

KNOWLEDGE, ATTITUDE AND PRACTICE OF STANDARD ISOLATION PRECAUTIONS AMONG REGISTERED NURSES OF ALLIED HOSPITAL FAISALABAD

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ABSTRACT:

Standard isolation precaution is a way to stop the spread of hospital acquired infection which may be in the form of blood, secretions, body waste, body fluids and mucous membrane that may contain contagious infectious agents. Nurses are the persons who have the moral obligation to care for sick persons and improve their regaining health and attain excellent worth of treatment care. Therefore health care providers should have proper awareness and good practice to strictly adhere to standard isolation precaution to infection control

To assess the knowledge, attitude and practice of nurses toward standard isolation precaution among registered nurses of Allied hospital Faisalabad.

Study design of this study descriptive cross sectional was used and 132 participants were participate in this study from Allied hospital Faisalabad, through convenient sample method and all of the participants were female nurses.

Answers from the participant clearly predicted that most of the nurses have good knowledge and unsatisfactory attitude and practice toward standard isolation precaution.

The current study concluded that using standard isolation precaution is very important for nurses to control hospital acquired infection. Study finding also show that most of the nurses contributing in the study have good knowledge about standard isolation precaution but there attitude were not satisfactory toward standard isolation precaution. Study finding also predict that most of the nurses also have unsatisfactory practice and they do not use standard isolation precaution to control infection.

Knowledge, Attitude, Practice, Standard Isolation Precautions, Nurses.

Introduction:

Nurses are the health care professionals who have the responsibility to guard sick persons and enhance their recovery and accomplish prime quality of medical aid. Thus nurses ought to have information and strictly adhere to plain isolation precaution to infection management (Eskander, 2013).

Nurses ought to have correct information and that they ought to observe per customary isolation precautions whereas giving care to patients as a primary level of infection management (Fashafsheh & Thultheen, 2016). Standard isolation precaution is associate approach to stop the unfold of hospital no heritable infection which can be within the sort of blood, secretions, excretions, body fluids and tissue layer which will contain communicable infectious agents (McDonald, 2014). Customary isolation precaution may be a methodology through that we will forestall the unfold of infectious agents so as to stay the patients, attendants and health care suppliers safe from infectious agents (Barikani, 2012).

Standard isolation precautions are the measure through that we will management the unfold of infectious

agents within the hospital, as a result of the nurses are the professionals, World Health Organization deal the exposure over the other healthcare supplier (Barikani, 2012). Standard isolation precautions are thought-about to be a lot of vital for nurses than the other health care supplier as a result of they are accountable to allow care to patients and having nice exposure to infectious agents moreover (Sarani et al, 2016).

According to Zaidi et al., (2016) the most role of the nurses is to realize patient recovery however typically they become the supply of infection transmission. Therefore with the adherence of some policies, and commonplace isolation precautions pointers decrease the possibility of infection transmission (Zaidi et al., 2016). Pointers of solation precaution have nice importance as a result of today the infectious diseases like hepatitis B, hepatitis C and HIV are increasing day by day (Abdela, 2016). According to Baqi (2009) nurses data, perspective and apply with the adherence of ordinary isolation precautions can decreases the danger of hospital no inheritable infection that is that the most vital issue altogether hospital of Asian country and ultimately decrease the morbidity and fatality rate. Hospital no inheritable infection is that the major reason

behind morbidity and mortality in hospitals, 100 percent of patients in developed countries and twenty fifth in developing countries develop infection wherever commonplace isolation precautions don't seem to be used properly (Baqi, 2009).

According to Sahid (2011) a study conducted on nurses WHO worked in Azady Teaching Hospital in Kirkuk town to assess the information and practices of nurses towards customary isolation precautions. Finding of the study shows that the bulk of the nurses didn't get correct coaching sessions relating to customary isolation precautions and a few of them had not taken half in correct learning concerning infection management (Sahid, 2011). Nurses and alternative medical students are a lot of at risk of hospital no heritable infection through skilled exposure (Barikan, 2012). Per Sarani (2014) nurses could become the supply of infection transmission if they don't follow standards of isolation precautions (Sarani et al 2016). According to Eskander (2013) with the adherence of ordinary isolation precautions, the infectious diseases and every one alternative blood borne diseases could also be ablated to some extent. Adequate information and strict adherence to plain isolation precautions are terribly important so as to manage the transmission and ultimately to enhance the standard of care given to the patient (Eskander, 2013).

Guidelines of normal isolation precautions per authority (Centre of sickness control) for preventions of

hospital no heritable infections are the employment of personnel protecting instrumentality, like hand laundry is that the best methodology for hindrance of infection as a result of nurses often contact with patients, so it's required for nurses to scrub hand before and once contact with patients. Authority conjointly counseled that hand laundry ought to be done before patient contact and once patient contact. Nurses ought to conjointly wear gloves once direct contact with patient or patient's body secretions. They must wear robe once taking care of contagious patients. They must wear metastasis mask and spectacles for self-protections (Siegel, Chiarello, & Committee, 2007).

According to WHO (2004) normal isolation precautions is that the use of non-public protecting instrumentality that acts as a barrier between micro-organisms and user as a result of it defend nurses to stop micro-organisms from contaminating hand, eyes, clothing, hair and shoes transmission.

Personal protecting instrumentality includes gloves, protecting eye wear (goggles) mask robe shoe cowl, hair cover/cap (WHO, 2004).

Purpose of the Study:

The purpose of this study is to assess knowledge, attitude and practice of registered nurses regarding standard isolation precautions.

Problem Statement:

It is observed that nurses of government hospital are not following the standard isolation precautions. Nurses are at high risk of exposure of infectious diseases if they did not adapt standard isolation precautions and they also transmit the infectious agents to the patients. Nurses should have appropriate knowledge, attitude and practice toward standard isolation precautions this may decrease the morbidity and mortality rate and ultimately increases the patient recovery rate.

According to Baqi (2009) he concluded in his survey standard isolation precautions were not observed in government hospitals with different infectious diseases (Baqi, 2009). Government hospital nurses have poor knowledge, attitude and practices toward standard isolation precautions and this lead to increase infection rate (Mangoni, 2012). Nurse's appropriate knowledge, attitude and refine practices toward standard isolation precautions play a vital role in prevention of hospital acquired infections and increase patient outcome (Eskander, 2013).

Significance of the Study:

Nurses have close contact to the patients, therefore results of the study will be helpful for nurses to follow the standard isolation precautions to minimize hospital acquired infections. It will also help the participants of the study to become aware about the adherence of standard isolation precautions and its consequences for them and for patients. After completion of this study results will be provided to organization to

know the importance of using standard isolation precautions. The finding of this study will enable the policy makers and higher authority of the hospital to build infection control committee to improve the nurse's practices and attitude and enhance their knowledge to improve patient care and incorporate the standard isolation precaution in the hospital.

Research Questions:

- 1: What is the knowledge of nurses toward the standard isolation precautions?
- 2: what is the attitude of nurses toward the standard isolation precaution?
- 3: What is the practice of Nurses toward standard isolation precautions?

Objectives of the Study:

Objective of the study is to assess knowledge, attitude and practice of standard isolation precaution among nurses.

Key Words:

Nurses, Standard isolation precaution, Nurses Knowledge, practice, attitude.

Conceptual definitions:

Nurse:

Nurse is a person who provide care to sick individuals or infirm specifically (Merriam Webster, 2017).

Standard Isolation precautions:

The advance care and protective measure for the safety of hospital workers to prevent from the infectious agents among them and patient to patient (Merriam Webster, 2017).

Knowledge:

The fact or condition of knowing something with familiarity gained through experience or association (Merriam Webster, 2017).

Attitude:

A mental position toward fact or state is called attitude. (Merriam Webster, 2017)

Nurses practices:

To perform work at repeatedly so as become competent practice (Merriam Webster, 2017).

Operational definitions:

Nurse:

Nurse is a person who provides care to all sick individuals who are eligible for care.

Standard isolation precautions:

Standard isolation is a guideline of prevention of hospital acquired infection through usage of protective measure equipment. With the use of protective measures nurses minimize the risk of hospital acquired infection which threatening for themselves and for patients.

Knowledge:

To become aware and acquired information through personal experience or by learning.

Attitude:

Attitude is a perception and behavior toward a specific direction.

Practice:

Any work or task which is done in daily basis and someone becomes expert.

Theoretical Framework:

The theory of Planned Behaviour will be applicable for this study. Which is developed by Social Psychologist Aizen and Fishbein in 1967. The theory describe how attitude and motivation impact on the human behaviour. The theory explains that intent is the most important factor of a person's behaviour and that person's intention to perform behaviour is dependent upon the attitude toward the performance of the behaviour and behaviour motivates to practice (Kamunge, 2013).

According to this theory, appropriate knowledge and motivation have grate impact on person,s attitude and which influence the bahaviour and practice depend on behaviour.

Literature Review:

Standard precautions square measure pointers to stop unfold of infection

in hospitals. However, their implementation relies on the information,

attitudes and observes of tending employees (Ogoina 2015). Commonplace isolation precautions practices weren't determined in numerous government hospitals of Asian nation (Baqi, 2009). Standard isolation precautions square measure necessary measures for interference of hospital no inheritable infection and protective the all health care employees from the infectious diseases that faces throughout skilled exposure (Mohammad zadeh, 2013). Standard isolation precautions square measure important for the interference of hospital no inheritable infections, if these precautions aren't use then the patient outcomes are going to be poor that ultimately results in inflated medical price and reduction within the obtainable medical facilities (Thu, Anh, Chau, & Hung, 2012).

According to Mahomet zadeh (2013) Study unconcealed that thirty.5% of nurses have poor perspective relating to the quality isolation precautions and in sixty eight moderate perspective. 49%, Nurses poor observe and forty third moderate and solely in V-E Day high observe regarding commonplace isolation precautions. (Mohammad zadeh 2013).

According to Mangoni (2012) the most reason of infection is improper practices and poor data of nurses or alternative care team as a result of in government hospitals there are not any correct ways for isolation precaution. The most effective thanks to decrease the speed of hospital no heritable infection within the hospitals is to

follow commonplace isolation precautions, that area unit a collection of suggested pointers to stop or cut back exposure to infectious agents by hospital employees, patients and their guests (Mangoni, 2012). Poor adherence within the use of non-public protecting instrumentality, hand laundry, safe handling and disposal of needles and sharp objects were found to be among the practices that the interns expressed correct data.

According to Mangoni (2012) the study on data, follow and perspective of nurses at Qazvin University of bioscience in Iran during which he unconcealed that attitudes among medical students were acceptable however practices and data towards customary isolation precautions were poor (Mangoni, 2012). Boujaafar (2013) highlighted in his study regarding the data, perspective of nurses and customary isolation precautions, like correct hand hygiene and therefore the correct application of personnel protecting instrumentality through out invasive procedures square measure easy and of low-priced, however need employees responsibility and activity modification, additionally to rising employees coaching, coverage and police investigation systems (Boujaafar,2013). Consistent with Cole (2011) customary isolation precautions and use personnel protecting instrumentality, aid members play a crucial role in increasing or decreasing the probabilities of infection

(Cole, 2011). According to Ahmed (2013) a study on nurse's data, perspective toward customary isolation precautions methods in Birmingham teaching hospitals of infection management. The finding of this study unconcealed that overall data, perspective concerning customary isolation precautions of the nurses was poor (Ahmed, 2013)

The health care employees who area unit at high risk of exposure to infectious diseases through skilled exposure ought to wear personnel protecting instrumentation that has the mask, robe gloves, goggles, that use to guard them from infections (De Iaco et al., 2012). According to Ahmed (2013) the Nurses don't perform hand hygiene once patient contact. Finding of the study shows that; the simplest thanks to improve infection management practices in hospital area unit coaching and education, monitoring, improved convenience of resources, and correct use of personnel protecting instruments/measures for poor compliance (Ahmed, 2013). The inappropriate use of gloves and failure to vary the gloves to attending completely different patient's procedures increase risk of cross transmission of infections between patients and health care suppliers (Loveday et al., 2014). Forty eighth infections being related to failure to get rid of gloves once patient care and perform hand hygiene (Loveda et al., 2014).

According to Langoya & Fuller (2015) Hospital no heritable infections increase the mortality and morbidity rate. With the

adherence to correct hand laundry there'll cut back the chance of hospital no heritable infections. (Langoya & Fuller, 2015). A survey was conducted within the government hospital Baqi (2009) within which they finished that there was no any infection management committee and no correct hand hygiene practices except ICU. (Baqi, 2009). According to Sahid (2011) the amount of nurse's data and practices towards commonplace isolation precautions was poor (Sahid, 2011). According to Thomas (2013) concerning ninety four of the nurses expressed that they face issue to observe of normal isolation precautions in bar of hospital no heritable infections. These difficulties embody poor operating surroundings, poor awareness concerning bar of hospital no heritable infection, and lack of water for hand laundry and different material resources (Thomas, 2013).

According to Thomas (2013) study reveals that majority of the trained nurses have awareness concerning the hindrance of hospital no inheritable infections however not all observe in line with normal isolation precautions its thanks to lack of correct measures and poor operating setting. (Thomas, 2013) Hospital no inheritable infections increase the mortality and morbidity rate. With the adherence to correct hand laundry there'll be cut back the chance of hospital no inheritable infections (Langoya, 2015).

(Safety, 2009) normal isolation precaution includes hand hygiene that is that the basic thanks to forestall the chance of hospital no inheritable infection and unfold of antimicrobial resistance. However health care supplier don't perform hand hygiene properly and this cause transmission of hospital no inheritable infection and unfold of multi-resistant organisms. (Safety, 2009). It is all over in another study that health care team don't perform hand hygiene throughout providing patients care. Personnel protecting instrumentality e.g. robes and different infections instrumentality were share by health care staff and sharp instrumentality weren't get rid of fastidiously and thrown within the garbage baskets (Baqi, 2009).

Methodology:

This is quantitative descriptive cross sectional study which assesses knowledge, attitude and practice of registered nurses regarding standard isolation precautions. The site of the study will be Allied Hospital, Faisalabad. Targeted population of the study was registered Nurses of Allied Hospital, Faisalabad. Simple size for this study was 132 patients calculated according Slovene's formula $n = N/1 + (N) (E)^2$

If total population is 198

If N=Population, n=Sample size, E= Margin of error

$$n = N/1 + (N) (E)^2$$

$$n = 198/1 + (198) (0.05)^2$$

According to (Safety, 2009) poor adherence to the standard isolation precautions hospital acquired infection transmission occurs through droplets, direct contact with infectious agents.

According to Punjabi, Banglani, Priya, & Mangi, (2017) there is increased risk of spread of infection through the used sharp patient equipment. There should be recapped and dispose of used needles and sharp equipment carefully. 38.5% Nurses had awareness about transmission of Hepatitis B and 44.5% about Hepatitis C, and 17% about HIV/AIDS by needle stick injury. Only 8% use safety measures when dispose sharp patient equipment. 94.5% nurses had faced needle stick injuries during patient care. (Punjabi, Banglani, Priya, & Mangi, 2017)

$$n = 198/1 + (198) (0.0025)$$

$$n = 198/1 + 0.495$$

$$n = 198/1.495$$

$$n = 132$$

My sample size is 132

The study was done through convenient sampling method. Register nurses of Medical I, Medical II, Medical III, Medical Emergency, wards of Allied Hospital, Faisalabad. All other nurses, Head nurses, student nurses of Allied Hospital, Faisalabad and all other health care members like doctors or other paramedical staff will be excluded.

A well-constructed liker scale 5 point questionnaire will be used as the major tool

in gathering the data needed for attitude and practice in this study from the registered nurses of Allied Hospital, Faisalabad and 3 point scale for knowledge. The questionnaire of attitude and practice adopted from the study conducted by (Mohammadzadeh, 2013).The knowledge questionnaire adopted(Barikani & Afaghi, 2012).

The data was collected through questionnaire and this questionnaire was distributed to 132 participants through convenient sampling method. The participants were instructed to complete the questionnaire to best of their ability and return the questionnaire. The collected data

. This study approximately takes in 2 to 4 months (Feb, 2017 to May, 2017).

was analyzing through SPSS version 20.0. And data was computed using frequency, tables and charts.

For this research purpose I will take permission from principal of Independent college of Nursing. After approval from principal I will take permission from nursing superintendent of Allied Hospital, Faisalabad to collect data from staff nurses of this hospital. To collect data from participants enough information of research will be provided to participants with the help of full consent from and this will be achieved via a letter attach to the questionnaire. Confidentiality will be considered by informing participants

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Results:

Section A: Demographic Analysis

Table 1

		Frequency	Percentage
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Gender	Male	00	00%
	Female	132	100%
	Total	132	100%
Age	18-25	46	34.8%
	25-35	61	46.2%
	35-45	15	11.4%
	Above 50	10	7.6%
	Total	132	100%
Marital Status	Married	52	39.4%
	Unmarried	80	60.6%
	Total	132	100%
Organization Name	Allied Hospital Faisalabad	132	100%
	Others	00	00%
	Total	132	100%
Qualification	Nursing diploma	77	58.3%
	Post RN	30	22.7%
	BSN	18	13.6%
	MSN	7	5.3%
	Total	132	100%
	Others	0	0%
	Total	132	100%
Experience	1=<1year	31	23.5
	2=1-5 years	52	39.4
	3=6-10 years	31	23.5
	4=Above 10 years	18	13.6
	Total	132	100%

Data was collected from female nurses only. Total no of n=132, respondents from Allied Hospital Faisalabad, Lahore was contributed in the research. According to table 1, all participants were female and contributing of n= 132, (100%).

The range of participant's age was between 18 to 50 years. According to data received from patients (Table 1.2 and figure 2) below analysis is found that the mostly selected sample was based on 25-35 years of participants which were n=61 (46.2%) and

the 18-25 years n=46 (34.8%), 35-45 years of age were n=15 (11.4%) and some patients above 50 years old age were n=10 (7.4%).

Respondent qualification represents (Table1) that most of the participants have nursing diploma n=77 (58.3.7%), Post RN nurse were n= 30 (22.7%), BSN were n=18 (13.6%) and some were MSN n=7 (5.3%).

Table no 1 also shows that most of the respondents were married n=80 (60.4%) and some were unmarried n=52 (39.6%)

participating in this study. And all participants are from Allied Hospital, Faisalabad. n=132, (100%). All percipients of this study were registered nurses of Allied Hospital, Faisalabad. n=132, (100%) were registered nurses.

Table 1 shows that n=31(23.5%) have less than 1 year experience and n=52(39.4%) have 1-5 year experience and n=31(23.5%) have 6-10 year experience and only n=18(13.6) have above 10 year experience.

Section B: Analysis of Research Questions (Knowledge)

Sr.#	KNOWLEDGE	YES	NO	DO NOT KNOW	Total
1	Before and after patients care hand hygiene.	108 (81.8%)	10 (7.8%)	14 (10.6%)	100%
2	Before and after gloves use hand hygiene.	90 (68.2%)	33 (25%)	9 (6.8%)	100%
3	After accidental contact of blood, blood contains fluid, secretions and contagion items.	88 (66.7%)	30 (22.7%)	14 (10.6%)	100%
4	When touching mucus membrane and non-intact skin gloves should wear.	85 (64.4%)	27 (20.5%)	20 (15.2%)	100%
5	To protect mucus membrane of the eyes goggles should wear.	73 (55.3%)	4 (34.8%)	13 (9.8%)	100%
6	After contact with blood, bloody fluid and body secretions or infectious item hand washing with beta dine solution.	75 (56.8%)	3 (27.3%)	21 (15.9%)	100%

7	To protect the nose and mouth during invasive processors and activities surgical mask should be wear.	84 (63.6%)	25 (18.9%)	23 (17.4%)	100%
8	Before disposal needle should be bent.	68 (51.5%)	48 (36.4%)	16 (12.1%)	100%
9	Before disposal needle should be recapped.	70 (53.0%)	50 (37.9%)	12 (9.1%)	100%
10	When there is chance to contamination with aggressive processors and activities gown should be wear.	83 (62.9%)	27 (20.5%)	21 (15.9%)	100%

Table no 2 reported a high level of about n=108 (81.1%) of participants were response to YES and n=10 (7.5%) were NO, n=14 (10.6%) were DO NOT KNOW, that before and after patient care hand hygiene. In response to question no 2 show that most of the responded were YES 80 (68.1%) and 33 (25%) were response to NO about the question. 9 (6.8%) were neutral and DO NOT KNOW about the above question. In question 3 most of the participants were response to YES 88 (66.6%) and 30 (22.7%) were NO to the statement. 14 (10.6%) of the participants were DO NOT KNOW about the question. In response to question 4 reveal that most of the participants were response to YES 85 (64.3%) and 27 (20.4%) were response to NO that about the question and 20 (15.5%) DO NOT KNOW about the statement. Table no 2 also show responses to the above question of this contrast in which mostly participants 73 (55.3%) were

response to YES and 46 (34.8%) of the participants were response to NO and only 13 (9.8%) were DO not know or neutral to the above mention statement.

In response to the question 6 in which 75 (56.8%) were YES and 36 (27.2%) were NO to the statement. Very little number of Do not know or neutral which to the above mention statement. Response to the question 7, in which 84 (63.6%) of respondents were YES and 25 (18.9%) were response to NO to the statement and only 23 (17%) were DO NOT KNOW or remained undecided for this statement. In question 8, 68 (51.5%) of respondents were YES and 48 (36.3%) were response to NO to the statement and only 16 (12.1%) were DO NOT KNOW or remained undecided for this statement. Response to question 9, 68 (53.0%) of respondents were YES and 50 (37.5%) were response to NO to the statement and only 12 (9.0%) were

DO NOT KNOW or remained undecided for this statement. In question 10, 83 (62.8%) of respondents were YES and 27 (20.4%) were

response to NO to the statement and only 21 (15.9%) were DO NOT KNOW or remained undecided for this statement.

Section C: Analysis of Research Questions (Attitude)

Table 3

Sr.#	ATTITUDE	SA	A	NEU	D	SD	Total
1	When draw blood sample or touching patient's secretions.	14 (10.6%)	5 (3.8%)	7 (5.3%)	49 (37.1%)	57 (43.2%)	100%
2	When attending infectious patient wear of gown think inconvenient to perform skills of patient care.	16 (12.1%)	22 (16.7%)	13 (9.8%)	54 (40.9%)	27 (20.5%)	100%
3	One should wear gloves when NG insertion and out.	14 (10.6%)	12 (9.1%)	19 (14.4%)	51 (38.6%)	36 (27.3%)	100%
4	Respiratory mask is not necessary and goggles for intubation/extubation and suctioning tracheal tube because they limit his/her competence.	20 (15.2%)	35 (26.5%)	15 (11.4%)	48 (36.4%)	14 (10.6%)	100%
5	When entering in ICU wearing gown is not necessary.	32 (24.2%)	26 (19.7%)	17 (12.9%)	35 (26.5%)	22 (16.7%)	100%
6	Getting infected with a contagious disease may be accidental (can depend on chance).	14 (10.5%)	26 (19.7%)	22 (16.7%)	52 (39.4%)	18 (13.6%)	100%
7	Before wearing gloves hand washing is a trivial action.	18 (13.6%)	20 (15.2%)	27 (20.5%)	49 (37.1%)	18 (13.6%)	100%

8	It is not reason to assume all patients infectious unless their infection has been Confirmed.	15 (11.4%)	21 (15.9%)	33 (25%)	43 (32.6%)	20 (15.2%)	100%
9	Precautions are not necessary for the infectious patient from reception and waiting room.	28 (21.2%)	24 (18.2%)	20 (15.2%)	42 (31.8%)	18 (13.6%)	100%
10	90cm away from respiratory infectious patient is not effective for transmission.	18 (13.6%)	27 (20.5%)	33 (25%)	41 (31.1%)	13 (9.8%)	100%

Table 3 show response of the respondents to the above mention questions in which most of the respondents 57 (43.1%) were strongly agree and 49 (37.1%) were agree. 7 (5.3%) of respondents were neutral to question 1. 5 (3.7%) of the respondent's response to disagree and 14 (10.6%) of the respondents were strongly disagree to the question its means that they show negative response. Table 3 also reveals answers of the respondents to the 2nd question in which most of the respondents n=54 (40.9%) were disagree and n=27 (20.4%) strongly disagree n=13 (9.8%) of respondents were neutral about this question. n=22 (16.6%) of the respondent's response to agree and n=16 (12.1%) of the respondents were strongly agree to this question its means that they show positive response. Response of the respondents to the 3rd question of this contrast in which most of the respondents n=51 (38.6%) were disagree and n=36 (27.7%) were strongly disagree. n=19 (14.3%) of respondents were neutral about this question. n=12 (9.0%) of the

respondent's response to agree and n=14 (10.6%) of the respondents were strongly agree to this question its means that they show negative response. 48 (36.3%) were disagree and n=14 (10.6%) were strongly disagree. n=15 (11.3%) of respondents were neutral about 4th question. n=35 (26.5%) of the respondent's response to agree and n=20 (15.1%) of the respondents were strongly agree to this question its means that they show positive response. 35 (26.5%) were disagree and n=22 (16.6%) were strongly disagree. n=17 (12.8%) of respondents were neutral about the first question. n=26 (19.6%) of the respondent's response to agree and n=32 (24.2%) of the respondents were strongly agree to this question its means that they show negative response.

52 (39.9%) were disagree and n=18 (13.67%) were strongly disagree. n=22 (16.7%) of respondents were neutral about the 6th question of this contrast. n=26 (19.7%) of the respondent's response to agree and n=14 (10.6%) of the respondents

were strongly agree to this question its means that they show negative response. Response of the respondents to 7th question in which most of the respondents n=49 (37.1%) were disagree and n=18 (13.6%) were strongly disagree. n=27 (20.4%) of respondents were neutral about this question. n=20 (15.1%) of the respondent's response to agree and n=18 (13.6%) of the respondents were strongly agree to this question its means that they show negative response. Table no 3 also show response of the respondents to question 8 in which most of the respondents n=43 (32.8%) were disagree and n=20 (15.2%) were strongly disagree. n=33 (25%) of respondents were neutral about this question. n=21 (15.91%) of the respondent's response to agree and n=15(11.36%) of the respondents were

strongly agree to this question its means that they show positive response and n=42(31.82%) were disagree and n=18 (13.64%) were strongly disagree. n=20 (15.2%) of respondents were neutral, n=24 (18.18%) of the respondent's response to agree and n=28 (21.21%) of the respondents were strongly agree to 9th question of this contrast its means that they show positive response. Response of the respondents to the last question of this contrast in which most of the respondents n=41 (31.5%) were disagree and n=13 (9.8%) were strongly disagree. n=33 (25%) of respondents were neutral about this question. n=27 (20.4%) of the respondent's response to agree and n=18 (13.6%) of the respondents were strongly agree to this question its means that they show positive response.



Section C: Analysis of Research Questions (Practice)

Table 4

Sr.#	PRACTICE	SA	A	NEU	DA	SD	Total
1	After use needles should be bent or recap before dispose.	33 (25%)	29 (22%)	12 (9.1%)	35 (26.5%)	23 (17.4%)	100%
2	After touching patient's surroundings hand hygiene should be done.	17 (12.9%)	14 (10.6%)	16 (12.1%)	62 (47%)	23 (17.4%)	100%

3	When contact with patient blood, bloody fluid and secretion hand hygiene should be done.	20 (15.2%)	13 (9.8%)	14 (10.6%)	52 (39.4%)	33 (25%)	100%
4	When touching patient used instruments, skin, wounds, mucosal membrane and blood and during invasive procedures gloves should be wearing.	17 (12.9%)	19 (14.4%)	16 (12.1%)	42 (31.8%)	38 (28.8%)	100%
5	Have you wear gown in case there has been hazard of wading blood or body Secretions to you?	21 (15.9%)	19 (14.4%)	22 (16.7%)	46 (34.8%)	24 (18.2%)	100%
6	Did you use mask in the last event which wading of blood to your face was possible?	19 (14.4%)	25 (18.8%)	24 (18.2%)	48 (36.4%)	16 (12.1%)	100%
7	One should 90cm away from the respiratory suspicious infectious patient.	23 (17.4%)	23 (17.4%)	24 (18.2%)	48 (36.1%)	16 (12.1%)	100%
8	Decontamination workers and sweeper should wear gloves and gown.	14 (10.6%)	19 (14.4%)	30 (22.7%)	39 (29.5%)	30 (22.7%)	100%
9	For each period Separate sterile syringe and needle should be used for aspirating multi-dose vials.	22 (16.7%)	17 (12.9%)	15 (11.4%)	54 (40.9%)	23 (17.4%)	100%

Table no 4 show response of the respondents to practice question in which most of the respondents n=35 (26.5%) were disagree and n=23 (17.4%) were strongly disagree.

n=12 (9.0%) of respondents were neutral about first question of this contrast. n=29 (21.9%) of the respondent's response to agree and n=33 (25%) of the respondents

were strongly agree to this question its means that they show negative response. n=62 (46.9%) were disagree and n=23 (17.4%) were strongly disagree. n=16 (12.1%) of respondents were neutral about 2nd question. n=29 (10.6%) of the respondent's response to agree and n=17 (12.8%) of the respondents were strongly agree to this question its means that they show negative response. n=52 (39.3%) were disagree and n=33 (25%) were strongly disagree. n=14 (10.6%) of respondents were neutral, n=13 (9.8%) of the respondent's response to agree and n=20 (15.1%) of the respondents were strongly disagree to 3rd question its means that they show negative response. n=42 (31.3%) were disagree and n=38 (28.7%) were strongly disagree, n=16 (12.1%) of respondents were neutral, n=19 (14.3%) of the respondent's response to agree and n=17 (12.8%) of the respondents were strongly agree to the 4th question of this contrast its means that they show negative response. Response of the respondents to question no 5th in which most of the respondents n=46 (34.8%) were disagree and n=24 (18.1%) were strongly disagree. n=22 (16.6%) of respondents were neutral about this question. n=19 (14.3%) of the respondent's response to agree and n=21 (15.9%) of the respondents were strongly agree to this question its means that they show negative response.

Table no 4 show response of the respondents to the 6th question in which most of the respondents n=48 (36.3%) were disagree and n=16 (12.1%) were strongly disagree, n=24 (18.1%) of respondents were neutral about this question, n=25 (18.9%) of the respondent's response to agree and n=19 (14.3%) of the respondents were strongly disagree to this question its means that they show negative response. n=36 (27.2%) were disagree and n=19 (14.3%) were strongly disagree, n=31 (23.4%) of respondents were neutral about this question. n=23 (17.4%) of the respondent's response to agree and n=23 (17.4%) of the respondents were strongly agree to this question its means that they show negative response and n=39 (29.5%) were disagree and n=30 (22.7%) were strongly disagree. n=30 (22.7%) of respondents were neutral, n=19 (14.3%) of the respondent's response to agree and n=14 (10.6%) of the respondents were strongly agree to 8th question its means that they show negative response. Table 3 show response of the respondents to the last question of this contrast in which most of the respondents n=54 (40.9%) were disagree and n=23 (17.4%) were strongly disagree, n=15 (11.3%) of respondents were neutral about this question, n=17 (12.8%) of the respondent's response to agree and n=22 (16.6%) of the respondents were strongly agree to the question its means that they show negative response.

Discussion:

Hospital developed infection may be a collective downside everywhere the planet. Thus, refine data and polished observe toward customary isolation precaution nursing skills will play vital roles in preventing infection. Nurses ought to have the possibility to observe in line with customary isolation precaution on commonplace as an important a part of patients' care. That's why this cross sectional study was administrated. Customary isolation precautions area unit central actions for preventing hospital assimilated infections and act as protecting measures for health care suppliers from infection through skilled contact. Finding of the study indicated that if the nurses have sensible data concerning customary isolation precaution then they absolutely have an effect on their observe however a bit amendment also can occur in nurse's behaviour.

Results of the current study reveal that most of the nurses were good knowledge about standard isolation precautions n=108 (81.8%) of the nurses response to YES that before and after patient care hand hygiene important to prevent infection out of 132 nurses n=90 (68.2%) of nurses believe that hand washing before and after using gloves is necessary to prevent infection from patient to patient and also to prevent from hospital acquired infection. There were a lot of knowledge question in which most of the nurses responses positively which means that nurses have good knowledge about standard isolation

precaution. In response to another question of knowledge that to protect mucus membrane of eye should wear goggles most of the nurses n=73 (55.3%) response to YES and know that use protective measures during invasive procedure is important.

These findings are in agreement with (Dimie, 2015) during which they unconcealed that the bulk (91.6%) of the study participants had awareness concerning customary isolation precautions of bar of infection. ninety seven knew that customary precautions ought to be accomplished on all patients. once inquired concerning recommendations for management of sharps instrument forty seven.7% told that sharps ought to be recapped. the foremost of the participants (95.8%) have data that before once direct contact with patients hands ought to be washed whereas ninety six.5% aware that once draw blood sample gloves ought to be wear. seventy three have smart data that once touching a patient's surroundings hand hygiene ought to be done (Dimie, 2015).

Finding of the current study showed that most of the nurse's attitude about standard isolation precaution was not satisfactory and they do not use protective measures to prevent from hospital acquired infection. Results from the responded reflect that out of 132 nurses n=49 (37.1%) wer disagree and n=57 (43.2%) were strongly disagree that wear gloves when taking blood sample and touching patient secretions. One should wear gloves when nasogastric tube

insertion and out n=51 (38.6%) were disagree and n=36 (27.3%) were strongly disagree which shows negative attitude toward standard isolation precautions. Same like that before wearing gloves hand washing is a trivial action n=49 (37.1%) response disagree and n=18 (13.6%) were strongly disagree which predict that these nurses attitude not meet the standard isolation precautions criteria.

According to Hosoglu S, (2011) mention in his study regarding perspective of nurses toward customary isolation precaution within which he state that solely (55%) of the study contributors understood that customary isolation precautions have nice importance in infection management and shield them and patients from getting infection. solely seven-member participants replied that hand laundry isn't necessary once touching patient encompassing, while 98.9% agree that gloves ought to be use once touching patient, s blood. The results of the study showed that almost all of the nurse's attitudes weren't smart toward customary isolation precaution and that they don't have correct data that handing hygiene before and once patient care is critical (Hosoglu S, 2011)

The present study also stated that nurse's practices were poor according to CDC guideline of preventing hospital acquired infection. The current study reveals that out of 132 n=62 (47%) nurses were disagree and n=23 (17.4%) were strongly disagree that after touching patient surroundings hand hygiene should be done this showed the poor practices toward standard isolation

precautions. Same like in another response n=52 (39.4) disagree and n=33(25%) were strongly disagree that hand washing after contact with patient blood, bloody fluid and secretions this predict the poor practices of nurses. Same like n=42 (31.8) disagree and n=38 (28.8%) strongly disagree that gloves should be wear when touching patient used instruments skin, wounds and mucosal membrane this also predict the poor practices toward standard isolation precautions. Use of mask when chance of splashing of blood possible which show that n=24 (18.2%) disagree and n=48 (36.4%) were strongly disagree these participants practice were poor due to which there is a chance of transmitting infection from patients to healthcare members. Responses from the nurses to another question regarding practice that have you wear gown in the case there has been hazard of wading blood or body secretions to you n=22 (16.7%) disagree and n=46 (34.8) were strongly disagree responses from these participants show that very little number of nurses has good practice and most of the nurses practice were not according to standards isolation precautions.

According to Khapre M, (2011) shows in his study concerning the observe of nurses, hand hygiene ought to done, 58.5%, 28.1% and 63.6% continuously experienced hand hygiene when touching patients, when touching patients' surroundings and when removing gloves, severally that show that nurses observe don't seem to be satisfactory and that they should have to

be compelled to improve their clinical talent or observe. solely twenty 2 per cent continuously wear gloves before taking blood sample of patient that additionally shows the poor observe of nurses. In respect to injection safety, 33.7% sometimes recap sharps with 2 hands, 7.9% typically bend or break sharps, while 63.6% had continuously disposed of sharps/needles in puncture proof boxes within the (Khapre M, 2011).

CONCLUSION:

The current study concluded that using standard isolation precaution is necessary for nurses to prevent hospital acquired infection. Study finding also show that most of the nurses contributing in the study have good knowledge about standard isolation precaution but there attitude were not satisfactory toward standard isolation precaution. Study finding also predict that nurses also have poor practice and they do not use standard isolation precaution to prevent infection. The study also concluded that there is negative association between knowledge and attitude of nurses but knowledge and practice were positive association which means that if the level of knowledge increase than practice will be improve if the environment of hospital are free of hazards.

RECOMMENDATION:

- Strict monitoring of nurses practices and application standard isolation

precautions in prevention of infection by infection control team.

- Higher authority and hospital management team should provide all personnel protective equipment in all departments.
- The hospital higher authority to build some policies and incorporate standard isolation precaution in their hospital's standard operating protocols.
- Hospital management should establish infection control committees to check resources of standard isolation precautions routinely available to infection control and to arrange training sessions and check that attitude and practices improves with provided training.

LIMITATIONS:

- The study done in single hospital and the results did not generalize.
- Repeat this study on large sample size and with probability of sampling.
- Explore the factors that were obstacles in practicing toward standard isolation precautions.
- The most considerable limitation of this study the practices not assessed by observation which should be evaluate by observation and which can give most accurate reflection of their practices.

References:

- Abdela, A. w. (2016). *Abdela, A., Woldu, B., Haile, K., Mathewos, B., & Deressa, T. (2016). Assessment of knowledge, attitudes and practices toward prevention of hepatitis B virus infection among students of medicine and health sciences in Northwest Ethiopia. BMC research note. Northwest Ethiopia.*
- Ahmed. (2013). Knowledge, attitude and practice towards standard isolation precautions among Iranian medical students. *Global journal of health science, 4(2), 142. Global journal of health science,.*
- Baqi, S. D.-7. (2009). Baqi, S., Damani, N. N., Shah, S. A., & Khanani, R. (2009). Infection control at a government hospital in Pakistan. *Int J Infect Control, 5, 1-7.*
- Barikani, A. A. (2012).
- Barikani, A., & Afaghi, A. (2012). Knowledge, attitude and practice towards standard isolation precautions among Iranian medical students. *Global journal of health science, 4(2), 142. Global journal of health science,.*
- Boujaafar. (2013). Guideline for isolation precautions in hospitals. *J Ayub Med Coll Abbottabad. Int J Infect Control, 5, 1-7*
- Cole. (2011). Infection control at a government hospital in Pakistan. *Int J Infect Control, 5, 1-7.*
- Siikamaki, H. (2012). Personal protective equipment management and policies: European network for highly infectious diseases data from 48 isolation facilities in 16 European countries. *Infection Control & Hospital Epidemiology, 33(10), 1008-101*

Dimie.(2105).). Knowledge, attitude and practice towards standard isolation precautions among Iranian medical students. *Global journal of health science*, 4(2), 142. *Global journal of health science*,.

Eskander, H. G. (2013). Eskander, H. G., Morsy, W. Y. M., & Elfeky, H. A. A. (2013). Intensive Care Nurses' Knowledge & Practices regarding Infection Control Standard Precautions at a Selected Egyptian Cancer Hospital. *prevention*, 4(19)

Fashafsheh, I., Aayed, A., Koni, M., Hussein, S., & Thultheen, I. (2016). Midwives and Nurses Compliance with Standard Precautions in Palestinian Hospitals. *Open Journal of Nursing*, 6(04), 294

Hosoglu. (2011). Exploring Knowledge, Attitudes and Practices of Registered Nurses Regarding the Spread of Nosocomial Infection.

Kamunge, E. W. (2013). Exploring Knowledge, Attitudes and Practices of Registered Nurses Regarding the Spread of Nosocomial Infection.

Khapre.(2011). Assessment of knowledge of hand washing among health care providers in Juba Teaching Hospital, South Sudan. *South Sudan Medical Journal* , 8(3), 60-62.

Langoya, C. O., & Fuller, N. J. (2015). Assessment of knowledge of hand washing among health care providers in Juba Teaching Hospital, South Sudan. *South Sudan Medical Journal*, 8(3), 60-62.

Loveday, H., Lynam, S., Singleton, J., & Wilson, J. (2014). Clinical glove use: healthcare

- workers' actions and perceptions. *Journal of Hospital Infection*, 86(2), 110-111.
- Mangoni.(2012). The first Global Patient safety challenge: "Clean care is safer care". Geneva. International Journal of Nursing Education.48(2), 45_56.
- McDonald, M., & Ness, S. M. (2014). Infection control. Health.
- Merriam Webster dictionary.com (2017) retrieved march 28,2017 from <http://www.merriam-webster.com/dictionary/attitude>, practice, nurse, and standard isolation precautions.
- Mohammadzadeh, M., Behnaz, F., & Parsa, S. (2013). Knowledge, practice and attitude towards standard isolation precautions in nurses, auxiliary nurses and midwives of Shahid Sadoughi hospital Yazd, Iran. *International Journal of Infection Control*, 9(1)
- Pittet. (2012). *Assessment of knowledge, attitudes and practices toward prevention of hepatitis B virus infection among students of medicine and health sciences in Northwest Ethiopia. BMC research note*. Northwest Ethiopia.
- Ogoina, D., Pondei, K., Adetunji, B., Chima, G., Isichei, C., & Gidado, S. (2015). Knowledge, attitude and practice of standard precautions of infection control by hospital workers in two tertiary hospitals in Nigeria. *Journal of Infection Prevention*, 16(1), 16-22.
- Organization, W. H. (2004). Practical guidelines for infection control in health care facilities: Manila: WHO Regional Office for the Western Pacific.
- Punjabi, S. K., Banglani, M. A., Priya, D., & Mangi, N. (2017). NEEDLE STICK INJURIES. *Oral Surgery*, 75, 37.35.
- Sarani, H., Balouchi, A., Masinaeinezhad, N., & Ebrahimitabs, E. (2016). Knowledge, Attitude and Practice of Nurses about Standard Precautions for Hospital-Acquired Infection in

- Teaching Hospitals Affiliated to Zabol University of Medical Sciences (2014). *Global journal of health science*, 8(3), 193
- Shaid. (2011). Health care related problems. *International Journal of Health Care Quality Assurance*. 4(19).
- Siegel, J. D., Rhinehart, E., Jackson, M., Chiarello, L., & Committee, H. C. I. C. P. A. (2007). 2007 guideline for isolation precautions: preventing transmission of infectious agents in health care settings. *American journal of infection control*, 35(10), S65-S16
- Thomas. (2013). Knowledge, attitude and practice towards standard isolation precautions among Iranian medical students. *Global journal of health science*, 4(2), 142. *Global journal of health science*,.
- Thu, T., Anh, N., Chau, N., & Hung, N. (2012). Knowledge, attitude and practices regarding standard and isolation precautions among Vietnamese health care workers: a multicenter cross-sectional survey. *Intern Med*, 2(4), 115.
- Zaidi, N., Javed, N., Naz, S., & Mumtaz, A. (2016). Gaps in Knowledge and Practices About Health Care Associated Infections Among Health Care Workers at a Tertiary Care Hospital. *Journal of Islamabad Medical & Dental College (JIMDC)*, 5(2), 84-87