

# A Study to Assess the Respiratory Health among Cement Factory Workers at Vyasarpadi

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## ABSTRACT

**Background:** The present study aim was to assess the level of respiratory health among factory workers at vyasarpadi. **Purpose:** The current study was aim to assess the respiratory status among cement factory workers at vyasarpadi. **Materials and Methods:** Non-experimental descriptive research approach study was conducted in the VYASARPADI. A total of 100 study participants was recruited using non-probability purposive sampling technique based on the inclusion criteria, the demographic variables was assessed by using a self-structured questionnaire and assess the level of respiratory health among cement factory workers was estimated during 2 weeks. **Result:** The study shows that maximum of them were in the age group of 26-35 years, about 51% of the women were married, 36% were Christian, 26% of them had gained degree qualification, 46% of them are living in joint family, 56% were non vegetarian, 53% of them had 2 years of occupational history, 58% of them residing in urban area and 38% were from middle socio economic status. **Conclusion:** The main study concludes that, the level of concentration in reading, writing and listening skills among students was low and education performance is also low. The relationship with the level of respiratory health of workers.

**KEYWORDS:** Respiratory health, Cement factory, Occupational health

## INTRODUCTION

Occupational health nursing is the application of nursing practice and public health procedures for the purpose of preventing, promoting and restoring the health of individuals and group through their place of employment. By occupational environment "it is meant some of the external conditions which prevail at the place of work and which have a bearing on the health of the working population". The industrial workers today is placed in a highly complicated environment which is getting more complicated as man is becoming more ingenious. The health of the industrial workers will be influenced by conditions prevailing in their workplace. one of the declared aims of occupational health is to provide a safe environment in order to safeguard the health of the workers and to step up industrial production.

Cotton dust is defined as dust present in the air during the handling or processing of cotton, which may contain a mixture of many substances including ground up plant matter, fibre, bacteria, fungi and other

contaminants which may have accumulated with the cotton. Invisible small cotton dust particles enter into the alveoli of the lung through inhalation and accumulate in the lymph causing damage to the alveoli and reducing the capacity of retain oxygen. As the cotton dust accumulates, the worker develops a brown lung and suffers from bysiosis

Textile manufacture utilizes a wide range of chemicals which can be harmful to the environment, to people working in textile processing and to consumers. There is information about the adverse effects on textile workers and the effects of pure chemicals, but there is limited information about the overall toxicity of dyed and finished materials

## Methods and Material:

The study was used non-experimental descriptive research approach and descriptive research design with the sample size of the study was 100 who was working in a cement factory in vaysarpadi selected by

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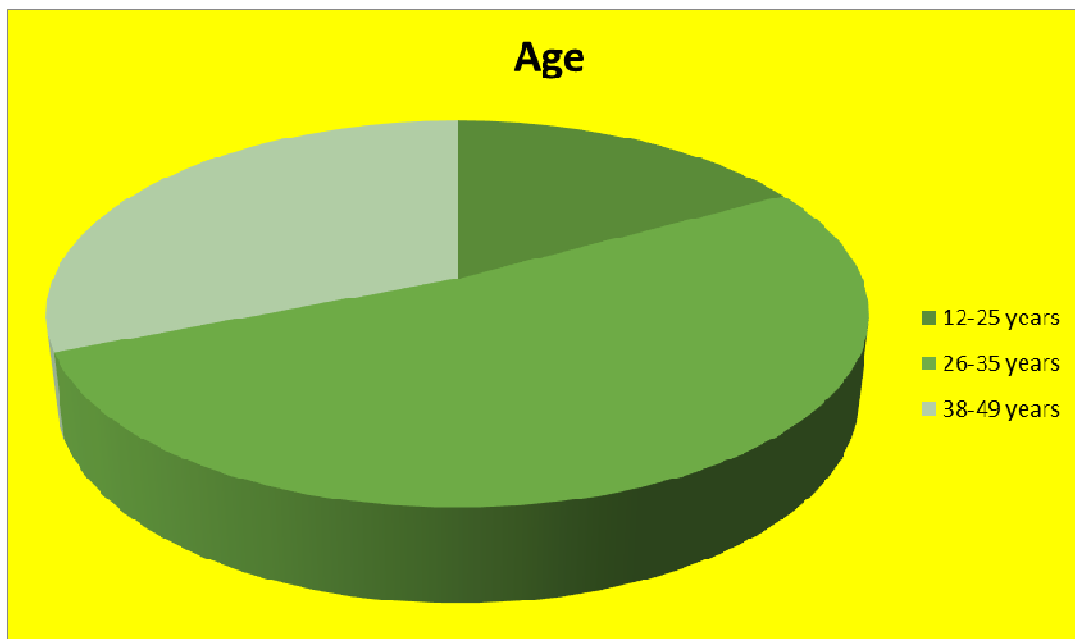
non-convenient sampling technique and who fulfilled the inclusion criteria. inclusion criteria, the demographic variables was assessed by using a self-

structured questionnaire and assess the level of respiratory health among cement factory workers was estimated during 2 weeks.

**Results and Discussion:**

**SECTION A: Description of the demographic variables of workers**

The table shows that maximum of them were in the age group of 26-35 years, about 51% of the women were married, 36% were Christian, 26% of them had gained degree qualification, 46% of them are living in joint family, 56% were non vegetarian, 53% of them had 2 years of occupational history, 58% of them residing in urban area and 38% were from middle socio economic status.



Percentage distribution of age

**SECTION B Table 3: Assessment of scores of level of respiratory health:**

**Assessment of level of respiratory health among the workers**

The table despite that, about (40.0%) of them had good respiratory health, (28.0%) of them had average respiratory health and (32%) of them had poor respiratory health.

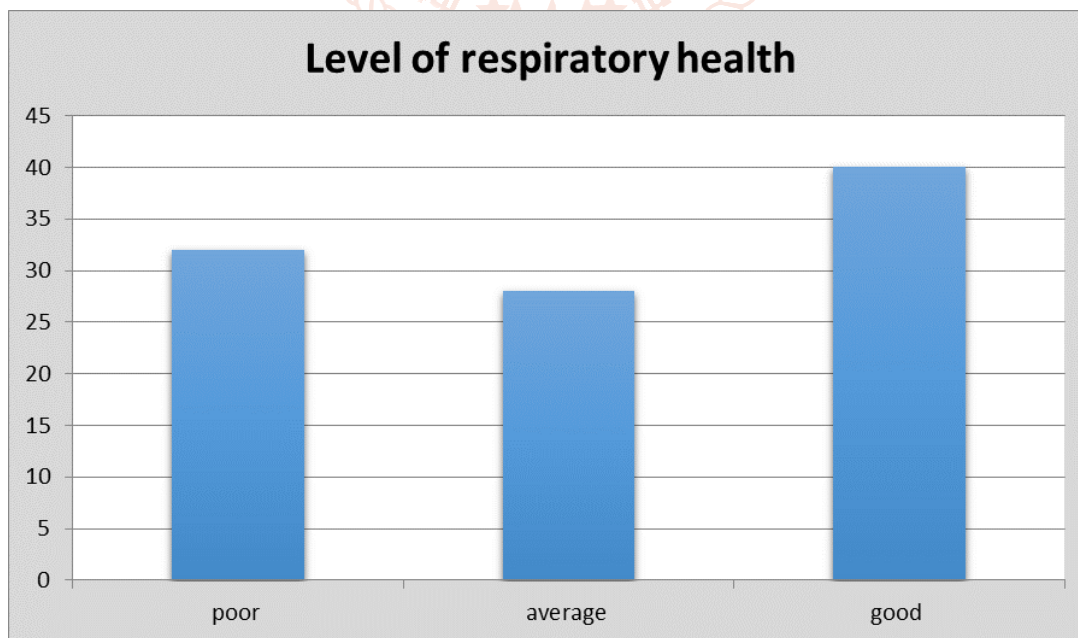


Table Percentage distribution

**SECTION C: Assessment of scores of level of respiratory health**

The table shows that minimum score 6.0, maximum score is 18.0, mean is 15.72, and standard deviation is 4.45 for respiratory health of cement factory workers.

**SECTION D: Association of level of respiratory health with selected demographic variables**

The table despites that, variable such as religion had significant association with level of respiratory health

**CONCLUSION:**

Respiratory tract diseases were the most important group of occupational diseases in Dyeing, Cotton and Cement factories as a result of inhalation of chemical Dyeing powders, Cotton dust and Cement dust in the work place. There was shortage of health services to workers and nursing services in the factory were not present. Adequate facilities should be provided and habits such as smoking and alcohol intake must decreased to promote respiratory health among the workers.

**AUTHORS CONTRIBUTION:**

All the authors actively participated in the work of the study. All the authors read and approved the final manuscript.

**CONFLICTS OF INTEREST:**

The authors declare no conflicts of interest.

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