

ASSESS THE KNOWLEDGE OF HEALTH WORKERS WORKING IN THE PRIVATE HOSPITALS REGARDING UNIVERSAL PRECAUTIONS WITH A VIEW TO DEVELOP AN INFORMATION BOOKLET TO ENHANCE THEIR KNOWLEDGE

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Abstract

As we all know that infection is one of the reasons. This increases the mortality and morbidity rate. So infection prevention is a big issue for the health services. Although Universal precautions focus on reducing the spread of blood borne pathogens in recognized and unrecognized client. Universal precaution requires the use protective barriers with all clients regardless of their presumed infection status. So it's important for all the health workers to know about universal precaution and the methods which is used to prevent the spread of infection. And therefore we conducted this study to assess the knowledge of health workers working in the private hospitals with a view to develop an information booklet to enhance their knowledge. Keeping in view the aim of universal precautions we planned to assess the factor influencing the knowledge of health workers working in private hospitals. The aim of the study was to find the factors that affect the knowledge of health workers regarding universal precautions in order to develop an information booklet to enhance their knowledge. Main objectives of study are firstly to develop a tools to assess the knowledge of health workers working in private hospitals which helps in assessing the knowledge of health workers regarding universal precautions in order to develop an information booklet to enhance their knowledge .and to correlate the knowledge of health workers with selected socio demographic variable A descriptive survey was carried out to – assess the knowledge of health care workers regarding universal precaution. A non – experimental study was carried out on 100 samples to find out the factors influencing the knowledge regarding universal precaution. The study subjects were selected on a convenient based sample. Two interview schedule were developed I .e the first containing the socio – demographic variables of the subjects and the other one is universal precaution inventory to assess the knowledge of health care workers in private hospitals regarding universal precaution . The objectives were achieved through the findings, It is summarized after the study findings that It was feasible to assess the knowledge of health workers working in private hospitals regarding universal precaution. Assessing the knowledge of health workers regarding universal precautions is very helpful in order to develop an information booklet to enhance their knowledge

48% of the subjects had good knowledge regarding universal precautions and 52% are satisfied after receiving the information booklet based on universal precautions and safety measures to prevent them from spread of infection due to lack of knowledge regarding universal precautions. As by recognition of knowledge level, efforts may be made to reduce the infection to health care workers and patients and thereby decreasing the mortality and morbidity ate . If health care worker feel they can protect themselves from infections, they can provide better care

Keywords:- Assess , Knowledge ,Universal precaution , health workers.

I. INTRODUCTION

Universal precautions were designed for doctors, nurses, patients, and health care support workers who were required to come into contact with patients or bodily fluids. This included staff and others who might not come into direct contact with patients. Under universal precautions all patients were considered to be possible carriers of blood-borne pathogens. The guideline recommended wearing gloves when collecting or handling blood and body fluids contaminated with blood, wearing face shields when there was danger of blood splashing on mucous membranes and disposing of all needles and sharp objects in puncture-resistant containers. Universal precautions were typically practiced in any environment where workers were exposed to bodily fluids, such as: Blood, Semen, Vaginal secretions, Synovial fluid, Amniotic fluid, Cerebrospinal fluid, Pleural fluid, Peritoneal fluid, Pericardial fluid, Feces, Urine.

In 1996, the Centers for Disease Control and Prevention (CDC) published their guidance that introduced a two-tier system of precautions. The first tier known as standard precautions are to be used for all patients regardless of diagnosis or infection status and are a synthesis of universal precaution and Body Substance Isolation. The second tier, transmission based precaution are to be taken in addition to standard precautions when a patient is known or suspected of being infected with a pathogen transmissible by air, droplet or contact with dry skin or contaminated surfaces.

Transmission based precautions can be divided into three:

1. Contact Precautions
2. Droplet precautions
3. Airborne precautions

Universal precautions refers to the practice in medicine, of avoiding contact with patients bodily fluids, by means of wearing of non-porous articles such as medical gloves, goggles and face shield so as to focus on preventing transmission of blood borne pathogens from infected or potentially infected clients to susceptible caregivers. Medical instruments, especially scalpels and hypodermic needles should be handled carefully and disposed of properly in a sharps container.

Standard principles cover hand hygiene, the use of personnel protective equipment, the safe use and disposal of sharps and education of patients, caregivers and their health care personnel. In addition, the acute care guidelines include hospital hygiene. Additional precautions are used in addition to universal precautions for patients who are known for suspected to have an infection condition and very depending on the infection control needs of that patient.

Conditions require additional precautions-

- Prion disease (e.g., Creutzfeldt – Jakob disease)
- Diseases with air-borne transmission (e.g., tuberculosis)
- Diseases with droplet transmission (e.g., mumps, rubella, influenza, pertussis)

□ Transmission by direct or indirect contact with dry skin , colonization with MRSA (Methyllin Resistant Staphylococcus Aureaus) or contaminated surface or any combination of the above.

Protective clothing includes but is not limited to barrier gowns , gloves, eyewear (goggles or glasses), face shields , hairnets , shoe coverings.

II

. A non – experimental descriptive approach was considered as appropriate for the study. Questionnaire method was found to be appropriate for collected the data as this study aims to assess the knowledge of health workers working in the private hospitals with a view to develop an information booklet to enhance their knowledge.

RESEARCH APPROACH-The study attempts to check out the knowledge regarding universal precaution perceived by health workers so we adopt the survey approach (descriptive research).). We adopted survey approach in this study to explore and assess the knowledge of health workers about universal precaution and relates to their socio demographic variables. The nature of the study therefore can be called as an exploratory research approach.

RESEARCH SETTING-The study was conducted on health workers from age group of 20 years and above in private hospitals. These hospitals are private hospital and treat all kind of diseases,

POPULATION- In this study the target of this study population was health workers between the age of 20 – 30 yrs. and above of selected private hospitals who are prone to have infection due to lack of knowledge regarding universal precautions.

SAMPLE AND SAMPLING TECHNIQUE- The sample selection approach used was the non – probability one (Henry , 1990). Out of the six non –probability design, the purposive sample was through to be the most appropriate for this study. A purposive sample is a group of individuals who are readily available for participation in a study (Henry, 1990).

All the staff nurses fulfilling the selection criteria were interviewed with the help of the interview schedule to identify the knowledge perceived by them (Poor, average, good). The sample considered of 100health workers.

DEVELOPMENT OF TOOL-structured tool is termed as an interview schedule for the health workers it was used to assess the knowledge perceived by them about universal precaution and another is socio – demographic scale. It this way there were two tools used.

1. Socio – demographic scale.
2. Interview schedule for the health workers for assessing their knowledge regarding universal precautions.

SCORING- For individual item:

The range of total knowledge score was 0 – 30 for the interview schedule Equal scores were assigned to each group according to the degree of knowledge i.e. the scores

between 0 – 10 were considered poor , 11 – 20 average and 21 – 30 were having good level of knowledge (Table – 1)

TABLE 1
LEVEL OF KNOWLEDGE AND DISTRUBUTION OF SCORES

S. NO.	KNOWLEDGE SCORES	SCORING CRITERIA
1	0 – 10	POOR
2	11 – 20	AVERAGE
3	21 – 30	GOOD

DATA COLLECTION METHOD- After explaining the purpose of the study and ensuring confidentiality of information given by them. the direct interview approach was taken by us in studying the subjects via online and telephonic interviews The information about socio – demographic variables was collected by socio demographic Performa, Each subject was interviewed individually to assess the knowledge of health worker regarding universal precautions which is very helpful in developing information booklet to enhance their knowledge regarding universal precautions.

III. Experiment and Result

. The data analysis is carried out on the basis of the following objectives.

-To develop a tools to assess the knowledge of health workers working in private hospitals

-To assess the knowledge of health workers regarding universal precautions in order to develop an information booklet to enhance their knowledge.

Organisation of the study findings

The analysis of the data was organized and presented as follow:

1. Socio – demographic variables.
 - a) General characteristics of socio - demographic variables.
 - b) Relationship of socio – demographic variables with the level of knowledge.

2. Analysis of level of knowledge

A. GENERAL CHARACTERSTICS OF SOCIO – DEMOGRAPIC VARIABLES

The analysis of the study was some together of the entire sample. The data describing the sample characteristics are present:

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TABLE – 2
DISTRIBUTION OF SUBJECTS ACCORDING TO AGE

Age in yrs	F = 100	Percentage
20 – 25	77	77%
26 – 30	16	16%
30 & above	7	7%
Total	100	100%

Variables of age

In studied 100 subjects, 77% of participants belong to the age group of 20 – 25 yrs, 16% of participants belong to the age group of 26 – 30 yrs and 7 % of participant belong to the age group of 30 yrs and above

TABLE – 3
DISTRIBUTION OF SUBJECTS ACCORDING TO GENDER

Gender	F = 100	Percentage
Male	36	36%
Female	74	74%
Total	100	100%

Variables of gender

In all the subject 30 % of the participants were male and 64% of the participants were female

TABLE – 4

DISTRIBUTION OF SUBJECTS ACCORDING TO MARIETAL STATUS

In all the subject 26 % of the participants were married and 74% of the participants were single.

Gender	F = 100	Percentage
Married	26	26%
Single	74	74%
Total	100	100%

TABLE – 5

DISTRIBUTION OF SUBJECTS ACCORDING TO MONTHLY INCOME

Monthly	F = 100	Percentage
10000 – 30000	95	95%
30000 – 50000	5	5%
Total	100	100%

Variables of monthly income

In all the subject 95 % of the participants are having 10000 – 30,000 Rs as their monthly income, 5% have 30,000 – 50,000 Rs as their monthly income

TABLE - 6

DISTRIBUTION OF SUBJECTS ACCORDING TO PROFESSIONAL QUALIFICATION

Professional qualification	F = 100	Percentage
DOCTERS	10	10%
NURSING STAFF	63	63%
PARAMEDICAL STAFF	27	27%
Total	100	100%

Variables of professional qualification

In all the subjects , 10% of the participants were the Doctors and the 63% of the participants were Nursing staff and 27% them were paramedical nurses

TABLE - 7

DISTRIBUTION OF SUBJECTS ACCORDING TO EXPERIENCE IN YEARS

Experience in years	F = 100	Percentage
0 - 5	92	92%
6 - 10	6	6%
11 - 15	1	1%
Above 16	1	1%
Total	100	100%

Variables of experience in years

In studied 100 subjects, 92 % of participants were having 0 – 5 yrs of experience and 6 % of participants were having 6 – 10 yrs experience, 1 % of them having 11 – 16 yrs experience and 1 % of them have above 16 yrs of experience (Table no. 7 , Fig. no 2)

ANALYSIS OF DATA RELATED TO GRADING OF KNOWLEDGE

SCORE OF Health care workers

S. NO.	Scoring criteria	Grading	Percentage
1	(0 – 10)	Poor	5
2	(11 - 20)	Average	47
3	(21 - 30)	Good	48

GENERAL DESCRIPTION OF LEVEL OF KNOWLEDGE OF HEALTH CARE WORKERS

The overall score in the assessed knowledge of subjects ranked between 0 – 10 (poor), 11 – 20 (average) and 21 – 30 (good).

In the studied 100 subjects it was found that 48 subjects display good. 47 subjects displayed average and 5 subjects displayed poor level of knowledge.

IV. CONCLUSION

The overall experience of conducting this study was satisfying .The conclusions drawn based on the findings of the study are

1. It was feasible to assess the knowledge of health workers working in private hospitals regarding universal precaution.
2. Assessing the knowledge of health workers regarding universal precautions is very helpfull in order to develop an information booklet to enhance their knowledge

48% of the subjects had good knowledge regarding universal precautions and 52% are satisfied after receiving the information booklet based on universal precautions and safety measures to prevent them from spread of infection due to lack of knowledge regarding universal precautions

3. Overall level of the knowledge

The assessed level of knowledge in studied 100 subjects was as mean 19.41 and the standard deviation is 4.96.

Hence Recognition of knowledge level of health care workers working in private hospitals is of great importance because by recognition of knowledge level, efforts may be made to reduce the infection to health care workers and patients and thereby decreasing the mortality and morbidity ate . If health care worker feel they can protect themselves from infections, they can provide better care

IMPLICATIONS

Nursing practice

In view of the findings of study that is being aware of the level of knowledge of health care workers regarding universal precaution techniques, various nursing implications arise to help them to improve their knowledge.

1. In-service education program can be periodically organized to enlighten the health care workers to gain current knowledge about universal precaution and adequate some simple explanation of the procedures being used of universal precaution which is to be carried out.
2. The role of education through seminars, group discussion is used to improve the knowledge of trained professionals and consider the implementation

3. Many guidelines related to the isolation precaution can be given through different A.V. Aids and Self Instructional Modules (SIMs).
4. Survey should be done to assess the knowledge of professionals working in different areas.

LIMITATIONS

The following factors were beyond the control of investigator:

1. The present study could not include the health care workers of Government hospitals.
2. Limited size and non – randomized purposive based sampling were adopted which limited the generalization of findings.

Since the study was mainly based on the assessment of knowledge of subject through knowledge questionnaire and no other tool was undertaken and thus the generalization of findings were limited.

RECOMMENDATIONS

For researcher

1. A randomized large sample may be studied to assess the knowledge of health care workers in different hospitals.
2. An evaluative study can be undertaken to assess the knowledge of health care workers before and after the planned education program.
3. A comparative study may be conducted to assess the knowledge of health care workers working in Government hospitals regarding universal precaution.

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