26	2	4	
	b) No	2	4	10	20	1	2	

***p<0.05 - Significant; p<0.01 - Highly Significant K= constant**

The above table shows that there is significance association between education status and year of experience with level of attitude among construction workers towards preventing asbestosis where p<0.05. There is no significance association between Age, Gender, Occupation, Religion, Income per month, Marital status, Type of family, Any history of occupational lung diseases with level of attitude among construction workers towards preventing asbestosis.

CONCLUSION:

The present study assessed the attitude of construction workers towards preventing against asbestosis (occupational lung disease) at Thirubhuvanai, Puducherry. The study findings concluded that there is there is significance association between education status and year of experience with level of attitude among construction workers towards preventing asbestosis where p<0. 05.

RECOMMENDATIONS:

- Same study can be conducted with large samples.
- Same study to can be conducted among the general public.

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