



**ORIGINAL RESEARCH PAPER**

**Nursing**

**A STUDY ON KNOWLEDGE REGARDING WORK-RELATED INJURIES AMONG SANITATION WORKERS, ONE OF THE HAZARDOUS HEALTH ISSUES AMONG SANITATION WORKERS.**

**KEY WORDS:** Work-related injuries, Knowledge and Sanitation workers.

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**ABSTRACT**

**Background of the study:** Work-related injuries are one of the most dangerous health issues experienced by the sanitation workers. It drastically affects a large number of sanitation workers and their families to lead a quiet life in the society. **Aim of this study:** was to describe the knowledge regarding work-related injuries among sanitation workers and to find association between the knowledge score and the selected demographic variables. **Materials and Methods:** With purposive sampling technique 100 samples were selected, the data is collected with a self-administered structured questionnaire and the study is carried out by using non-experimental descriptive research design. **Result:** The result shows that 60% of samples had inadequate knowledge, 30% had moderate knowledge and only 10% had adequate knowledge regarding work-related injuries among sanitation workers. There was no significant association between the knowledge score and the selected demographic variables.

**INTRODUCTION**

We are surrounded by the environment all around. The physical condition, development and all other characteristics of any country develop only from the environment. It is the duty of every man to keep his city clean and free from any kind of insalubrities. Unfortunately, man has interfered too much with nature, people are producing more and more rubbish and not taking much interest to discard it in a healthy way. Poor sanitation leads to sickness and diseases, which lead to low productivity and consequently to poverty. Sanitation workers play a vital role in improving the health of people by cleaning and disposing waste and dedicatedly working in unsafe conditions even without any protective gears or other safety devices. Their job demands physical as well as mental fitness, they have to routinely carry heavy objects, enter into hazardous deep pits and manholes and work in different weather conditions. Admittedly, sanitation workers put their lives in danger, many work-related injuries are reporting in a daily basis from different countries.

A report by WaterAid, World Health Organization (WHO) and the International Labour Organization (ILO) indicated that between 2017 and late 2018, a sanitation worker die every 5 days in India. To shed light on this undervalued area, they analysed the problems faced by sanitation workers – focusing on those who maintaining sewers and emptying the pits. To improving the health, safety and dignity of sanitation workers and acknowledging their important role in attaining Sustainable Development Goal 6, they challenge health organizations, countries and development partners to coordinately work and attain the goal.

Wei L, Sha Z et. al (2021) reported that online news data about sanitation worker road traffic collisions in China, between 2013 and 2017, 511 road traffic collisions were reported, with the fewest in February and July. Most occurred around 5:00a.m. in Eastern regions and in urban areas. Victims were mainly over 50 years old, with more females than males. Collisions usually resulted in death at the scene. The most common cause of collisions was drivers' speeding, but workers also regularly risk death by crossing the road in pursuit of their duties. Raising awareness about sanitation worker road traffic collisions will help protect the work safety rights of this vulnerable group.

Chandra K, Arora VK (2018) reported that in a cross-sectional observational study on chronic comorbidity profile of sewage workers with more than five years of occupational experience and employed in three contiguous districts of NCT of Delhi revealed that among 104 sewage workers 21.15% sewage workers had Tuberculosis and 92.31% had at least one of the

chronic respiratory diseases (COPD, Asthma or ACOS). 85.6% of participants were smokers. Less than 5% of study participants were free from all the investigated chronic diseases. The sewage workers have an adverse chronic morbidity profile for both Tuberculosis and NCDs. There is an urgent need for epidemiological research and targeted screening and public health intervention for Tuberculosis and other NCDs in sewage workers as an occupational group.

Prabhakumari Chellamma, Sudhiraj, Arya Vijayakumar (2015) reported that in a cross-sectional morbidity study on a selected 601 sanitation workers in Thrissur Corporation, Kerala 53.6% were males. 34.4% workers presented with one acute illness and only 79.2% sought medical help. 43.26% had chronic morbidities and 83.86 % opted modern medicine. 53.9% of the workers were provided with personal protective equipments and regular use was seen in 18%. Acute illness had significant association with male gender, low education status, large family size, absence of provision of personal protective equipments. Chronic morbidities were associated with males, elderly groups and daily wage workers.

**OBJECTIVES**

1. To determine the prevalence of work-related injuries among sanitation workers.
2. To assess the knowledge regarding work-related injuries among sanitation workers.
3. To find the association of knowledge score with selected demographic variables.

**Assumptions**

1. Work-related injuries are more prevalent among sanitation workers.
2. Sanitation workers have low level of knowledge regarding the prevention and management of work-related injuries.

**MATERIALS AND METHODS**

**Source of data**

The data was collected from sanitation workers who were working under Kanhangad Municipality, Kasaragod.

**Research Approach**

Quantitative descriptive approach was used for the study to assess the knowledge regarding work-related injuries among sanitation workers.

**Research Design**

Non-experimental descriptive research design was used.

**Population And Setting Of The Study**

The population of the study was sanitation workers and the study was conducted in Kanhangad Municipality, Kasaragod.

**Sampling Technique And Sample Size**

Non probability purposive sampling technique was used to select 100 sanitation workers.

**Sampling Criteria**

**1. Inclusion criteria**

- a. Sanitation workers age between 20 – 49 years.
- b. Sanitation workers who know how to read and write Malayalam language.
- c. Sanitation workers who were working under Kanhangad Municipality, at the time of data collection.

**2. Exclusion criteria**

- a. Sanitation workers who are not willing to participate in the study.
- b. Sanitation workers who are illiterate.

**Development And Description Of Tool**

The tool consists of two sections

**Section A:**

Demographic variables like age, gender, education, year of experience, financial status, and residence.

**Section B:**

Structured questionnaire to assess the level of knowledge regarding sanitation workers regarding work-related injuries.

The tool consists of 30 questions with choices regarding work-related injuries among sanitation workers. The correct answer is given 1 mark and the others are given 0.

**Data Collection Method**

The data was collected by using self-administered structured questionnaire.

**Data Collection Procedure**

The study was conducted in Kanhangad Municipality, Kasaragod, Kerala. After getting the ethical clearance, the selected sanitation workers were explained about the purpose of the study and consent was taken. The data collection was carried out from 11-12-2021 to 21-01-2022. For statistical analysis the descriptive statistics mean, percentage is used to explain the sample characteristics and the knowledge on work-related injuries among sanitation workers. Chi-square was used to find out the association between the sanitation workers knowledge and demographic variables.

**RESULTS**

**The findings revealed that:**

**Section A: Findings related to the Socio Demographic profile of the subject in frequency and percentage**

**Age:**

majority (68%) were in the age group between 40 – 49 years, (22%) of them between 30 – 39 years and minority of (10%) of them between 20 – 29 years.

**Gender:**

majority of 82 (82%) were males and 18 (18%) were females.

**Education:**

majority (48%) have primary education, (37%) have completed their secondary education and (15%) have higher secondary education.

**Year of experience:**

majority (52%) had more than 10 years of experience, (37%) had 2 to 10 years of experience and a minority of (11%) had less than 2 years of experience.

**Financial status:**

majority (78%) were BPL (Below Poverty Line) and (22%) were APL (Above Poverty Line).

**Resident:**

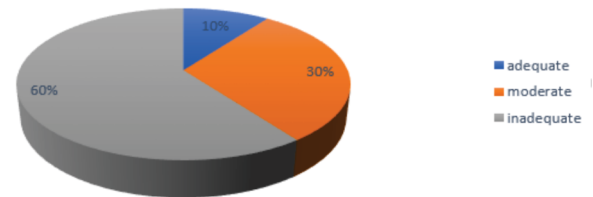
majority (86%) were live in rural area and (14%) residing in urban.

**Section B: Frequency, percentage, mean score and standard deviation of samples according to the level of knowledge regarding work-related injuries.**

**Table 1:** Level of knowledge regarding work related fatigue (N = 100)

Level of knowledge	Score	Frequency	Percentage	Mean Score	SD
Adequate knowledge	21 - 30	10	10	8.54	12.23
Moderate knowledge	11 - 20	30	30		
Inadequate knowledge	1 - 10	60	60		

**Knowledge level regarding work-related injuries**



**Fig. 1: Percentage distribution of samples based on level of knowledge.**

According to the level of knowledge regarding work-related injuries 60% of samples having inadequate knowledge, 30% having moderate knowledge and 10% having adequate knowledge.

**Section C: Chi-Square analysis to assess the association between the levels of knowledge with socio demographic variables among sanitation workers.**

The findings divulge that the data collection score was not significantly associated with socio demographic variables like age, gender, education, year of experience, financial status, and residence.

**CONCLUSION**

As per the result obtained from the current study admit that the knowledge regarding work-related injuries among sanitation workers are inadequate. Improving the knowledge and its application in the job will safeguard the health and dignity of the sanitation workers. There is also need to focus on research, health and work planning and health education for sanitation workers.

**Recommendations**

It would be worthwhile to undertake a study on occupational practices among the sanitation workers because without them environmental sanitation and cleanliness remain unattainable.

Some recommendations in view of the present study can be:

- Similar study regarding knowledge of work-related injuries among sanitation workers in female employees only.
- A comparative study on knowledge of work-related injuries among male and female sanitation workers.
- Study on practices regarding work safety among sanitation workers can be undertaken in the similar way.

- An experimental study to assess the effectiveness of any kind of teaching materials regarding the work-related safety measures, to reduce the work-related injuries among sanitation workers.

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