

## Effectiveness of Educational programme on knowledge regarding occupational disease and its prevention

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### Abstract:

Sanitation workers (SW) are presented to a wide scope of biological, chemical, and physical perils. They experience the ill effects of skin sicknesses, respiratory and gastrointestinal issues, eye and ear diseases, and incidental wounds. The majority of these illnesses (Waterborne, air conceived,) are found to have presentation pathways and most injuries have contact pathways (hepatitis B virus [HBV], human immunodeficiency virus [HIV], Tetanus). **Objective:** to find out the knowledge regarding occupational disease and its prevention among sanitation workers. **Method:** The information was investigated on three online electronic databases – Google Scholar, EBSCO and Medline, check the accessibility of surveys in a specific order. **Result:** The available literature refines to get 5 qualitative research studies which condition depicts that participants had insufficient Knowledge regarding occupational disease and its prevention. **Conclusion:** There is highlight a basic issue about constrained Knowledge regarding occupational disease and its prevention among participants so there is need to give educational programme regarding occupational disease and its prevention and create the awareness about personal protective equipment.

**KEYWORDS:** occupational disease, prevention, sanitation workers, educational programme, knowledge, personal protective equipment

## 1. INTRODUCTION:

Occupational disease is a fundamentally a preventive medicine. Occupational health of the sanitation workers and street workers should be aim at their promotion and preservation of the highest degree of physical, mental and social wellbeing but the currency of occupational hazards and death ratio has been high in sanitation workers.

Throughout the last few decades, the demand for better health services has been perceived globally and to require the urgency and importance of the increasing population, a rapid increasing of hospital, both in government and private sector has occurred, so there has been a commensurate increase in the total of waste develop by these health care centers. Humorously the hospital hoped to bring relief to the ill are themselves creating health risk to the community due to inappropriate management of waste generated in the course of health care action. Medical waste constitute high risk to doctors, visitors and patients due to irresponsible management.

## 2. Need for the study:

Universal precautions reveal the need for the workers and students to recognize all blood and body fluids as probably infected with HIV, HBV and other blood borne pathogens and to observe strictly to infection control precaution for reduce the risk of exposure. Universal precautions and recently standard precautions have been globally promoted in high income countries to preserve health care workers from occupational hazards to blood and the consecutive exposure of infection with blood borne pathogens.

The situation is very different in low income countries. UPs are frequently practiced, if possibly exposing the HCWs to avoidable risk of infection. Worldwide each year 2 million workers experience a needle stick injury, a needle stick injury is transmit hep B, C and HIV.

**3. Aim:** The aim of this review is to gather the evidence about effectiveness of educational programme on knowledge regarding occupational disease and its prevention.

**4. Objectives:** To search the evidence of effectiveness of educational programme on knowledge regarding occupational disease and its prevention.

## **5. Methodology:**

**5.1 Search strategy method:** The data was explored on three electronic database- PubMed, Medline and google scholar in order to check the availability of review from 2014-2020. The research was confirmed to only English language.

## **5.2 Type of studies:**

Experimental research design and cross section research design

**5.3 TYPE OF PARTICIPANT:** Sanitation workers

**5.4 SETTINGS:** Hospital, Municipal Corporation

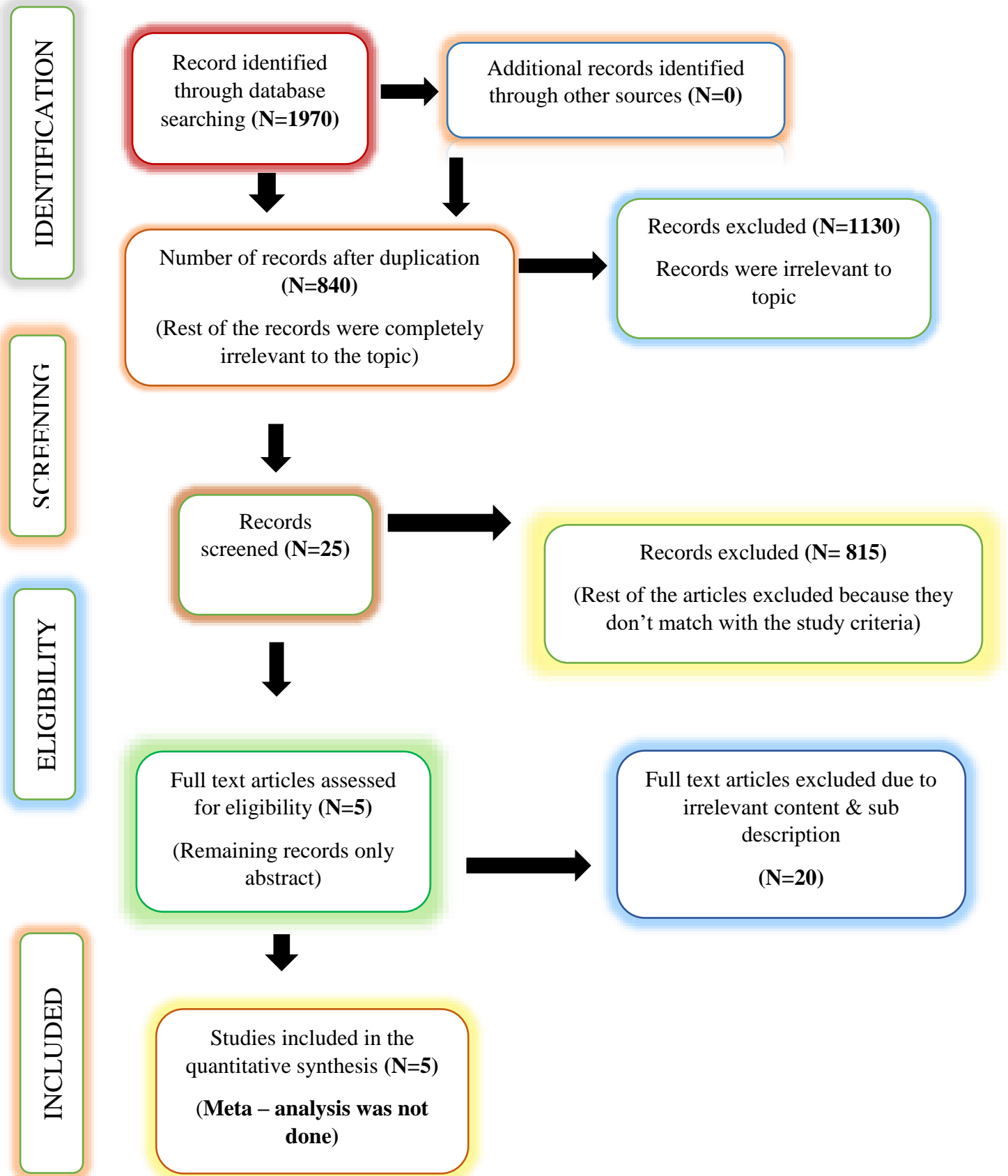
**6. OUTCOME:** The outcome of this narrative review is that effectiveness of educational programme on knowledge regarding occupational disease and its prevention.

**7. RESULT:** Out of 5 articles 3 articles shows the knowledge regarding occupational disease and its prevention, mostly workers have lack of knowledge.

2 articles shows that sanitary workers were suffering from many health problems in their working area.

## **8. DELIVERY OF INTERVENTION**

The narrative review has been predetermined with the analysis of reviews related to the topic “Effectiveness of educational Programme on knowledge regarding occupational disease” the search begins with keywords Knowledge, educational programme related to occupational disease and its prevention. The online database which was used for the search of the review was Google scholar, PubMed from the year 2014 to 2020. Initial search retrieved 1970 articles over which 840 was selected manually and duplicates were removed and reviewed 25 articles for eligibility. 815 articles were rejected because of duplication in two databases. 20 more reviews were rejected due to the unavailable of the full content. So 5 studies were screened in the quantitative synthesis.

**PRISMA FLOW DIAGRAM OF NARRATIVE REVIEW**

## 9. DATA EXTRACTION:

S.no	Author and years	Research design	Finding of the study
1.	Mr.Dayalal D et.al (2020)	Pre experimental	The posttest mean (20.98±2.98) was greater than mean pretest (10.28±2.85) knowledge score. Hence the STP was effective to improving the knowledge of housekeeping staff regarding blood borne disease and universal precaution.
2.	Pushparani JP.et.al(2018)	Cross sectional study	Most of the participants had musculoskeletal problems (82.2%), (61.6%) had respiratory problems, (53.4%) had ophthalmic problems, (38.4%) skin problems, (39.7%) mental health problems. Those workers worked for more than 5 year they had many common health problems such as headache, fatigue, giddiness.
3.	Priyanka patil et.al(2017)	Descriptive study	The result shows that the sanitation workers were suffering from numerous health problems (85%) workers had musculoskeletal symptoms such as low back pain and wrist pain, (65%) had reported harmful gases, (45%) had reported respiratory problems, (40%) workers reported headache problems, (53%) workers were suffering from dermatological problems and (10%) workers had gastrointestinal symptoms (nausea and diarrhea)
4.	D melisa Maurella et.al (2016)	Descriptive study	The result shows that 75% participants had good knowledge, 13% had very good knowledge and 12% had poor knowledge regarding needle stick injury and there was a significant association between knowledge score of the participants and source of information of housekeeping staff.

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5.	Zagade Tukaram B et.al(2014)	Experimental study	The finding shows that the mean pretest score was $9.3 \pm 3.9$ and posttest mean score $20 \pm 2.4$ . Hence the educational intervention was effective to improve the knowledge score regarding disposal of biomedical waste.
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**10. OUTCOME:** This narrative review outcome revealed that the knowledge regarding occupational disease and its prevention. It shows that sanitation workers have lack of education regarding occupational disease and its prevention.

### 11. SUMMARY OF FINDINGS:

The available literature was refined to get 5 quantitative studies:

- ❖ Out of 5 articles 3 articles shows the knowledge regarding occupational disease and universal precaution, mostly workers have lack of knowledge.
- ❖ 2 articles shows that sanitary workers were suffering from number of health ailments in their working area.

**12. DISCUSSION:** Occupational health is fundamentally a preventive medicine. Occupational health of the sanitation workers should aim at their promotion and preservation of the highest degree of physical, mental and social wellbeing. But the currency of occupational diseases and death ratio has been high in sanitation workers. Personal protective equipment plays an important role for the sanitation workers to reduce the exposure of infection and diseases. The findings of the above reviewed studies shows the sanitation workers had lack of knowledge regarding occupational disease and its prevention.

**13. IMPORTANCE IN EDUCATION:** Having baseline information regarding occupational disease and its prevention will help the workers to increase their knowledge related to disease. The infection control unit of the hospital give more focus on teaching the sanitation workers regarding use of personal protective equipment during waste disposal and also watch the expectancy of resources.

**14. FUTURE SIGNIFICANCE:** In order to reduce the exposure of infection associated with occupational disease it is very important to provide education related to occupational disease

and its prevention because it will help to build positive views among workers related to occupational health in the prevention of occupational disease.

### **15. LIMITATIONS:**

- Electronic data base were limited
- Limited to only knowledge of occupational disease of sanitation workers.

### **16. STRENGTH AND WEAKNESS:**

#### **Strength:**

- Article search was carried out on a significant criteria.

#### **Weakness:**

- Only 5 articles were included for data synthesis due to limitations
- Meta- analysis was not done ,only quantitative synthesis done for this reviews

### **SUMMARY:**

This chapter deal with the review of literature on the problem statement and focus on the occupational disease and its prevention and narrative review.

**CONCLUSION:** It has been estimated through various studies that workers usually have less knowledge regarding occupational disease which affect health in many ways. Hence it is essential to providing education related to occupational disease in order to reduce the exposure of infection and promote the occupational health in an effective and efficient manner. The infection control committee have to formulate in order to educate sanitation workers regarding personal protective equipment and bio medical waste management.

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