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# Assess the Level of Knowledge on Prevention and Control of Bagassosis among Workers in Sugarcane Industry

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**Abstract:** ***Introduction: Bagassosis is an occupational disease of the lung caused by inhalation of bagasse on sugarcane dust. It can be prevented with following measures include, dust control-measures for the prevention and suppression of dust such as wet process, enclosed apparatus, exhaust ventilation, personal protective equipment such as mask, gloves, initial medical examination and periodical medical checkup of sugar cane industrial workers. Objectives: To assess the level of knowledge on prevention of bagassosis among workers in sugar cane industry. To assess the level of knowledge on control of bagassosis among workers in sugarcane industry. To find out the association between level of knowledge with demographic variable among workers in sugar cane industry. Methodology: Descriptive cross sectional design was adopted for this study, simple random sampling technique was used and 30 sugarcane workers were selected. The data was collected, analysed in terms of both inferential and descriptive statistics. Result: The study findings showed that 8(26.6%) people had adequate knowledge and majority of them 17(56.6%) had moderate knowledge, 5(16.6%) had inadequate knowledge.***

**Keywords:** Knowledge on prevention and control of bagassosis

## 1. Introduction

Workers in developing countries like India face as many work related health problems. It is a field of science which aim at promotion and maintenance of highest degree of physical, mental and social well-being of workers in prevention of departure from health at working condition. Occupational health problems in the sugar cane industry, which exist in more than 40 countries in the world. Sugar cane workers have a high level of occupational accidents and they are exposed to high toxicity of pesticides. They may also have an increased risk of lung cancer, possibly bagassosis.

Bagassosis is also problem specific to the industry as it may follow exposure to bagasse, which is a byproduct of sugar cane. Practice of burning foliage at the time of cane cutting can lead to bagassosis.

Inhalation of sugar cane dust particles in occupational setting can cause various lung symptoms. Chronic exposure can lead to symptoms such as weight loss and eventually lung scarring and possibly even respiratory failure in severe cases. Other symptoms such as fever, chills, shortness of breath and body aches.

Bagassosis can be effectively diagnosed with following diagnostic tests include blood test, urine test, swabs, diagnostic test lab test, and it can be prevented with following measures include, Dust control-measures for the prevention and suppression of dust such as wet process, enclosed apparatus, exhaust ventilation, personal protective equipment's such as mask, gloves, initial medical examination and periodical medical checkup of sugar cane industrial workers.

## 2. Statement of the Problem

Assess the level of knowledge on prevention and control of bagassosis among workers in sugar cane industry

## 3. Objectives of the Study

1) To assess the level of knowledge on prevention of bagassosis among workers in sugar cane industry.
2) To assess the level of knowledge on control of bagassosis among workers in sugarcane industry.
3) To find out the association between level of knowledge with demographic variable among workers in sugar cane industry.

## 4. Research Methodology

- **Research approach:** Quantitative research approach
- **Research design:**Pre experimental descriptive design.
- **Setting:** The setting of the study is Cooperative sugar mill, situated in Vellore, Tamil Nadu.
- **Sample:** Sugar cane industrial workers under selected industries of Vellore district.
- **Sample size:** The total sample of the study consists of 30 workers.
- **Sampling technique:** Simple random sampling technique using Lottery method.

**Criteria for sample selection**

**Inclusion Criteria**

1) Sugarcane industrial workers available at the time of data collection.
2) Sugarcane industrial workers willing to participate in the study.

**Exclusive Criteria**

1) Sugarcane industrial workers who had severe respiratory disease and on medical treatment.

**Data Collection Tool**

**Part – I**
It consists of age, sex, residential place, education, occupation, income, years of experience, safety measures, types of precaution.

**Part – II**
Structured questionnaire method to assess the level of knowledge on prevention and control of bagassosis, According to the score interpretation.0-30%indicates inadequate knowledge, 40-60%indicates moderate knowledge, and 70-100% indicates adequate knowledge

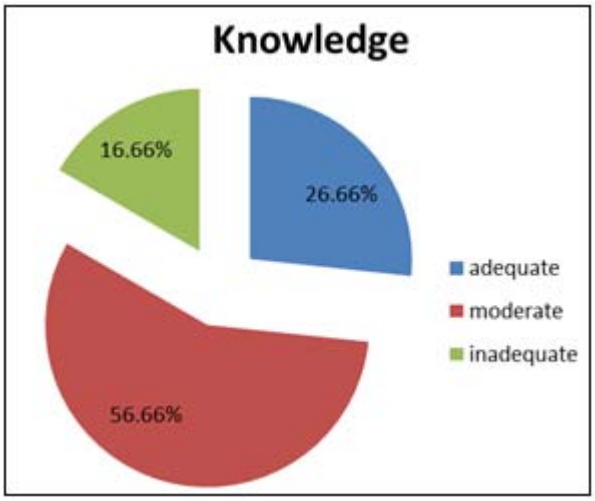
## 5. Analysis and Interpretation

**Mean and Standard deviation of level of knowledge on prevention and control of bagassosis among workers in sugarcane industry**

| Sl. No. | Dependent Variable | Mean | SD |
|---|---|---|---|
| 1. | Bagassosis | 5.4% | 1.8384 |

**Description of score range in percentage with respects to the sample size**

| S. No. | Knowledge | Score | Percentage (%) |
|---|---|---|---|
| 1. | Adequate knowledge | 10-30 | 26.66% |
| 2. | Moderate knowledge | 40-60 | 56.66% |
| 3. | Inadequate knowledge | 70-100 | 16.66% |




## 6. Major findings of the Study

1) Out of 30 sample 10(33.33%) were in the age group of 35-45 year, 30(100%) belongs to male, 19(63.3%) most of them live in rural area, majority 11(36.6%) are degree holder, occupation status 21(70%) identified has heavy worker, 11(36.6%) had income of 25,000-30,000, more than 10 yearsof experience was 14(46.6%), majority 30(100%) was aware of the safety measures, use of face mask by the industrial workers was30(100%).
2) Out of 30 samples the knowledge about preventive measures were 8(26.66%) had adequate, 17(56.66%) had moderate and 5(16.66%) had inadequate knowledge.

## 7. Conclusion

Majority of the sugarcane industrial workers have moderate level of knowledge regarding bagassosis.

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