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# A STUDY TO ASSESS THE KNOWLEDGE REGARDING BLOOD AND BODY FLUID EXPOSURES AMONG STAFF NURSES WITH A VIEW TO DEVELOP AN INSTRUCTIONAL BOOKLET, IN SELECTED HOSPITALS AT KANPUR, UP.

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## ABSTRACT

Word related blood and body fluid exposure is a significant danger for medical services laborers, which places them at a high danger for blood-borne diseases including hepatitis B infection, hepatitis C infection and human immunodeficiency infection and results in mental and enthusiastic burdens.

A descriptive design was used to assess the knowledge of staff nurses regarding the blood and fluid exposure with view to develop an instructional booklet in selected hospitals, Kanpur, UP. A descriptive approach was adopted in this study and it was carried out at Rama Hospital, Kanpur. Simple random sampling was used to select 100staff nurses. The tool used for the data collection was self-structured knowledge questionnaire. Data was analyzed by using descriptive and inferential statistics. The results of this study showed that the overall knowledge mean score was 11.87 (SD $\pm$ 6.22), which showed that staff nurses had inadequate knowledge regarding the occupational blood and fluid exposure. Out of 100 staff nurses58 (58%) had poor knowledge, 24(24%) had average knowledge and 18(18%) had adequate knowledge. Findings revealed that the chi-square value was significant at 0.05% level of significance. Hence the research hypothesis H<sub>1</sub>was accepted. It indicted that there was an association between the knowledge score and selected demographic variables of staff nurses.

# INTRODUCTION

Openness to blood microbes at work has a significant role in increasing the risk for medical care professionals. Body fluids include things like semen, vaginal discharges, cerebrospinal fluid, urine, regurgitate, sputum, salivation, and so on that contain concentrated infections. Blood is the red, viscous liquid that round the body<sup>1</sup>.

Decontaminating the blood splash after exposure to blood and other fluids is crucial to preventing the spread of blood-borne infections. The main strategy to stop the spread of germs in healthcare environments is to avoid occupational exposures to blood and bodily fluids. According to the U.S. Public Health Service (PHS), vaccination and post-exposure care are crucial parts of a comprehensive program to prevent illness after exposure to blood-borne pathogens and are crucial aspects of occupational safety<sup>2</sup>.

Key words:-Knowledge, staff nurses, blood and fluid exposure, Instructional booklet.

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## NEED FOR THE STUDY

Human immunodeficiency virus (HIV), hepatitis B infection (HBV), and hepatitis C infection (HCV) are among the blood-borne infections that medical care workers (HCWs) are susceptible to because to word-related blood and bodily fluid (BBF) exposures. Approximately 3,000,000 percutaneous blood-borne microbial exposures occur annually among 35 million healthcare workers worldwide. According to estimates, these wounds cause about 16,000 HCV, 66,000 HBV, and 200 HIV infections. The majority of these contaminations are avoidable, and over 90% of them occur in low-income countries.27 According to a European overview of needle stick injuries (NSI), medical caregivers are more likely to be uncovered (91%) than experts (6%) or phlebotomists (3%)<sup>3</sup>.

Vital parts of the healthcare delivery system are nurses. They may come into contact with patient blood or bodily fluids while performing a variety of operations. It has been noted that when nurses disregard safety procedures, unintentional exposure occurs more frequently. Therefore, a nurse should be aware of all the possible issues brought on by exposure to blood and bodily fluids at work, as well as how to prevent and treat them.

#### STATEMENT OF THE PROBLEM

"A Study to Assess the Knowledge Regarding Blood and Body Fluid Exposures Among Staff Nurses With A View to Develop an Instructional Booklet, In Selected Hospitals at Kanpur, Up"

## OBJECTIVES

- 1. To assess the knowledge of the staff nurses regarding blood and body fluid exposure.
- 2. To find the association between knowledge of staff nurses regarding blood and body fluid exposure with their selected socio demographic variables.
- 3. To develop a Self Instructional Module on occupational blood and body fluid exposure for staff nurses.

#### **HYPOTHESIS**

H1 = There will be significant association between the knowledge level of the staff nurses regarding blood and body fluids exposure with selected demographic variables.

METHODS AND MATERIALS

# Research approach

In the present study, descriptive approach was used. Research design

The research design used in this study was descriptive research design

#### VARIABLES

#### Dependent variable

In this study, knowledge of staff nurses regarding blood and body fluid exposure.

## Demographic variables

The demographic variables under the study are age, gender, professional qualification, year of experience in nursing, specified department, history of vaccination, history of accidental exposure of blood and body fluid, exposure to continuing or in service education regarding occupational blood and body fluid exposure.

# POPULATION

The population for this study comprises of staff nurses.

#### Target population

In this study the target population was staff nurses working in selected hospitals at Kanpur, UP.

# SAMPLE

The sample for the present study comprises of staff nurses who met the inclusion and exclusion criteria.

# SAMPLE SIZE

The sample size for the present study consists of 100 staff nurses from Rama hospital, Kanpur, UP.

#### SAMPLING TECHNIQUES

In the present study, convenient sampling technique has been used for selection staff nurses.

# SAMPLING CRITERIA

Inclusion criteria

- Staff nurses: -
  - Working in OT, Emergency, ICU's, Medical Department, Surgical Department, of Rama Hospital
  - Willing to participate in the study
- Who knows English and Hindi

Exclusion criteria Staff Nurses: -

- who are not willing to participate in the study
- who are not available at the time of the study
  METHODS OF DATA COLLECTION

Assessment of knowledge regarding blood and body fluid exposure was measured by administering research tool.

#### DEVELOPMENT OF RESEARCH TOOL

On the basis of developed framework, to achieve the objectives of the study, A self-structured knowledge questionnaire was prepared to assess the knowledge on blood and body fluid exposure of staff nurses. **DESCRIPTION OF THE TOOL** 

**Section A:** A self-structured questionnaire will be used to collect socio-demographic data.

**Section B:** A self-structured questionnaire will be used to assess the knowledge on blood and body fluid exposure.

# RESULTS AND FINDINGS

Section A:

Findings related to the socio demographic variables

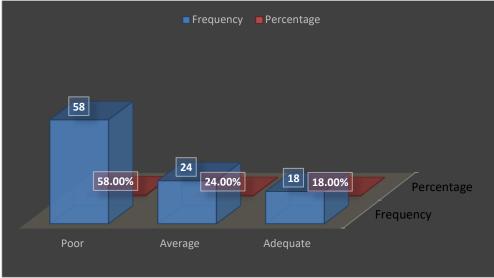
- Majority 73(73%) staff nurses were between the age group of 21 25 years.
- Majority 60(60%) staff nurses were females.
- Majority 31(31%) staff nurses studied GNM.
- Majority 26(26%) staff nurses were working in medical ward.
- Majority 73(73%) staff nurses have 0-3 years of experience.
- 100(100%) samples of staff nurses are vaccinated
- Majority 80(80%) staff nurses were not having any history of accidental exposure.

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  - Majority 70(70%) staff nurses were not having any source of information.

## Section B

Knowledge of staff nurses regarding occupational blood and body fluid exposure

The results of this study showed that the overall knowledge mean score was 12.87 (SD $\pm$ 6.22), which showed that staff nurses had inadequate knowledge regarding occupational blood and body fluid exposure. Out of 100 staff nurses58 (58%) had poor knowledge, 24(24%) had average knowledge and 18(18%) had adequate knowledge.



## Section- C:

## The association between the knowledge score and selected demographic variables

n=100					
SL.NO	Demographic Variables	Chi-Square Value (x <sup>2</sup> )	Degree of freedom (df)	Tabulated value	Level of significance
1	Age	78.81	4	9.49	Significance
2	Gender	1.23	2	5.991	Not Significance
3	Educational Status	2.16	6	12.59	Not Significance
4	Year of Experience	78.81	4	9.488	Significance
5	Working departments	17.32	8	15.51	Significance
6	Vaccination	0	0	5.99	Not Significance
7	Any history of exposure	3.97	2	5.99	Not Significance
8	Source of information	44.55	2	5.99	Significance

Findings revealed that, age, working department, years of experience and source of information have significant association with knowledge. Hence the research hypothesis  $H_1$  was accepted.

## NURSING IMPLICATIONS

The investigator has drawn the following implications from the studies, which are of vital concern in the field of nursing practice, nursing education, nursing administration and nursing research.

#### Nursing Practice

The study's conclusions could serve as the foundation for staff nurse orientation programs and in-service training, fostering ongoing awareness and a clear understanding of occupational blood and bodily fluid exposure. Staff nurses' understanding of and proficiency with numerous facets of blood and bodily fluid exposure will grow as a result.

## Nursing Education

To lower the mortality and morbidity rate of staff nurses, nurses as educators have a critical role to play in educating staff nurses about occupational blood and bodily fluid exposure. The study's conclusions can be utilized by nurse educators to instruct staff nurses and student nurses, enabling them to limit blood and bodily fluid exposure and deliver quality nursing care.

#### Nursing Administration

The nurse should emphasize the value of staff nurses' understanding of blood and bodily fluid

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exposure as an administrator in order to accomplish this. By organizing health programs and overseeing care at various levels, nursing administrators can affect the standard of nursing care in hospitals, assisted living facilities, and the community. In order to arrange health programs at different levels for patient care, the nurse can also plan and discuss occupational blood and bodily fluid exposure at various forums and meetings.

## Nursing research

Since nursing is now an evidence-based profession, research studies are crucial to enhancing nursing care and the body of scientific information underlying it. Because exposure to blood and bodily fluids plays a significant role in health worldwide, nursing research is given increased attention. This could assist the researcher in raising staff nurses' awareness of occupational blood and bodily fluid exposure.

## LIMITATIONS

- The study was limited to assess the knowledge of staff nurses regarding occupational blood and body fluid exposure.
- The study was limited to the staff nurses at selected hospitals at Kanpur, UP

#### RECOMMENDATIONS

- > A study can be undertaken with a large sample to generalize the findings
- An experimental study can be undertaken with control group
- > A comparative study can be done between the government and private hospitals.
- A study can be conducted to assess the knowledge, practice and attitude of staff nurses regarding the blood and body fluid exposure.
- > A similar study can be conducted using the other strategies like STP, PTP and VAT.

#### CONCLUSION

This study revealed that the majority of the staff nurses had inadequate knowledge regarding the blood and fluid exposure. Hence, there is a need of an instructional booklet on occupational blood and fluid exposure for the staff nurses.

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