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PROBLEM SOLVING APPROACH ON INADEQUATE LEVEL OF KNOWLEDGE REGARDING UNIVERSAL PRECAUTION AMONG THE STAFF NURSES

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ABSTRACT

Introduction: Nursing staff play a crucial role in health care delivery and constitute an integral part of Health Care workers (HCW) in any health care setting. In their day-to-day activities, they are exposed to blood and body fluids with the risk of transmission of various blood-borne pathogens. The aim of the problem-solving approach is assess inadequate level of knowledge regarding universal precaution among the staff nurses and reduce the risk of infection. Purpose Universal precaution must be proper taking for protect the environment general public and workers, specially health care workers who are at risk of exposure to Hepatitis B, G and HIV or other disease. **Method:** A PSA (Problem solving approach) was conducted, using cross sectional survey design among 12 participants, selected by Non-probability, quota sampling method. Self Structured questionnaire was used to collect the data from the Medical and Surgical wards and ICU. **Result:** The range, median, mean standard deviation of level of knowledge score were 12, 14, 13.42, and 3.72 respectively and this survey showed that hefty (66.7%) participants were having moderate knowledge regarding universal precaution, (25%) participants were having adequate knowledge rest (8.3%) participants were having inadequate knowledge about universal precaution.

KEYWORDS: Knowledge, Universal Precaution, Staff Nurse.

INTRODUCTION

Nursing staff play a crucial role in health care delivery and constitute an integral part of Health Care workers (HCW) in any health care setting. In their day-to-day activities, they are exposed to blood and body fluids with the risk of transmission of various blood-borne pathogens. In the 1980s, the US Centers for Disease Control and Prevention (CDC) developed a set of protocols and guidelines known as standard precautions (SP) to prevent accidental transmission of pathogens in health care setting. These are a set of guidelines to protect the health care workers as well as the patients from the risk of transmission of blood-borne pathogens from recognised as well as unrecognized sources. In recent years, transmission-based blood-borne pathogens such as human immunodeficiency virus, hepatitis-B virus and hepatitis-C virus have emerged as the most important occupational health hazards among health care personnel. Adherence to standard precautions (SP) is even such as avian influenza virus, severe acute respiratory syndrome and the threat of bio-terrorism. These precautions need to be followed at every intervention of patient care at all levels. In such a scenario, it is all the more pertinent that the nursing personnel are well equipped with knowledge about standard precautions in their day-to-day activities of patient care. Limited number of studies has been done in India to assess the nurses' knowledge and practices regarding standard precautions. Hence, this study was planned.

Defining the Problem

"Inadequate level of knowledge regarding universal precaution among the staff nurses Teerthanker Mahaveer Hospital & Research Center.

Purpose

Universal precaution must be proper taking for protect the environment general public and workers, specially health care workers who are at risk of exposure to Hepatitis B, G and HIV or other disease.

OBJECTIVES

1. To determine the knowledge of health care providers working standard precaution In Teerthanker Mahaveer Hospital and Research Center.

2. To provide knowledge regarding universal precaution to staff nurses.
3. To reduce the risk of infection.

METHOD

A PSA (Problem solving approach) was conducted, using cross sectional survey design among 12 participants, selected by Non-probability, quota sampling method. Self Structured questionnaire was used to collect the data from the Medical and Surgical wards and ICU. The duration data were collected from 15th March, 2022 to 20thMarch, 2022 of the study was 15 days. .Inclusion criteria included those staff nurses who are willing to participate in the study. Staff nurses were available at the time of the study. Research variable is dependent Variable as knowledge of patient on universal precaution. A total of 12 staff nurses in a selected hospital of Moradabad. The tools used were structured knowledge questionnaire. Reliability of the structured knowledge questionnaires was computed by split-half formula. As a result, the tool was confirmed to be reliable. Those who met the inclusion criteria participated in the study. After receiving authorization from the applicable hospital authorities and the informed consent of the participants, data was collected. On the first five days test was administered to assess staff nurses existing knowledge of universal precautions, and then on 5th day a planned teaching programme on universal precautions was given to them.

Findings

The analysis of data is based on the objectives of the study.

- Section A: Description of the Sample characteristics.
- Section B: Assessment of knowledge of nursing staff regarding universal precaution.

Table 1.1: Frequency and percentage distribution of sample characteristics.

S. No.	Demographic characteristics	f	%
1)	Age in years		
	20-23 years	6	50%
	24-26 years	3	25%
	27-30 years	1	8.3%
	Above 30 years	2	16.7%
2)	Gender		
	Male	6	50%
	Female	6	50%
3)	Religion		
	Hindu	9	75%
	Muslim	3	25%
	Christian	0	0
	Others (specify)	0	0
4)	Marital status		
	Married	7	58.3%
	Unmarried	5	41.7%
	Divorced/separate	0	0%
	Widow/widower	0	0%
5)	Educational status		
	General nursing & midwifery	4	33.3%
	Basic B.sc nursing	7	58.3%
	Post Basic B.sc nursing	1	8.3%
	M.sc nursing	0	0%
6	Experience		
	1-2 years	6	50%
	3-5 years	4	33.3%
	6-7 years	2	16.7%
	8 years and above	0	0%
7)	Wards		
	Medical ward	4	33.3%
	Surgical ward	4	33.3%
	ICU	4	33.3%
	Casualty emergency	0	0%
	OT nurse	0	0%
	Gynecology and obstetrics wards	0	0%
	Labor room	0	0%
		0	0%

Table 1 revealed that approx hefty of the participants (50%) pertained to the age group of 20-23 years, (25%) respondent were pertained to the age group of 24-26 years, 16.7% participants pertained to age above 30 rest of the respondents were pertained to age to 27-30 years. Equal halves (50%) of the respondents belong to males and females. Hefty (75%) participants those were Hindu and rest (25%) participants belonged to Muslim category. Hefty (58.5%) participants those were married, (41%) belonged to under category of unmarried participants. Almost half participants (58.3%) were belonged to Basic B.sc nursing about one third (33.3%) participants from General nursing & midwifery and rest participants Post Basic B.sc nursing that is 8.3%. Hefty (50%) participants those were pertained to category of 1-2 years experiences nurses, (33%) belonged to under category of 3-5 years and rest participants comes under the category of 6-7 years that is 16.7%.

Equal 1/3 (33%) of the respondents belong to medical ward, surgical ward and ICU,

Section B: Assessment of knowledge regarding universal precaution among the staff nurses.

This section deals with the assessment of knowledge regarding to universal precaution.

Table-2.1 Range, median, mean and standard deviation of level of knowledge regarding universal precaution among staff nurses.

This section deals with the assessment of knowledge regarding universal precaution among the staff nurses.

Table-2.1 Range, median, mean and standard deviation of level of knowledge regarding universal precaution.

Variable	Range	Median	Mean	Standard deviation
Knowledge	12	14	13.42	3.72

n =12

Table 2.1 revealed that the range, median, mean standard deviation of level of knowledge score were 12, 14, 13.42, and 3.72 respectively.

Table: 2.2 Frequency and percentage distribution of level of knowledge regarding universal precaution among staff nurses.

Level of knowledge	f	%
Inadequate	1	8.3
Moderate	8	66.7
Adequate	3	25%

n=12

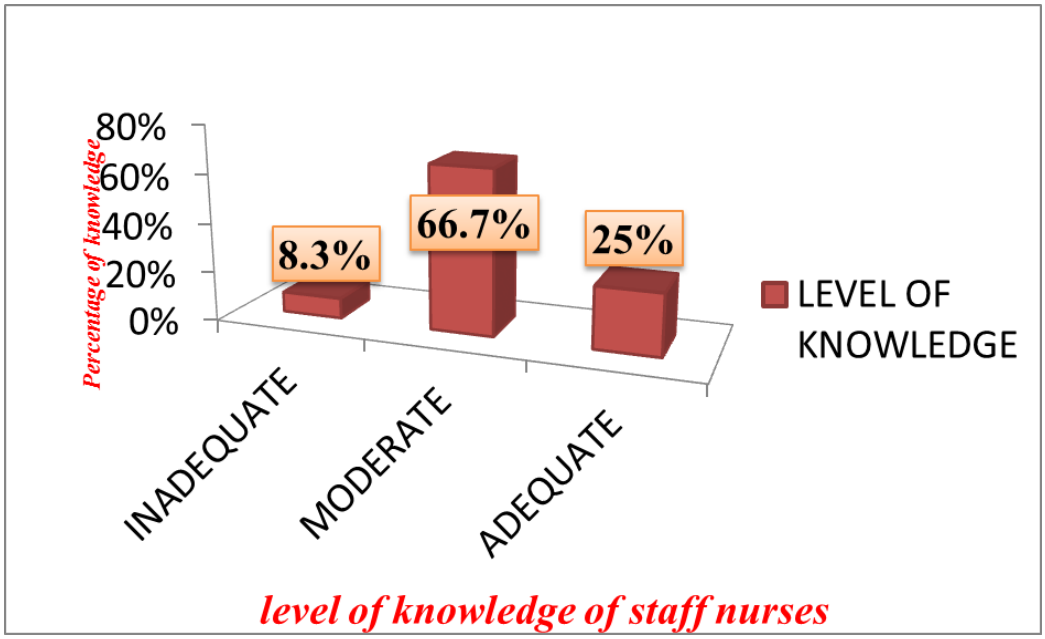

Figure 2.2 Column diagram showed the level of knowledge regarding universal precaution among staff nurses.

Figure 2.2 showed that hefty (66.7%) participants were having moderate knowledge regarding universal precaution, (25%) participants were having adequate knowledge rest (8.3%) participants were having inadequate knowledge about universal precaution.

Causes identified

From the analysis of gathered information various causes which were responsible for universal precaution theses causes were.

A. Personel Factor

a) Less experiences
b) Lack of knowledge
c) Increase in work load
d) Not knowing about the PPE and universal precaution

B Environmental Factor

a) Lack of knowledge
b) Lack of policy
c) Lack of administrative efforts

Desired Outcome

To maintain proper use of universal precaution by improving the levels of knowledge regarding its proper use treatment and guidelines among staff nurses.

Solutions for achieving the goal

- ✓ Conduct staff development programme on universal precaution for staff nurses
- ✓ Prepare and give the hand out to staff nurses regarding universal precaution.
- ✓ Make recommendation and discussion with medical and nursing superintendent to make the policies regarding use of universal precaution and separate department to look after the issues related to this.

Consider Consequences

- ➢ When the nurses attend staff development programme regarding universal precaution their knowledge will improve in particular area which will help them modify their practice.
- ➢ When the nurses get pamphlet regarding universal precaution it helps to improve their knowledge and their by
- ➢ Making recommendation and discussion with higher authorities will help develop a uniform policy regarding universal precaution throughout hospital and separate department to handle issues related to this.

Make a Decision

On this basis of possible solution and their consequences it was found that all solution was improving the knowledge regarding universal precaution among the staff nurses. So the following decisions were made.

Implementation

- Pamphlet distributed a regarding universal precaution among staff nurses.
- Developed & distributed a hand out regarding universal precaution among staff nurses.
- Demonstration regarding the standard technique of how the blood samples is taken was shown to the staff nurses.

Evaluation

The selected problem was assessed along with steps taken it. Nurses understood the proper use of universal precaution in detail. Nurses ensured to practice accordingly thereafter**.**

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