



Assess the knowledge regarding prevention of needle stick injury among staff nurses at NMCH, Nellore

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Abstract

Needle stick injuries and other sharp injuries present a major risk for infection with hepatitis B virus, hepatitis C virus and HIV. The present Cross-sectional descriptive study was conducted with an aim to identify the level of knowledge regarding prevention of needle stick injuries among staff nurses working at NMCH, Nellore. 100 Subjects were selected by using Convenience sampling technique. Data was obtained by using pretested self-administered questionnaire. Confidentiality was maintained throughout the study. Data was analyzed by using descriptive and inferential statistics. Chi-square test was applied as a test of significance with fixing the p-value of 0.05 as significant. Pertaining to the study results out of 100 staff nurses, 8 (8%) were had in adequate knowledge, 12 (12 %) were had moderately adequate knowledge and 80(80%) were had adequate knowledge regarding needle stick injuries. Hence the study concluded that Needle stick injury is the most important occupational health hazard in nurses with alarmingly high rates. Reporting to the concerned authorities, screening of nurses after needle stick injury and promotion of safety measures against it should be greatly encouraged.

Keywords: nurse, needle stick injuries, knowledge

Introduction

A needle stick injury, percutaneous injury or sharps injury is the penetration of the skin by a needle or other sharp object, which has been in contact with blood, tissue or other body fluids before the exposure. Contact with contaminated needles, scalpels, broken glass pieces pose to greater risk of infectious diseases among the health care workers.

Needle-stick injuries have been widely recognized as a source of exposure to blood borne pathogens for workers in healthcare setting and can lead to transmission of infectious diseases, such as hepatitis B (HBV), hepatitis C (HCV), and the human immunodeficiency virus (HIV). According to WHO globally: reports say that, each year out of the 35 million health-care workers, 2 million experience percutaneous exposure to blood borne infectious diseases. The safe handling and disposal of needles and other sharp instruments should be a part of an overall policy of biomedical waste disposal to protect staff, patients and visitors from exposure to blood borne pathogens. The nurses should have minimal knowledge regarding the needle stick injuries at health care setting. Hence the researcher felt there is a need to identify the level of knowledge regarding health care associated needle stick injuries.

Objectives

- To assess the knowledge regarding prevention of needle stick injuries among staff nurses at NMCH, Nellore.
- To association the level of knowledge regarding prevention of needle stick injury with selected demographic variables among staff nurses

Materials and methods

Quantitative approach and cross sectional descriptive design was adopted for the study. 100 staff nurses working in Narayana Medical College hospital were selected by using non probability convenience sampling technique. After obtaining informed consent from participants the data was collected by using the structured questionnaire. Finally data was analyzed by using both descriptive and inferential statistics.

Description of the tool

The investigator developed questionnaire to assess knowledge regarding prevention of needle stick injuries among staff nurses at NMCH, Nellore. The tool consists of 2 parts.

Part A: Socio Demographic data.

The demographic data includes age, gender, education, work experience.

Part B: It consists of questionnaires on knowledge regarding prevention of needle stick injuries which has 25 questionnaires.

Data collection procedure: Data collection procedure was conducted after getting consent from the concerned authority subjected were selected by convenient sampling technique it took for each subject 15 minutes for the assessment. The data collection procedure was carried out for a period of 1 week. The staff nurses were interviewed at NMCH, Nellore and they responded for the questions and they were able to understand because the interview schedule was conducted in English the investigator took 15minutes for each interview as an average.

Plan for data analysis

The data was analyzed by descriptive statistics and the inferential statistics. The plan for data analysis as follows.

- The frequency and percentage distribution of socio demographic variables
- Mean median and standard deviation for knowledge score.
- Chi square test for assessing association between level of knowledge and socio demographic variables.

Results

Section 1: Frequency and percentage distribution of socio demographic variables of staff nurse.

Majority of staff nurses with associated to age 68(68%) were 22-25 years, pertaining to gender 97(97%) were female. With context to education 88(88%) were completed BSC (N).With related to work experience 46(46%) staff nurses had 1-3 years of experience.

Section 2: Frequency and percentage distribution based on level of knowledge regarding prevention of needle stick injuries among staff nurses.

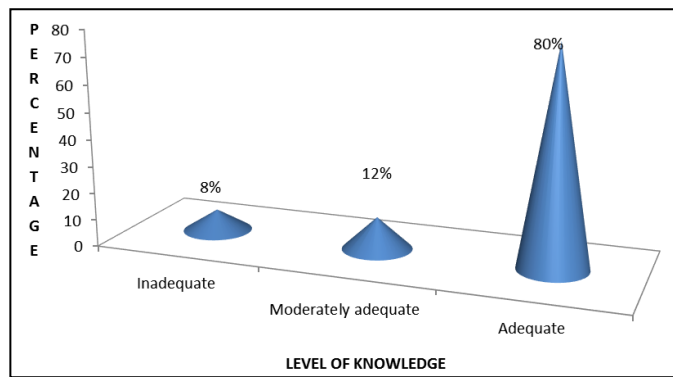


Fig 1

Section 3: Mean and standard deviation of distribution of level of knowledge regarding prevention of needle stick injuries among staff nurses.

The mean knowledge score was 18.96 with standard deviation of 4.84.

Section4: Association between the level of knowledge regarding prevention of needle sticks injuries among staff nurses and selected socio demographic variables.

There is a significant association between level of knowledge and socio demographic variables like work experience, and remaining socio demographic variables like age, education; gender has shown non-significant association with level of knowledge.

Conclusion

The study reveals the level of knowledge regarding prevention of needle stick injuries, 8 (8%) were had in adequate knowledge, 12 (12 %) were had moderately adequate knowledge and 80(80%) were had adequate knowledge. although Needle stick and sharp object injuries represent a major occupational challenge to health care workers. Prevention should be based on different working lines including immunization, education of health care workers and proper engineering control measures.

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