Saudi Journal of Medical and Pharmaceutical Sciences **ISSN 2413-4929 (Print)**
Scholars Middle East Publishers **ISSN 2413-4910 (Online)**
Dubai, United Arab Emirates
Website: https://saudijournals.com/ DOI: 10.36348/sjmps.2017.v03i06.015

Original Research Article

Knowledge and Practice of Nurses about Needle Stick Injury at Lahore General Hospital

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Abstract: Needle stick injuries are wounds caused by needles that accidently harm the skin. These wounds are harmful for individuals who work with needles and other sharp equipments. These wounds can happen whenever individuals utilize, or discard needles. Needle stick injury (NSIs) is genuine reason behind blood borne infection transmitted among wellbeing mind personals. Administering infusion, pulling back blood, recapping needles, arranging needles, treatment of junk and dirty materials and exchanging blood or body liquid from syringe to example compartments are typical activities related with sharp injuries. The objective of this study is to assess knowledge and practice of needle stick injury among nurses. The significance of the study is that this study is beneficial for all nurses, undergraduate students and other health organization. In conclusion, the awareness of the nurses regarding needle stick injury and its preventive measure on their practical training was poor. A survey was finished by 253 nurses. In this review, needle stick harm was characterized by percutaneous harm brought about by empty borne needles, suturing needles, surgical tool and blades. In this review 77.1% nurses have great learning 20.2% have poor information and 2.8% have no information about empty borne needles and the fundamental driver of percutaneous wounds with empty bore needles were recapping). The greater part of wounds happened after utilize what's more, before disposal of the objects. . All in all, the familiarity with the nurses to needle stick harm and preventive measure and application on their functional preparing was poor. It would be suggest that the wellbeing training program for needle stick damage and preventive measure should be introduced to all the nurses and encourage them to apply during their daily practice.
Keywords: Nurses. Needles stick injury, knowledge and practice

INTRODUCTION

Needle stick injuries are wounds caused by needles that accidently harm the skin. Needle stick wounds are risky for health care providers, who work in clinical setting with hypodermic syringes and other sharp equipment's [1].

Injection safety is an important component to keep away from disease which is transmitted by unsafe practice. Safe infusion practices are one that does not harm the supplier, does not expose the supplier to any avoidable hazard. This is accomplished by giving an infusion utilizing a sterile syringe, utilizing sterile procedure by an all-around prepared individual and disposes of it appropriately [2].

Utilization of injections is accomplished for corrective and preventive purposes. Regardless of the way there are different strategies for taking medications, infusion will be supported by some prescribers and clients as the full impacts of the medication are experienced rapidly. In India, it is accounted for that more than 93% of injections are unsafe and about 60% of cases of HBV contamination are brought by such practices [3].

The best practices use for safe injection techniques are remove unnecessary injections, use sterile injection equipment and sharps, prepare and give infusion without contamination. Dispose of sharps to prevent reuse and harmful waste [2]. Other practice use in safe injection practices are:

Engineered technology

If possible, use those devices that prevent from needle-stick injury and have been shown to be effective for patients and care providers. Auto-disable (AD) syringes are increasingly available to prevent the reuse

of injection in selected settings, including immunization services.

Hand hygiene

Before preparing and giving injections wash or disinfect the hand.

Gloves

Gloves are not needed for injections. Single-use gloves may be indicated if excessive bleeding is anticipated.

Unsafe injection not only harm the patient but also risky to the Health Care Workers [4]. Most of the sharps wounds were because of the unavailability of sharps container at the site of the procedure and unnoticed needles are left in trays, kidney dishes, among drapes and among junk [5].

According to [6] the best ways to prevent from needle stick injuries are:

- Bring standard-marked, leak- proof, cut safe sharps holders.. Try not to accept such containers will be accessible there. Immediately discard utilized needle and sharps, which may be defiled, in the containers.
- Plan for the safe taking care of and transfer of needles before utilize.
- Secure utilized sharps containers during transport to prevent from dropping.
- Follow standard safety measures, avoid infection, and general hand hygiene practices
- Regularly.
- Report any needle stick and different sharps harm quickly [6].

Burden of work has influence the performance and protection of the nurses. Factors, for example, gathering of new patients, turnover of patients, documentation and performing surgical methods also other works for example, blood sampling all of which are of a higher recurrence in the morning shift can expand the rate of workload and every day routine of nurses acitvities that increase the errors or increase risk of needle stick injury [7].Although infusion practices, for example, recapping needles has been denied by the USA Occupational Safety and Health Administration's (OSHA) blood borne pathogen standards [3].

Unsafe injection is one of the significant hazard calculates the event of needle stick and different sharps related wounds in both health care workers and the overall population. There is some evidence of uncovering a high prevalence of unsafe injections practices among health care workers in creating nations, where around 90% of mischances identified with needle stick injuries happen [8]. Nurses reported more cases of NSIs (57.8%) in the morning shift than other shifts. Morning shift is considered as a busy working shift for nurses in terms of the number of patients that they look after and the number of tasks that they render [9].

Theoretical Framework

The health belief model has been used to develop effective interventions to change health-related behaviors by targeting various aspects of the model's key constructs. Interventions based on the health belief model may aim to increase perceived susceptibility to and perceived seriousness of a health condition by providing education about prevalence and incidence of disease, individualized estimates of risk, and information about the consequences of disease.

Problem Statement

According to literature review observed that most of the nurses received infection and blood transmitted diseses after needle stick injury in Pakistan. The rate of needle stick injury in Pakistan is 45%. [10]. Therefore, this study is to assess the knowledge and practices of registered nurses regarding needle stick injuries. The same problem observed in Lahore General Hospital.

Research Question

- What is the nurse’s knowledge about needle stick injuries?
- What are the current practices of registered nurses regarding needle stick injuries?

Objective

- To assess the knowledge regarding needle stick injuries among nurses in Lahore General Hospital.
- To study the practices of nurses regarding needle stick injuries.

Purpose of the study

The purpose of the study is to explore knowledge and practices of prevalence of needle stick injury among nurses of Lahore General Hospital, Pakistan.

Significance of the study

The study will enhance the knowledge of nurses about needle stick injury. Moreover, the study will help the nurses to overcome their weakness and boost up the strong point, as a result quality of patient care will be improved as well as health and morale of the nurses will enhance. The results will be shared to the institutional authorities that help them to modify the new standards and policies. Better quality of nursing care and practices will lead to enhance the organizational productivity as well as to generate the knowledge or information for the others.

LITERATURE REVIEW

Poor reporting of sharps-related wounds uncovers an inability to value the potential outcomes of such wounds [11]. Rates of location are additionally low, for instance, just 11% of glove perforation were recognized by the doctor in a review researching the utilization of blunt needles during obstetrical cut repair surgeries [12]. A review from Iran demonstrates the relationship between work move and frequencies of Needle stick injury. Around 60% of needle stick injuries had happened in the morning shift and recapping was the most well-known action causing Needle stick injury [8]. There are different factors that cause needle stick or sharp wounds, types of devices and method attempted, accessibility of preparing on more secure sharp utilize and proper disposal, Lack of information and attention to the outcomes of Needle stick injuries [13]Lack of sources and tiredness of staffs are likewise connected with expanded hazard of Needle stick injuries [14, 13]. Late reviews suggest that the majority of the quantity of needle stick wounds happen either by recapping of the needle (18%), trailed by exchange of sharps (16%) and fifteen percent wounds while trading a body fluid (blood) to an example bottle [15].Among the 35 million medicinal services specialists around the world, three million experience needle stick and sharps wounds each year [16].

The transmitting of infection after needle stick wounds because of various components like depth of the harm, types of devices utilized, and previous injury causing devices, e.g. regardless of whether it is in vein or artery, contamination status of the source [17]. The threat of transmitting HBV disease depends on upon the immunization status of the harmed medicinal services specialist. Health care workers with hepatitis B immunization and completely created invulnerability to the infection are at for all intents and purposes no hazard for contamination. The dangers for non-immunized health care workers range from 6%- 30%. [18]. Avoidance of needlestick wounds only wellbeing of the healthcare workers as well as enhance the pt security. 48% of nurses have been injured by used sharp and 45% have not received any training regarding safe needle use during their job employment. Therefore, nurses are always at the risk of needle stick injuries [19].

Because of the perceived danger of needle-stick wounds, safeguards have been put in place to attempt to lessen the risk of injury. These include the policy of universal precautions and needle fewer systems to connect with intravenous tubing [20]. Wearing two pair of gloves is a practice which protects the care provider from patients' blood and body liquids. A current review found that in 82% of situations when the external glove was punctured, the internal gloves had been found to protect the wearer's hand from contamination [20].Recently introduced guidelines for the prevention of sharps injuries in healthcare in Australia include, but do not mandate, access to and the use of safe engineered devices.

METHODOLOGY

The study was determined the knowledge and practice of needle stick injury among nurses of Lahore General Hospital. The individual and interactive effects of needle stick injury of the healthcare staff will be evaluated. Doctors, student nurses and Para medical staff will be excluded in this study. A descriptive correlational study will be used for this research project. Descriptive Study approach to quantitative research will use to assess the knowledge and practice regarding needle stick injury. A quantitative instrumental questionnaire will be used on likert scale based on health belief model and AIDE-MEMOIRE for a strategy to protect health which is adopted by the cited of Kye Mon Min Swe "Needle Sticks Injury among Medical Students during Clinical Training, Malaysia" [5]. The registered staff nurses at Lahore General Hospital will be participating in this research study. The total size registered nurse's population 690. The study was conduct at Lahore General Hospital. Convenient sampling technique will be taken in this study. The sample size 267 nurses will be taken according to sampling calculation formula by the "Sullivan formula" [21]. Data will be collected through questionnaire. Data will be analyzed by using SPSS version 21.0. Participants will be given an informed consent form to give agreement for involvement in this survey. Participant's confidentiality and privacy will be maintained. Beneficence of the participants must be maintained that will not any harm to the participants and will be protected the welfare of the participants. Research will be conducted after getting the permission of the head of department of Lahore school of nursing (The University of Lahore). Permission was taken by the higher authority of General hospital Lahore. All registered staff nurses will participate in this study.

ANALYSIS AND RESULT

This section contains 2 portions of analysis. First is demographic analysis it gives us details of 7 Demographic questions and second is descriptive analysis which gives us detail of 13 questions Of knowledge and 13 questions of practice are describing with the help of charts and table.

Table-1: Demographic data

Demographic data	Frequency	percent	Valid percent	Cumulative percent
organization name:				
Lahore General Hospital	253	100.0	100.0	100.0
Designation of participants:				
Charge nurse	253	100.0	100.0	100.0
Gender of participant:				
Male	1	.4	.4	.4
Female	252	99.6	99.6	100.0
Total	253	100.0	100.0	
Age group of participants:				
20-25y	99	39.1	39.1	39.1
26-30y	92	36.4	36.4	75.5
31-35y	42	16.6	16.6	92.1
36-40y	20	7.9	7.9	100.0
Total	253	100.0	100.0	
Participants stay in organization:				
<1year	34	13.4	13.4	13.4
1-5year	136	53.8	53.8	67.2
6-10year	57	22.5	22.5	89.7
Above 10year	26	10.3	10.3	100.0
Total	253	100.0	100.0	
Marital status of participants:				
Married	113	44.7	44.7	44.7
Unmarried	140	55.3	55.3	100.0
Total	253	100.0	100.0	
Qualification of participants:				
Nursing Diploma	253	100.0	100.0	100.0

DESCRIPTIVE ANALYSIS AND RESULTS

In this portion detail analysis of independent variable describe with the help of table and bar charts. In this study knowledge and practice are independent variable.

Knowledge regarding needle stick injury

There are 13 questions related to knowledge which were used for the assessment of knowledge regarding needle stick injury among nurses.

Table-2: Assessment of knowledge regarding needle stick injury

Questions	Frequency	Percent	Valid percent	Cumulative percent	Mean	Std. Deviation
Needle stick injury is a percutaneous wound?						
Good knowledge	229	90.5	90.5	90.5	1.09	.294
Poor knowledge	24	9.5	9.5	100.0		
Total	253	100.0	100.0			
Needle stick injury is the risk of transmission of blood-borne disease.						
Good knowledge	215	85.0	85.0			
Poor knowledge	35	13.8	13.8	85.0	1.16	.400
No knowledge	3	1.2	1.2	98.8		

Total	253	100.0	100.0	100.0		
Recapping needle prevents risk of needle stick injuries.						
Good Knowledge	168	66.4	66.4			
Poor knowledge	80	31.6	31.6	66.4	1.36	.519
No knowledge	5	2.0	2.0	98.0		
Total	253	100.0	100.0	100.0		
Needle sticks injury cause transmission of pathogens.						
Good knowledge	230	90.9	90.9			
Poor knowledge	20	7.9	7.9	90.9	1.10	.341
No knowledge	3	1.2	1.2	98.8		
Total	253	100.0	100.0	100.0		
It is necessary to report after the needle stick injury.						
Good knowledge	199	78.7	78.7			
Poor knowledge	51	20.2	20.2	78.7	1.23	.446
No knowledge	3	1.2	1.2	98.8		
Total	253	100.0	100.0	100.0		
Bleeding should be encouraged at the site of injury.						
Good knowledge	167	66.0	66.0	66.0	1.36	.512
Poor knowledge	82	32.4	32.4	98.4		
No knowledge	4	1.6	1.6	100.0		
Total	253	100.0	100.0			
PEP should be initiated within 1 hour of exposure of Needle stick injury.						
Good knowledge	70	27.7	27.7			
Poor knowledge	100	39.5	39.5	27.7	2.05	.777
No knowledge	83	32.8	32.8	67.2		
Total	253	100.0	100.0	100.0		
Affected area should be washed with soap and water.						
Good knowledge	184	72.7	72.7			
Poor knowledge	61	24.1	24.1	72.7	1.30	.525
No knowledge	8	3.2	3.2	96.8		
Total	253	100.0	100.0	100.0		
Does the person exposed to needle stick injury need tetanus vaccination?						
Good knowledge	109	43.1	43.1			
Poor knowledge	123	48.6	48.6	43.1	1.65	.628
No knowledge	21	8.3	8.3	91.7		
Total	253	100.0	100.0	100.0		
Needle should be recapped by using one hand to hold the cap and other to hold the needle.						
Good knowledge	195	77.1	77.1			
Poor knowledge	51	20.2	20.2	77.1		
No knowledge	7	2.8	2.8	97.2	1.26	.497
Total	253	100.0	100.0	100.0		
Is there is the risk of HIV transmission during needle stick injury?						
Good knowledge	197	77.9	77.9			
Poor knowledge	53	20.9	20.9	77.9		

No knowledge	3	1.2	1.2	98.8	1.23	.451
Total	253	100.0	100.0	100.0		
Is there is availability of HCV vaccine after needle stick injury?						
Good knowledge	209	82.6	82.6			
Poor knowledge	39	15.4	15.4	82.6	1.19	.443
No knowledge	5	2.0	2.0	98.0		
Total	253	100.0	100.0	100.0		
Improved engineering control devices reduce the risk of needle stick injury.						
Good knowledge	221	87.4	87.4		1.14	.393
Poor knowledge	28	11.1	11.1	87.4		
No knowledge	4	1.6	1.6	98.4		
Total	253	100.0	100.0	100.0		

Practice regarding Needle stick injury among nurses

It is very important that the nurses must have enough knowledge regarding needle stick injury and used proper techniques when provide care to the patients.

Table-3: Practice regarding Needle stick injury

Questions	Frequency	Percent	Valid Percent	Cumulative percent	Mean	Std. Deviation
Every nurse has chance to get needle stick injury.						
Agree	82	32.4	32.4			
Strongly agree	156	61.7	61.7	32.4		
Uncertain	6	2.4	2.4	94.1	1.81	.796
Strongly disagree	9	3.6	3.6	96.4		
Total	253	100.0	100.0	100.0		
Needle stick injuries are unavoidable things for nurses.						
Agree	45	17.8	17.8	17.8		
Strongly agree	34	13.4	13.4	31.2		
Uncertain	29	11.5	11.5	42.7		
Disagree	89	35.2	35.2	77.9	3.30	1.414
Strongly disagree	56	22.1	22.1	100.0		
Total	253	100.0	100.0			
Increase workload can lead to needle stick injury.						
Agree	74	29.2	29.2			
Strongly agree	164	64.8	64.8	29.2		
Uncertain	7	2.8	2.8	94.1	1.82	.717
Disagree	3	1.2	1.2	96.8		
Strongly disagree	5	2.0	2.0	98.0		
Total	253	100.0	100.0	100.0		
If nurses get infected with HIV infection, they should resign from their profession.						
Agree	82	32.4	32.4	32.4		
Strongly agree	65	25.7	25.7	58.1	2.65	1.583
Uncertain	29	11.5	11.5	69.6		
Disagree	13	5.1	5.1	74.7		
Strongly disagree	64	25.3	25.3	100.0		
Total	253	100.0	100.0			
The standard precautions to handle the sharp objects must always follow as improper handling can lead to get the						

infection.						
Agree	90	35.6	35.6			
Strongly agree	147	58.1	58.1	35.6	1.75	.737
Uncertain	9	3.6	3.6	93.7		
Disagree	2	.8	.8	97.2		
Strongly disagree	5	2.0	2.0	98.0		
Total	253	100.0	100.0	100.0		
The infection transmitted from needle stick injuries are life threatening.						
Agree	101	39.9	39.9			
Strongly agree	138	54.5	54.5	39.9	1.70	.721
Uncertain	6	2.4	2.4	94.5		
Disagree	5	2.0	2.0	96.8		
Strongly disagree	3	1.2	1.2	98.8		
Total	253	100.0	100.0	100.0		
Although there is a risk of infection, confident and skillfulness can prevent injury.						
Agree	109	43.1	43.1			
Strongly agree	124	49.0	49.0	43.1		
Uncertain	7	2.8	2.8	92.1	1.71	.802
Disagree	10	4.0	4.0	94.9		
Strongly disagree	3	1.2	1.2	98.8		
Total	253	100.0	100.0	100.0		
We haven't learned about standard precaution for needle stick injury.						
Agree	34	13.4	13.4			
Strongly agree	44	17.4	17.4	13.4		
Uncertain	87	34.4	34.4	30.8	3.00	1.156
Disagree	65	25.7	25.7	65.2		
Strongly disagree	23	9.1	9.1	90.9		
Total	253	100.0	100.0	100.0		
Unavailability of protective equipment can predispose a person to get needle stick injuries.						
Agree	75	29.6	29.6			
Strongly agree	145	57.3	57.3	29.6	1.90	.813
Uncertain	21	8.3	8.3	87.0		
Disagree	7	2.8	2.8	95.3		
Strongly disagree	5	2.0	2.0	98.0		
Total	253	100.0	100.0	100.0		
Handle needle without wearing glove is better than wearing glove.						
Agree	31	12.3	12.3			
Strongly agree	33	13.0	13.0	12.3	3.58	1.380
Uncertain	31	12.3	12.3	25.3		
Disagree	75	29.6	29.6	37.5		
Strongly disagree	83	32.8	32.8	67.2		
Total	253	100.0	100.0	100.0		
Reporting after needle stick injury is not much useful.						
Agree	49	19.4	19.4			
Strongly agree	34	13.4	13.4	19.4	3.28	1.432
Uncertain	20	7.9	7.9	32.8		

Disagree	98	38.7	38.7	40.7		
Strongly disagree	52	20.6	20.6	79.4		
Total	253	100.0	100.0	100.0		
Every health care worker should be immunized with Hepatitis B vaccine.						
Agree	116	45.8	45.8			
Strongly agree	111	43.9	43.9	45.8	1.72	.875
Uncertain	14	5.5	5.5	89.7		
Disagree	5	2.0	2.0	95.3		
Strongly disagree	7	2.8	2.8	97.2		
Total	253	100.0	100.0	100.0		
Health education for universal precaution on NSIs to the students and health care workers can reduce the prevalence of needle stick injuries among them.						
Agree	125	49.4	49.4			
Strongly agree	113	44.7	44.7	49.4		
Uncertain	4	1.6	1.6	94.1		
Disagree	4	1.6	1.6	95.7	1.64	.832
Strongly disagree	7	2.8	2.8	97.2		
Total	253	100.0	100.0	100.0		

Table-4: Summary of KMO Bartlett's assumptions

		Bartlett's Test		
	KMO	**Approx.**	**Df**	**Sig**
Knowledge	.617	350.423	78	.000**
Practice	.755	1077.586	78	.000**

At start complete instrument was consisted on total 26 questions. 13 questions related to Knowledge and 13 related to practice. Instrument was consisting of 1 independent variable and 2 Dependent variables. All assumption of factor analysis was fulfilled .Assumptions imply that KMO value must be above .60 and Bartlett's test must be significant so whole set criteria was fulfilled.

Table-5: association between knowledge and practice

Chi-Square Tests			
	Value	do	Asymp. Sig. (2-sided)
Pearson Chi-Square	763.789[a]	336	.000
Likelihood Ratio	318.901	336	.741
Linear-by-Linear Association	.123	1	.726
N of Valid Cases	253		
a. 371 cells (98.4%) have expected count less than 5. The minimum expected count is .00.			

The association between knowledge and practice was assessed through chi square test with p value=0.05, after apply this test the p value found .000 which is significant association between knowledge and practice as shown in above. (Table**: 5).**

DISCUSSION

The present study explores the nurse's knowledge and practices regarding needle stick injury At Lahore General Hospital. There was significant relation between respondent's knowledge and Practice. The study explore that the knowledge and practice greatly influenced by each other. The chi square value of knowledge with practice is p value = .000. The result showing

That the relationship between knowledge and practice is positive and relationship is significant. So the knowledge is a very important that affects the practice of performance significantly. The study shows that nurses have poor knowledge and practices regarding needle stick injury. Needle stick injury is an important cardinal indication of poor injection safety practices by health Workers. Only few nurses (17.1%) applied

preventive measures after getting needle stick Injury [22].The high ratings of recapping needle shows those health workers need Training on safe injection practices [25]. According to Onyemocho 70% of the respondents still recapp the needles all the time after use [23]. Another study shows that 69.9% participants do not recapp the needle after use [24]. Only 10% participants use gloves before administering the injection [26].

Limitations

The study has certain limitation that need to be acknowledged in the interpretation of the results. This is a cross-sectional study, therefore inferences related to the causality of association could not be drawn, and however, case-control and cohort studies should be conducted to establish causal relationship. Convenient sampling was applied in data collection process whereas the Probability sampling method can enhance the induction of different strata of the participants. Time duration was short for this study. Convenience sampling technique was also a limitation. Population was only selected from one government hospital. Lack of interest of participants, Staff nurses refused to participate due to work load, shortage of staff.

CONCLUSION

It is concluded from this study that knowledge of nurses regarding needle stick injury is poor in Lahore General Hospital. Remarkable percentage of nurses still has poor knowledge. It is a need of time to arrange education programme for the enhancement of nurse's knowledge.

Recommendations

Nurses must to know about needle stick injury because good practices or skills are very important in any health care setting. The study help to the hospital authority to make new policies and standards for best quality care of patients and increase the knowledge of other health care providers also.

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THE UNIVERSITY OF LAHORE

SCHOOL OF NURSING

This survey is being done by the Mary Zia student of PBSN, 02153029, The University of Lahore, Lahore School of Nursing. The purpose of this survey is to assess the Knowledge, and practices of Needle Stick Injury among Nurses. This survey is only for the academic purpose and the personal identity will be keep confidential. Thank you for your valuable time and opinion.

Signature----------**Demographics**

Organization		**Designation:**	
Gender	**1** Male ☐ **2** Female ☐	**Marital Status**	**1**.Married ☐ **2**.unmarried ☐
Age Group	**1** = 20- 25yrs ☐ **2**=26-30yrs ☐ **3** = 31-35 yrs ☐ **4** =36_40yrs ☐	**Qualification**	**1**.Nursing Diploma ☐ **2**.Specialization ☐ **3.** Post RN ☐
Stay in Organization	1 = < 1Year ☐ 2= 1-5Years ☐ 3= 6-10Years ☐ 4=Above 10Years ☐		

Sr#	**Nurses knowledge regarding needle stick injury**	**Good knowledge**	**Poor knowledge**	**No knowledge**
1	Needle stick injury is a percutaneous wound?	①	②	③
2	Needle stick injury is the risk of transmission of blood-borne disease.	①	②	③
3	Recapping needle prevents risk of needle stick injuries.	①	②	③
4	Needle sticks injury cause transmission of pathogens.	①	②	③

Sr. #	Nursing knowledge regarding needle stick injury	Good knowledge	Poor knowledge	No knowledge
5	It is necessary to report after the needle stick injury.	①	②	③
6	Bleeding should be encouraged at the site of injury.	①	②	③
7	PEP should be initiated within 1 hour of exposure of Needle stick injury.	①	②	③
8	Affected area should be washed with soap and water.	①	②	③
9	Does the person exposed to needle stick injury need tetanus vaccination?	①	②	③
10	Needle should be recapped by using one hand to hold the cap and other to hold the needle.	①	②	③
11	Is there is the risk of HIV transmission during needle stick injury?	①	②	③
12	Is there is availability of HCV vaccine after needle stick injury?	①	②	③
13	.Improved engineering control devices reduce the risk of needle stick injury.	①	②	③

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Sr #	Nursing Practices regarding needle stick injury	Agree	Strongly Agree	Uncertain	Disagree	Strongly Disagree
1	Every nurse has chance to get needle stick injury.	1		3	4	5
2	Needle stick injuries are unavoidable things for nurses.	1	2	3	4	5
3	Increase workload can lead to needle stick injury.	1	2	3	4	5
4	If nurses get infected with HIV infection, they should resign from their profession.	1	2	3	4	5
5	The standard precautions to handle the sharp objects must always follow as improper handling can lead to get the infection.	1	2	3	4	5
6	The infection transmitted from needle stick injuries are life threatening**.**	1	2	3	4	5
7	Although there is a risk of infection, confident and skillfulness can prevent injury.	1	2	3	4	5
8	We haven't learned about standard precaution for needle stick injury.	1	2	3	4	5
9	Unavailability of protective equipment can predispose a person to get needle stick injuries.	1	2	3	4	5
10	Handle needle without wearing glove is better than wearing glove.	1	2	3	4	5
11	Reporting after needle stick injury is not much useful.	1	2	3	4	5
12	Every health care worker should be immunized with Hepatitis B vaccine.	1	2	3	4	5
13	Health education for universal precaution on NSIs to the students and health care workers can reduce the prevalence of needle stick injuries among them.	1	2	3	4	5