



## A DESCRIPTIVE STUDY TO IDENTIFY THE KNOWLEDGE REGARDING STANDARD OPERATIVE PROCEDURE OF SAFE INJECTION PRACTICE AMONG STAFF NURSES, KOLHAPUR.

### Nursing

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### ABSTRACT

**Background & Objectives:** A safe injection is one that does not harm the recipient, does not expose the provider to any avoidable risks and does not result in waste that is dangerous for the community. Unsafe injection practices can lead to transmission of blood borne pathogens, with their associated burden of disease. The World Health Organization (WHO) in 2015 Guidelines recommend rational use of injections, safe injection practices and the exclusive use of safety-engineered syringes for all types of injections by 2020. Safety engineered syringes exist for both immunization and therapeutic use and have mechanisms preventing re-use of the device [re-use prevention (RUP) syringe] and/or protecting. Nurses in their daily routine play an essential role in medication reconciliation, preparing and administration of medication, Teaching patients about medication, evaluating and documenting the response to medication is very important task. **Objectives:** 1. To identify knowledge regarding standard operative procedures of safe injection practice among staff Nurses. 2. To find an association between Knowledge score with selected Socio demographic variables among staff Nurses. **Materials & Methods:** A quantitative descriptive survey approach was used to identify the knowledge regarding standard operative procedure of Safe Injection Practice (SOP). The study was conducted in D. Y. Patil Hospital and Research Institute, Kolhapur. Non-probability Purposive sampling technique was used to select 100 samples. The tool used for the data collection was self-administered structured knowledge questionnaire which comprised of 05 items on Socio demographic data and 40 items on knowledge regarding Standard Operative Procedure of Safe Injection Practice. **Results:** The findings of the study showed that the mean knowledge score of staff Nurses regarding Standard Operative Procedure (SOP) of safe injection practice was 20.78 and also there is no association between socio-demographic variables. There was a maximum number of staff Nurses who had an Average knowledge 74 (74%), while 17(17%) had Poor knowledge and 9(9%) had Good knowledge regarding standard operative procedures of safe injection practice.

### KEYWORDS

#### "Care for one- That's Love. Care for Hundreds- That's Nursing"

A safe injection is one that does not harm the recipient, does not expose the provider to any avoidable risks and does not result in waste that is dangerous for the community. Unsafe injection practices can lead to transmission of blood borne pathogen, with their associated burden of disease.<sup>1</sup>

Injections are among the most frequently used medical procedures, with an estimated 20 billion injections administered each year worldwide. Injections can be given intravenously, intramuscularly, Intradermal, or subcutaneously. Majority of these injections are administered for curative purpose. The World Health Organization (WHO) defined safe injection as one that is given using appropriate equipment and does not harm the recipient, does not expose the provider to any avoidable risks.

Unsafe injection is important cause of transmitting blood-borne diseases such as Hepatitis B (HBV), Human Immune-deficiency virus (HIV), Hepatitis C virus (HCV). These diseases put the patient & health workers at great risk by causing reduced life expectancy, productivity and also create burden on communities and health care systems in the form of high treatment costs. Burden of disease from Needle Stick injuries (NSI's) in health care Workers (HCW's) which showed that there were 3 million accidental needle-stick injuries leading to 37% of all new HBV, 30% of new HCV cases and around 5.5% of new HIV cases.<sup>1</sup>

Safe injection practices reduce a great burden on health system by breaking the chain of transmitting blood-borne diseases and their consequences. In the developing countries, unsafe injection practices exist substantially and are associated with the transmission of blood-borne pathogens.

Unsafe injections can result in transmission of a wide variety of pathogens, including viruses, bacteria, fungi and parasites. They can also cause non-infectious adverse events such as abscesses and toxic reactions. Reuse of syringes or needles is common in many settings. It exposes patients to pathogens either directly (via contaminated equipment) or indirectly (via contaminated medication vials) the risks

of unsafe injection practices have been well documented for the three primary blood borne pathogens - human immunodeficiency virus (HIV), hepatitis B virus (HBV) and hepatitis C virus (HCV ). The estimated global burden of disease for the year 2000 from unsafe injection practices for these pathogens included (3): 21 million HBV infections (32% of new HIV infections); 2 million HCV infections (40% of new HCV infections); 260 000 HIV infections (5% of new HIV infections).<sup>1</sup>

#### Need for Study

A safe injection does no harm; but unsafe injection practices are a plague of many health systems. The most affected category of health care providers are the Nursing personnel.<sup>2</sup> It is estimated that the risk of contracting hepatitis B infection due to a needle prick injury is 100 times higher than that of contracting HIV. Most people at risk for occupational exposures are in developing countries where there is paucity of standard reporting protocol.<sup>3</sup> WHO reports that, out of 35 million health care workers, 2 million experience percutaneous exposure to infectious diseases each year? It further notes that 37.6% of Hepatitis B, 39.4 of Hepatitis C and 4.4% of HIV/AIDS in Health Care Workers worldwide are due to NSL.<sup>4</sup>

Studies from India have reported high rate of NSI amongst resident doctors and nurses. " A recent study done in south India reported Incidence of NSI was 45%, Only 24% of the nurses were aware of the definition of NSI, about 90% of them were aware of the infections transmitted, 85% of them are unaware of 'no-recapping' technique of disposal, 90% of them were aware of standard precautions, Overall knowledge is adequate among 65% nurses. Only 35% nurses reported their NSI after incident, 24% knew post exposure prophylaxis, 98% of the reported NSI incidents, NSI were due to recapping of needles.<sup>5</sup>

Considering these factors for the present study the researcher focuses on the importance of safe injection practices among the staff Nurses.

#### Problem Statement

"A study to identify the knowledge of women regarding standard operative procedure of safe injection practice among staff Nurses, in selected Hospital, Kolhapur."

#### OBJECTIVE

- 1) To identify knowledge regarding standard operative procedures of safe injection practice among staff Nurses.
- 2) To find an association between Knowledge score with selected Socio demographic variables among staff Nurses.

### Materials and Methods

Since the present study is aimed to identify the knowledge regarding standard operative procedure of safe injection practices among Staff Nurses, a descriptive survey was felt to be appropriate and thus used for the study. The research design used for the present study was non experimental, descriptive design to identify the knowledge regarding standard operative procedure of safe injection practices among Staff Nurses at selected hospital, Kolhapur. The present study was conducted in Dr. D.Y. Patil Hospital Kadamwadi Kolhapur. The sample selected for the study includes 100 staff Nurses who fulfilled the inclusion criteria.

To select the samples, purposive sampling technique method was used for study. The structured questionnaire was designed for collecting relevant information from samples regarding their Socio Demographic variables and Knowledge about standard operative procedure of safe injection practices.

### RESULTS

The obtained data were analysed by using descriptive statistics, presented on tables and diagrams and interpreted.

#### Part I: Description of demographic variables of staff Nurses.

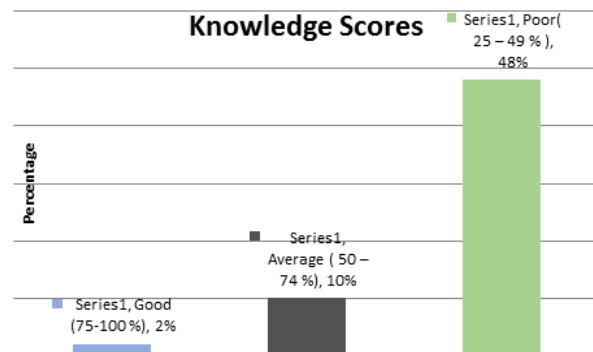
In the present study Majority of the subjects belonged to the age group of 21-30 years are 89(89%), while 7(7%) belonged to the age group of 31-40 years, while 4(4%) belonged to the age group of 41 & above. According to the gender, Male are 29(29%) & Females are 71(71%). Another is area of working, staff Nurses who were working In General ward 39(39%), In ICU 30(30%), In OT 10(10%), In OPD 4(4%) & in casualty 17(17%). Regarding experience of Staff Nurses in years i.e. 0-1 years are 48(48%), 1.1-2 years are 29(29%) & 2.1-3 years are 23(23%). In terms of previous knowledge on standard operative procedure of safe injection practices among Staff Nurses, YES 88(88%) & NO 12(12%).

#### Part II: Knowledge regarding standard operative procedure of safe injection practices among Staff Nurses working in selected hospitals, Kolhapur.

Result showed that the knowledge scores among staff Nurses were a maximum number who had an Average knowledge 74 (74%), while 17(17%) had Poor knowledge and 9(9%) had Good knowledge regarding standard operative procedures of safe injection practice.

**Table 1: Frequency and percentage distribution of staff Nurses working in selected Hospital,, Kolhapur according to the level of knowledge regarding standard operative procedure of safe injection practices. (n = 100)**

| Level of knowledge   | Frequency (f) | Percentage (%) |
|----------------------|---------------|----------------|
| Good (75-100 %)      | 01            | 02%            |
| Average ( 50 – 74 %) | 05            | 10%            |
| Poor( 25 – 49 % )    | 24            | 48%            |



### CONCLUSION

Based on the finding of the study the following conclusion were drawn

- I. Overall knowledge about standard operative procedure of safe injection practice was Average
- II. There was a need of informational booklet for Staff Nurses on

standard operative procedure of safe on injection practice.

- III. Study revealed no association between knowledge score and selected Socio demographic variables.

**Implication of the study:** The implications have been written under the following headings-Nursing practice, administration, Nursing education, Nursing research.

**Nursing Practice:** The research topic can be included in the health educational program. It should be carried out in different areas were Staff Nurses are working and in the hospital. Nursing superintendent can motivate and guide top roper knowledge about standard operative procedure on safe injection practice.

**Nursing Education:** 1) Nursing curriculum is responsible for preparing future nurse with emphasis on curative and promotive health practice regarding standard Operative procedure on safe injection Practice. 2) Nurses educator should give more importance regarding standard operative procedure on safe injection Practice. Need to conduct in-service education for nurses and to improve their knowledge and skills.

**Nursing Administration:** Nurses are vital source in educating the people on various health related issue. The nursing administrator can assess knowledge of Staff Nurses at D.Y. Patil hospital regarding standard operative procedure on safe injection practice. The administrator can communicate these findings to practice.

**Nursing Research:** Based on the findings, Nursing professionals & student Nurses can conduct further studies regarding standard operative procedure on safe injection practices. Staff Nurses can be motivated to conduct further research studies. Present research information must be used by others. The present study can be a source of review of literature for others who conduct the studies in same context. Evidenced based practices can improve the quality of life. This study focuses on standard operative procedures on safe injection practices.

### Recommendations

1. A similar study needs to be conducted at large samples from different settings.
2. A comparative study can be taken up to assess the knowledge of student Nurses of different setting regarding safe injection practices.
3. A similar study can be conducted to assess the Attitude towards safe injection practices
4. Pre Experimental studies can be conducted to assess the effectiveness of teaching strategies to sensitize the staff Nurses regarding standard operative procedures on safe injection practices

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