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Assess the knowledge regarding spillage management among staff nurses

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Abstract
Nurses are the major health care provider in the hospital and are more potential to get exposed to spillage with blood and body fluid. Previous studies have shown that Nurses are having inadequate knowledge regarding Spillage Management. The purpose of this study was to assess the knowledge level of Staff Nurses regarding Spillage Management. 10 Staff Nurses were selected through the Non probability purposive sampling technique and their knowledge level was assessed by Structured knowledge questionnaire. Mean and standard deviation of knowledge score was calculated in which, the mean value was 9.5 and the standard deviation was 1.301. Chi square was used to find the association of knowledge score with selected socio demographic variables. It was found that the p value was 0.048 and was less than the table value. Thus, the study revealed that there is an association of knowledge scores with selected socio demographic variables.

Keywords: knowledge, spillage management, staff nurses

1. Introduction
Blood and body fluid spillage continued to be a major worldwide public health problem, despite, advances in our understanding and control of these infections. Nurses are the major health care provider in the hospital and are more potential to get exposed to spillage with blood and body fluid. Spillage of blood pathogen plays a significant role in increasing the risk of the workers in the health care industry.Spillage is the exposure of the blood and body fluids which may contain concentrated virus. In terms of blood and body fluids, semen and vaginal secretions with visible blood should be considered potentially infectious vehicles. Similarly, cerebrospinal fluid, amniotic fluid, pleural fluid, synovial fluid, and peritoneal and pericardial fluids carry a high suspicion of risk for transmission. In addition, unless blood is present, saliva, sputum, sweat, tears, faeces, nasal secretions, urine, and vomitus carry a low risk of transmission of HBV, HCV, and HIV.After blood and body fluid spillage, decontamination of the blood splash is very important to avoid transmission of the blood borne pathogens. Avoiding occupational blood and body fluid spillage is the primary way to prevent transmission of pathogens in health-care settings.
In the year 2002, a study was conducted by the U.S. Public Health Service PHS to evaluate the immunization and post spillage management are integral components of a complete program to prevent infection following blood borne pathogen exposure and are important elements of workplace safety. In the year 2007, a study was conducted by the WHO to enhance the knowledge of Post-spillage prophylaxis refers to the set of services that are provided to manage the specific aspects of exposure to infection and to help the prevention of infection in a person exposed to the risk of getting infected by HIV, HBV, and HCV and also done follow-up.Nurses are an integral component of the health care delivery system. They perform numerous procedure during which they may be exposed to patients blood or body fluid, it is observed that accidental spillage are more frequent when nurses neglect safety practices. So Nurses should be knowledgeable about all the potential problems which is caused by occupational blood and body fluid exposure and its preventive measures and management.

1.2 Need for the study
In the year 2004,a study was conducted by the Ayranci U, Kosgeroglu N to evaluate the Occupational blood and body fluid (BBF) exposures place healthcare workers (HCWs) at risk for numerous blood-borne infections, most importantly human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV). Approximately three million percutaneous exposures to blood-borne pathogens occur annually among 35 million HCWs worldwide. These injuries are estimated to result in approximately 16,000 HCV, 66,000 HBV, and 200 HIV infections. Over 90% of these infections occur in low-income countries and most are preventable. In the year 2004, a study was conducted by an European survey found that nurses are exposed more commonly (91%) than doctors (6%) or phlebotomists (3%).
In the year 2001, a study was conducted by the U.S. hospitals to evaluate that all healthcare workers face a wide range of hazards on the job, including blood and body fluid exposure and they reported 2,93,600 nonfatal occupational exposure among their personnel. There is an annual exposure prevalence rates which range from <10% to 44%, depending on the occupational subgroup.
In the year 2008, a cross-sectional study was conducted by Hadadi A, Afhami S *et al.*, in Iran and Singapore on Occupational exposure to body fluids among healthcare workers. The study revealed that of 900 HCWs studied, 476 exposures had occurred (0.53 exposures per person-year). The highest exposure rate (per person-year) was observed among housekeeping staff (0.78) and nurses (0.63), and occurred most commonly in the medical wards (23.0 percent). Percutaneous injury was reported in 280 participants. There were 72 exposures to human immune deficiency virus, HBV and hepatitis C, with exposure to HBV being the most common.
In the year 2008, a study was conducted by Mehrdad Askarian MD MPH, Soheila Shaghaghian MD *et al.*, in Southern Iran to

evaluate the blood and body fluid exposures place healthcare workers at risk for blood-borne infections, the result was the overall prevalence of blood and body fluid exposures was 79%. The literature however in its effort to explore all facts of the current potential problem by occupational blood and other body fluid exposure has produced a complex construct effective as assessed for the researcher to understand the problem. Nurses are important group of health care providers who render support to health care system. They are also expected to impart new ideas to their practice all of which is expected to bring improvement to the service. It is with this context that this study is conducted with the aim of assessing the level of knowledge regarding spillage management.Thus, previous studies motivated the researcher to do this study among Nurses on spillage management with an intention to educate them about spillage management.

1.3 Statement of the problem
A descriptive study to assess the knowledge regarding Spillage Management among Staff Nurses working in a NABH Accredited hospital, Indore.

1.4 Objectives of the study
1. To assess the level of knowledge regarding spillage management among staff nurses.
2. To find out the association of knowledge scores with selected socio demographic variables of staff nurses.

1.5 Hypothesis
At 0.05 level of significance,
- **H_1:** There is a significant association of knowledge scores of staff Nurses on spillage management with selected socio demographic variables.

1.6 Assumption
- This study assumes that Staff Nurses may have knowledge regarding Spillage Management.

1.7 Delimitations
Staff nurses who were
- Not interested to participate in the study.
- Absent at the time of study.
- About to complete the tenure to leave the institution.

2. Materials and Methods
2.1 Research approach
Quantitative approach was used for the present study.

2.2 Research Design
The research design adopted for the study was Non-experimental descriptive design. This design was used to assess the knowledge level of Staff Nurses regarding Spillage Management.

2.3 Variables used for the study
The two variables identified in this study are;

- **Research variables**

In this study, the research variable was knowledge.

- **Extraneous variables**

In this study, the socio demographic variables were the extraneous variables.

2.4 Setting of the study
This study was conducted at NABH Accredited Hospital, Indore. The researcher selected the setting for the following reasons:
- Availability of the sample
- Economic feasibility of conducting the study.

2.5 Population
The target population in this study was 10 Staff Nurses working in a NABH Accredited Hospital, Indore.

2.6 Sample and Sampling Technique
In this study sample was selected from NABH Accredited Hospital, Indore, 10 Staff Nurses who fulfilled the inclusion criteria were selected as the sample. Non probability Purposive sampling technique was used to select the samples for this study.

2.7 Sampling Criteria
Inclusion criteria

Staff Nurses who are
- Working in a NABH accredited Hospital.
- 22years of age and above.

Exclusion criteria

Staff Nurses who are
- Not willing to participate,
- Not available at the time of study

2.8 Data Collection Process
10 Staff Nurses were selected randomly, using Non probability purposive sampling technique. Participants were requested to fill the socio demographic Performa initially, and their knowledge was assessed using structured knowledge questionnaire.

3. Result
1. 10% of Staff Nurses were in the age group of 21-23 years, 50% of Staff Nurses were under 24-26 years, 30% of Staff Nurses were in the age group of 27-29 years and 10% of Staff Nurses was in the age group 30 & above.
2. As regarding professional educational status, 40% had GNM, 50% staff Nurses had B.Sc. Nursing and 10% of Nurses were had Post B.Sc. Nursing.
3. 30% of staff Nurses had 1 year of clinical experience, 30% had 2 years of experience and 40% had >2 years of experience.
4. Mean value of knowledge level on Spillage Management among staff Nurses was 9.5; this value indicates that the staff Nurses had average knowledge level.
5. Standard deviation value of knowledge on Spillage Management among staff Nurses was 1.301.
6. P value was 0.048 was less than table value, thus there was a significant association of knowledge score with selected socio demographic variables.

4. Conclusion
The main study was to assess the knowledge level among staff Nurses and find its association with selected demographic variables. After detailed analysis the findings revealed of the following results.
- Majority of staff Nurses working in a NABH Accredited Hospital, Indore have average knowledge.

- Mean score of knowledge score among staff Nurses was 9.5.
- There was a significant association of knowledge scores with selected socio demographic variables.

The overall experience of conducting the study was enjoyable. The response of the participants was an encouraging hand for the investigator. The constant help and support of the guide and co-guide provided a positive re-enforcement for successful completion of the study. The study was a new learning experience for the investigator.

5. References

1. Robyn RM, Gershon MHS, Dr. Christine PHa, D. Karkashian MAa, *et al.* Hospital safety climate and its relationship with safe work practices and workplace exposure incidents. Available from: http://www.sciencedirect.com/science/article/pii/S019665530018842X. 2000; 28(3):211-221.
2. John M, Dement PhD, Carol CIH, Epling MSPH MD, *et al.* Blood and body fluid exposure risks among health care workers: Results from the Duke Health and Safety Surveillance System. Available from: http://onlinelibrary.wiley.com/doi/10.1002/ajim.20106/full. 2004; 46(6):637-648.
3. Min Zhang BM, Huanqiang Wang MMS, MPH BM, *et al.* Occupational exposure to blood and body fluids among health care workers in a general hospital, China. Available from: http://onlinelibrary.wiley.com/doi/10.1002/ajim.20645/full. 2009; 52(2):89-98.
4. Michelle Kermode PhD, Damien Jolley MPH, MSci MSc, *et al.* Occupational exposure to blood and risk of bloodborne virus infection among health care workers in rural north Indian health care settings. Available from: http://www.sciencedirect.com/science/article/pii/S0196655304006145. 2005; 33(1):34-41.
5. Ljiljana Markovic Denic1, Milos Brankovic1, *et al.* Occupational Exposures to Blood and Body Fluids among Health Care Workers at University Hospitals. Available from: http://www.doiserbia.nb.rs/img/doi/0370-8179/2013/0370-81791312789M.pdf, 2013; 13(276):9-12.
6. Ljiljana Cvejanov Kezunovic, Jadranka Mustajbegovic, *et al.* Occupational Exposure to Blood Among Hospital Workers in Montenegro. Available from https://www.researchgate.net/publication/266572590_Occupational_Exposure_to_Blood_Among_Hospital_Workers_in_Montenegro. 2014; 65(3):273-80.