

KNOWLEDGE AND PRACTICES OF UNIVERSAL PRECAUTIONS AMONG NURSING STUDENTS

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ABSTRACT

“Universal precaution” is the international term used by the medical industry to describe the set of measures introduced to allow medical and paramedical staff to safely handle material that may carry blood or body fluids infected with diseases. “Universal precautions” are designed to Prevent infection from inoculation Therefore a study to assess the knowledge and practices of universal precautions during their clinical posting at Chettinad Hospital Among III Year And IV Year Basic B.Sc.Nursing Students Of Chettinad College of Nursing, Kelambakkam, Kanchipuram District, Tamil Nadu. It was undertaken with the objectives of To assess the existing Level Of knowledge, practice and association of III year and IV year Basic B.Sc Nursing students on universal precautions in prevention of spread of blood borne pathogens, To find out the co-relation between knowledge & practice of universal precautions among III year and IV year Basic B.Sc Nursing students. A quantitative Non experimental descriptive study was conducted. The study sample consisted of total 94 nursing students. Findings revealed that Variables like, age of the respondent, gender, year of training were found to be non-significant and the demographic variable of Number of clinical posting attended, Awareness of universal precautions, Needle stick injury, Source of knowledge of nursing student are significant at p value 0.05. The maximum of nursing student were in the age of 20 – 21 years (65%). Maximum of nursing student had source of knowledge through nursing lectures 71 (76 %). Maximum of nursing student had Awareness of universal precautions 93(99%) and no needle stick injury 76(80%)The mean score is 40 and standard deviation is 4.95. in this 87(93 %) nursing student were having adequate knowledge,5(05 %) nursing student were having moderate knowledge and 2(02 %) nursing student were having inadequate knowledge and about the practice - 87(93 %) nursing student were having adequate practice,5(05 %) nursing student were having moderate practice and none of the nursing student were having inadequate practice

KEYWORDS: Knowledge, Practice, Universal Precautions, Nursing Student

Received: Mar 14, 2017; **Accepted:** Mar 30, 2017; **Published:** Apr 03, 2017; **Paper Id.:** TJPRC: IJNPSCJUN20176

INTRODUCTION

“Universal precaution” is the international term used by the medical industry to describe the set of measures introduced to allow medical and paramedical staff to safely handle material that may carry blood or body fluids infected with diseases. “Universal precautions” are designed to

Prevent infection from inoculation; contact with mucous membranes such as mouth or eye, or through skin damages such as cuts.

It is essential for all nurses to follow universal precautions during their clinical posting, as

- Any percutaneous or per mucosal exposure to blood or body fluids, represent a potential HIV. Infection these includes skin piercing procedures with contaminated objects and even broken skin, open wounds,

cuts and mucosal membranes (mouth or eyes) to the blood and body fluids of an infected person.

- Although they account for a minority of HIV infections, health care procedures represent preventable source of HIV infection, injections are of particular concern, accounting for an estimated 3.9% to 7.0% of new cases worldwide. In addition, unsafe practices in haemodialysis and plasmapheresis centres are associated with HIV transmission.
- Health care worker protection is an essential component of any strategy to prevent disease against HIV infected patients by health care workers.
- If health care workers feel they can protect themselves from HIV infection, they can provide better care. Shinde M concluded there is need for introducing measures in order to increase the knowledge, attitudes practices Teaching Hospital, which may play a very important role in increasing hand hygiene compliance among the staff and reducing cross transmission of infections among patients. The main principles of universal precautions are washing hands **TITLE :**

“A study to assess the knowledge and practices of universal precautions during their clinical posting at Chettinad Hospital And Research Institute Among III Year And IV Year Basic B.Sc. Nursing Students Of Chettinad College of Nursing, Kelambakkam, Kanchipuram District, Tamil Nadu, India.

OBJECTIVES OF THE STUDY

- To assess the existing Level Of knowledge & practice of III year and IV year Basic B.Sc Nursing students on universal precautions in prevention of spread of blood borne pathogens.
- To find out the association between knowledge & practice of universal precautions among III year and IV year Basic B.Sc Nursing students.
- To find out the co-relation between knowledge & practice of universal precautions among III year and IV year Basic B.Sc Nursing students.

Operational Definition

- **Knowledge:** In this study knowledge refers to the information, understanding and awareness gained by under graduate Nursing students regarding universal precautions, assessed in terms of the scores obtained based on structured knowledge questionnaire
- **Practice:** It refers to the actual application of B.Sc Nursing students on universal precaution
- **Universal Precaution:** Refers to the steps taken in order to prevent the cross-contamination of air and blood borne pathogens in hospital settings. It includes the use of gloves, gowns, masks, caps, goggles, proper hand washing and proper disposal of biomedical wastes.
- **B.Sc Nursing students:** The students who are studying III year and IV year Basic B.Sc Nursing students

Null Hypothesis

H0. There will be no significant association between knowledge and practice on Universal precautions and selected demographic variables of III year and IV year Basic B.Sc nursing students.

MEHODOLOG

In this study researcher were assessed the knowledge and practices of universal precaution among nursing students by using quantitative- non experimental descriptive type of approach was selected selected through non probability purposive sampling technique.

- **Inclusive Criteria**

Student nurses who were

- III year and IV year Basic B.Sc Nursing students studying in Chettinad college of Nursing
- posted for clinical experience in Medical, Surgical, Orthopedic, Casualty and Obstetrics and Gynecology units
- Available during the data collection period.

- **Exclusive Criteria**

Student nurses who were:

- Posted in Operation Theater and outpatient department
- Being in long leave.
- Being in sick leave

Selection and Development of Study Instruments

As the study aimed at evaluating the existing level of knowledge and practice on universal precautions among the nursing student, the researcher constructed demographic variable proforma and structured questionnaires to assess the knowledge and practice on Universal precautions among the III year and IV year Basic B.Sc Nursing student

Table 1: Scoring and Interpretation

| S. No | Score | | Percentage | Level of Knowledge |
|-------|-----------|----------|------------|----------------------|
| | Knowledge | Practice | | |
| 1 | 0-12 | 0-10 | ≤ 50 | Inadequate knowledge |
| 2 | 13-18 | 11-15 | 51-75 | Moderate knowledge |
| 3 | 19-25 | 16-21 | ≥76 | Adequate knowledge |

Ethical Consideration

The departmental permission were obtained prior to conduct the study and also permission obtained from the institutional ethical committee, An informed consent were received from the samples before conducting the study

Data Collection Procedure

Demographic variable proforma given to the nursing student after getting concern, then structured questionnaires were given to assess the existing level of knowledge and practice on universal precautions among the nursing student, participants were instructed to fill after that filled proforma collected from them for analysis such as frequency distribution, percentage, mean, standard deviation and inferential statistics like chi –square test.

RESULTS

The study Findings revealed that Variables like, age of the respondent, gender, year of training were found to be non-significant and the demographic variable of Number of clinical posting attended, Awareness of universal precautions, Needle stick injury, Source of knowledge of nursing student are significant at p value 0.05. The maximum of nursing student were in the age of 20 – 21 years (65%). Maximum of nursing student had source of knowledge through nursing lectures 71 (76 %). Maximum of nursing student had Awareness of universal precautions 93(99%) and no needle stick injury 76(80%)The mean score is 40 and standard deviation is 4.95. in this 87(93 %) nursing student were having adequate knowledge,5(05 %) nursing student were having moderate knowledge and 2(02 %) nursing student were having inadequate knowledge and about the practice - 87(93 %) nursing student were having adequate practice,5(05 %) nursing student were having moderate practice and none of the nursing student were having inadequate practice.

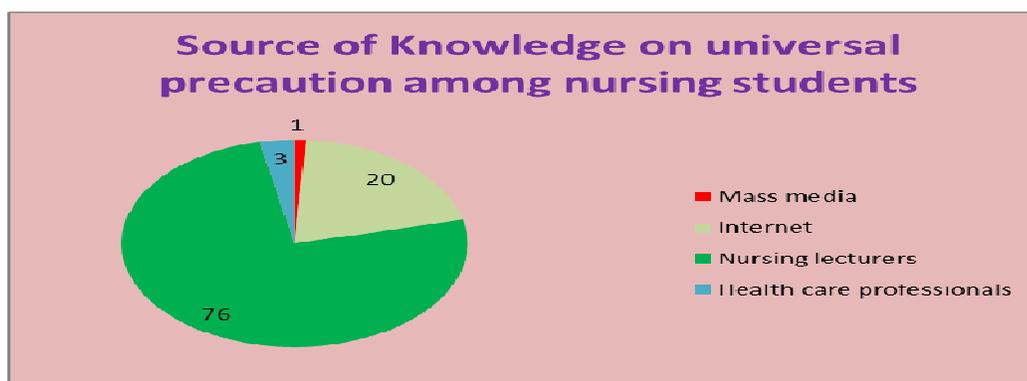


Figure 1: Source of Knowledge on Universal Precaution among Nursing Student

Table 2: Over all knowledge Aspects of knowledge of Nursing Student on Universal Precaution. N=94

| Sl. No | Level of knowledge | Number of Nursing Student | Total Number of Questions | Score Range | Total Score | | Mean | SD | Knowledge % | |
|--------|--------------------|---------------------------|---------------------------|-------------|-------------|-----|------|------|-------------|-------|
| | | | | | | | | | Individual | Total |
| 1 | Adequate | 94 | 05 | 19-25 | 87 | 470 | 40 | 4.95 | 87% | 100% |
| 2 | Moderate | | | 13-18 | 05 | | | | 05% | |
| 3 | Inadequate | | | 0-12 | 02 | | | | 02% | |

Table 3: Over all Knowledge Aspects of Practice of Nursing Student on Universal Precaution

| Sl. No | Level of Practice | Number of Nursing Student | Total Number of Questions | Score Range | Total score | | Mean | SD | Practice % | |
|--------|-------------------|---------------------------|---------------------------|-------------|-------------|-----|------|------|------------|-------|
| | | | | | | | | | Individual | Total |
| 1 | Adequate | 94 | 07 | 16-21 | 87 | 658 | 40 | 4.95 | 93% | 100% |
| 2 | Moderate | | | 11-15 | 07 | | | | 07% | |
| 3 | Inadequate | | | 0-10 | 0 | | | | 0% | |

DISCUSSIONS

Assessing the knowledge and practice of universal precautions, 87(93 %) nursing student were having adequate knowledge,5(05 %) nursing student were having moderate knowledge and 2(02 %) nursing student were having inadequate knowledge and about the practice - 87(93 %) nursing student were having adequate practice,5(05 %) nursing student were having moderate practice and none of the nursing student were having inadequate practice.From the above discussion the mean score of nursing student was 40 and standard deviation were 41.95.

The hypothesis H_0 was accepted suggesting that there will be no significant association between knowledge and practice on Universal precautions and selected demographic variables of III year and IV year Basic B.Sc Nursing students. It is the evidence from the statistical χ^2 test that the association found no significant between knowledge aspects of nursing student and selected demographic variables.

CONCLUSIONS

The nursing management of people with blood borne diseases involves the risk of occupational hazards to health care workers. As student health care workers become more involved in patient contact during their training, they are at risk of exposure to blood borne pathogens. The safety of student health care workers themselves, and subsequently that of their patients, depends directly upon the degree to which student nurses have knowledge of occupational hazards specific to their jobs and management mechanism for mitigating those hazards. The level of occupational safety and health training resources are available to the nursing student, to overcome these issues.

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