

The Incidence and Circumstances of Needle Sticks Injury (NSI) among Arab Nurses Students: Comparative Study



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Introduction

- Needle stick injury (NSIs) is a major cause of blood borne infections transmitted among health care personnel. Needle stick injury means the pretrial introduction into the body of a health care worker, during the performance of his or her duties, of blood or other potentially infectious material.

Introduction

- There are more than 20 types of blood borne pathogens and mainly of hepatitis B, C and human Immune Deficiency Disease can be transmitted through needle stick injuries



Introduction

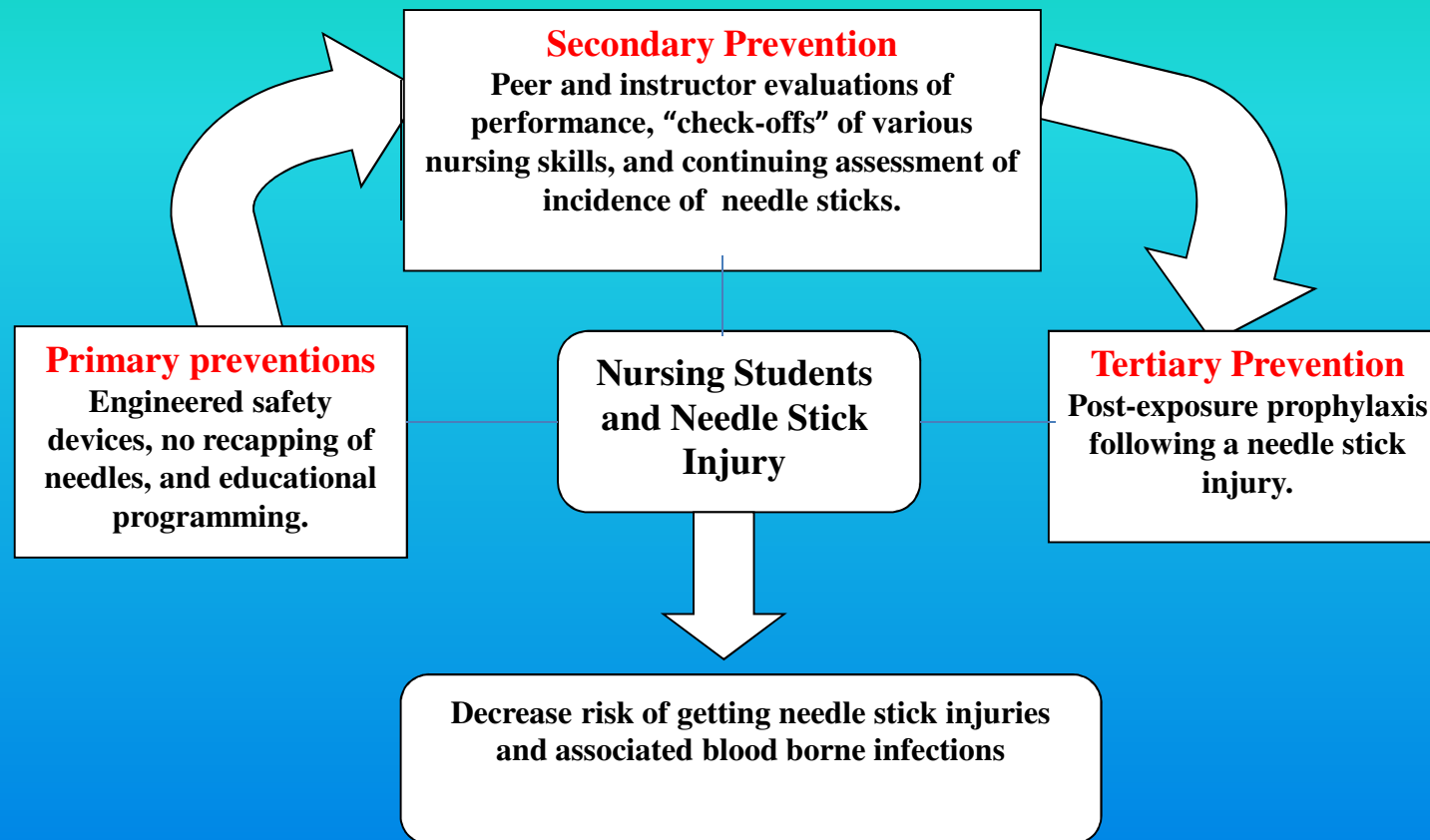
- The student nurses are sensitized to these risks from the outset of their training. However, they might have the knowledge on how to prevent accidental injuries, but their level of skills development, lack of training and awareness of importance, specifically the first and second year nursing students, might not yet be optimal.

needlestick



- This places a definite responsibility on the nurse educators and mentors in the clinical setting. Nurse educators are in part responsible for the actions of the students, and are subjected to liability for negligent acts such as inadequate supervision of students in the clinical setting

Theoretical Framework: Neuman Systems Model



Aim of Study

- To found out the incidence of needle sticks injury (NSI) among Arab nurse students
- To evaluate the circumstances around this situation.

Design

This multi-centre study was carried out as a cross-sectional survey based on a self-administered questionnaire .It was conducted among the undergraduate nursing students (from 2nd year to the final year). A descriptive comparative design was used to explore the incidence of needle sticks injury (NSI) among nurses students and evaluate the circumstances around this situation.

Setting

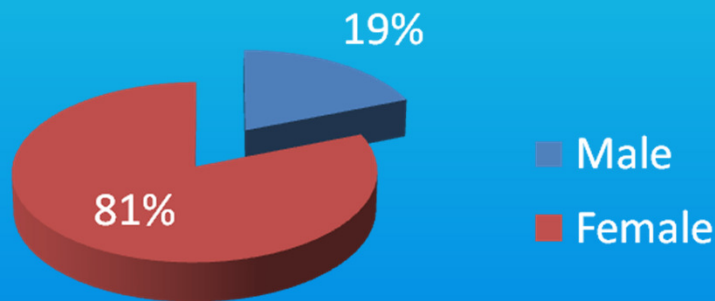
- The study was conducted at faculties of nursing among four Universities at AL-Hussein Bentalal at Jordan, Assiut at Egypt, Babylon at Iraq and El-Marefa at Saudi Arabia.

Sample

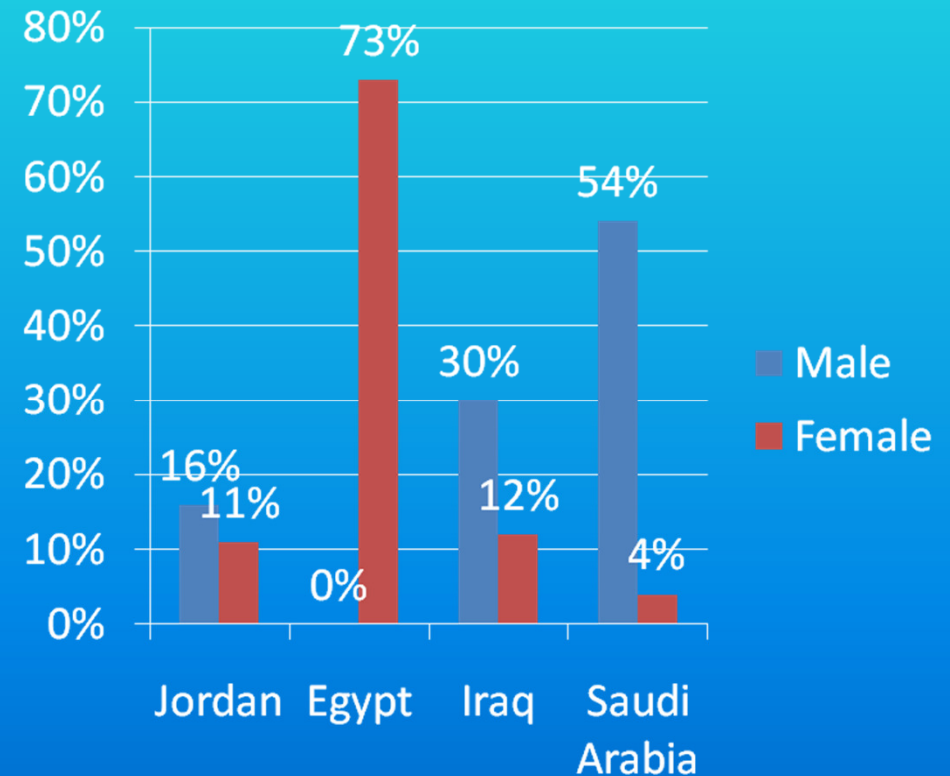
- The study sample included all undergraduate faculty of nursing students (1320) who agreed to participated in this study

Demographic Characteristics of Study Sample (All Universities No.1320)

Total by Gender

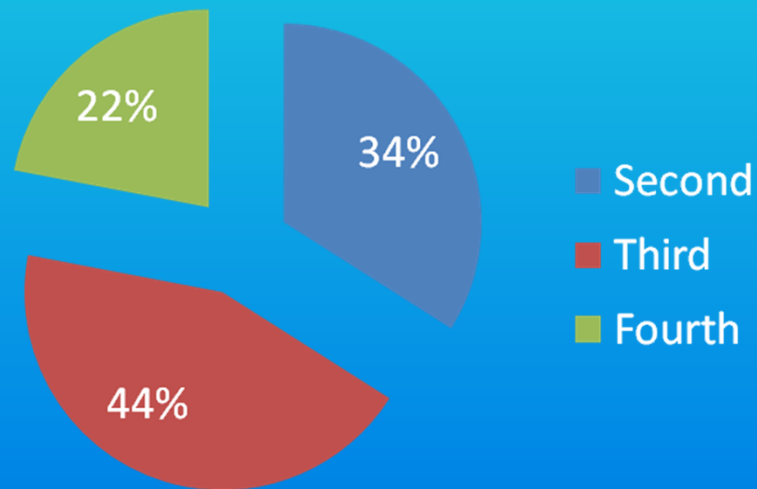


Gender by Universities

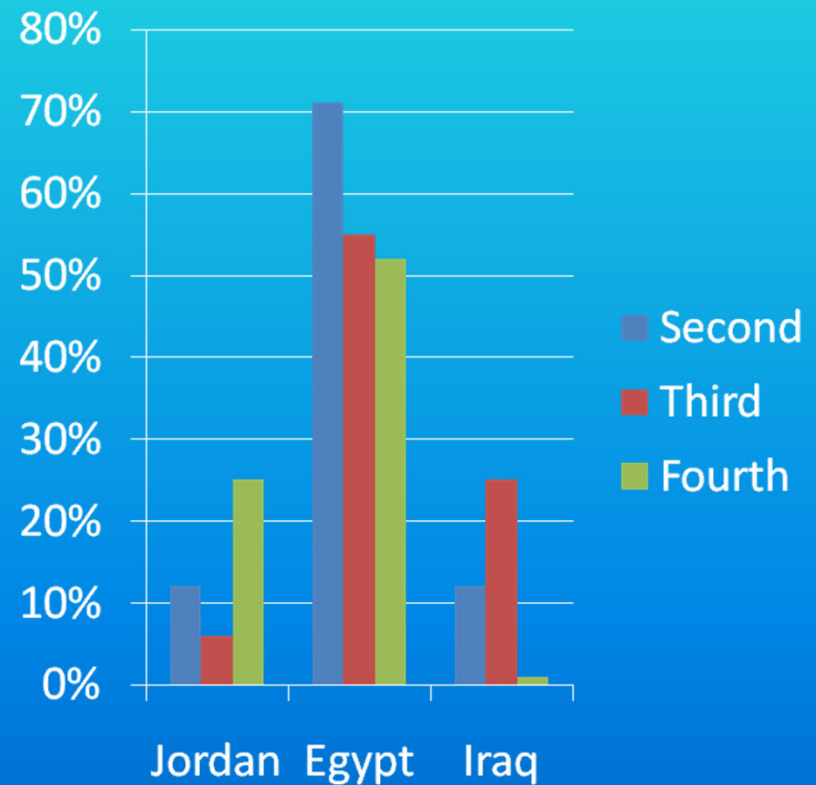


Demographic Characteristics of Study Sample (All Universities No.1320)

Total by Study level

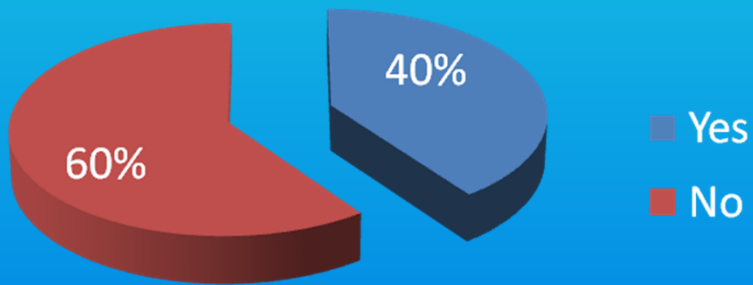


Study level by Universities

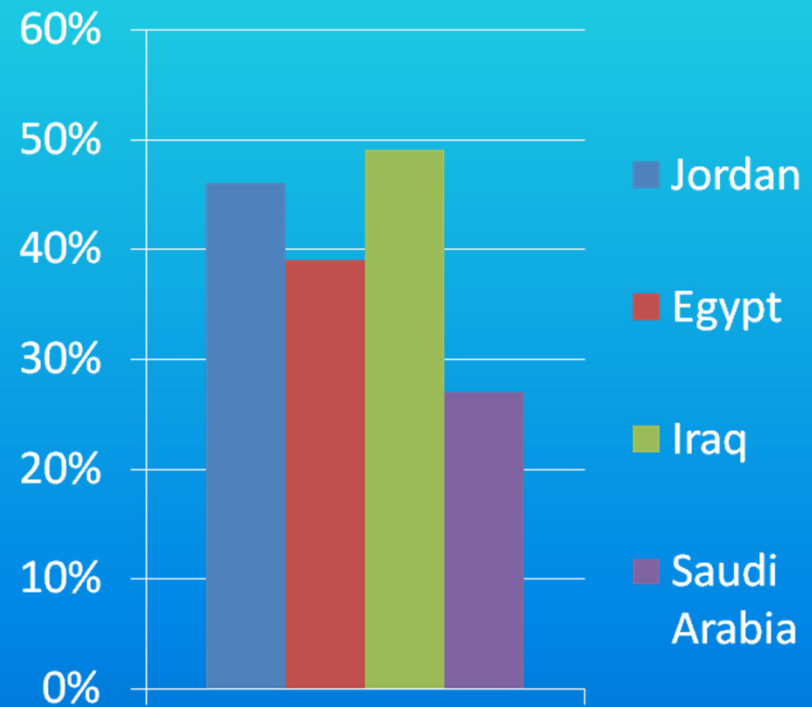


Experience of NSI

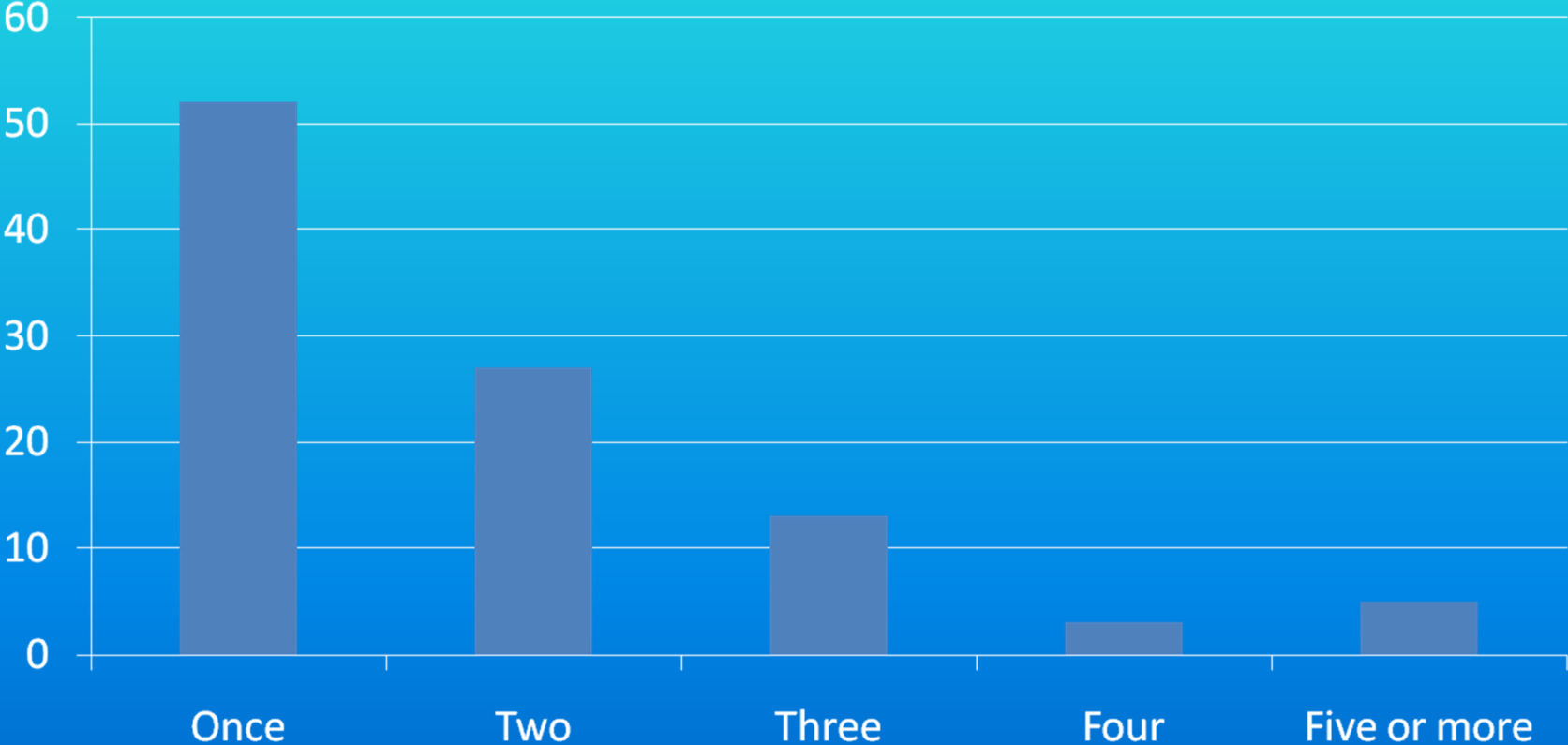
Total Number of Experience of NSI



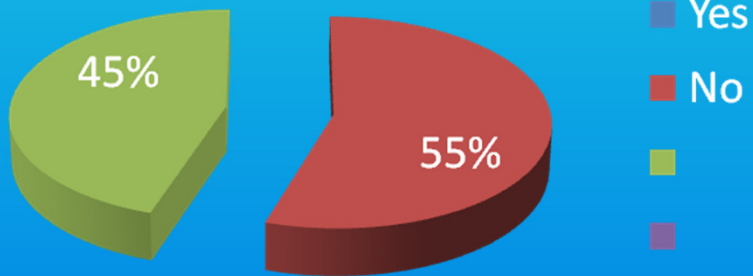
Mean score of Experience of NSI By University



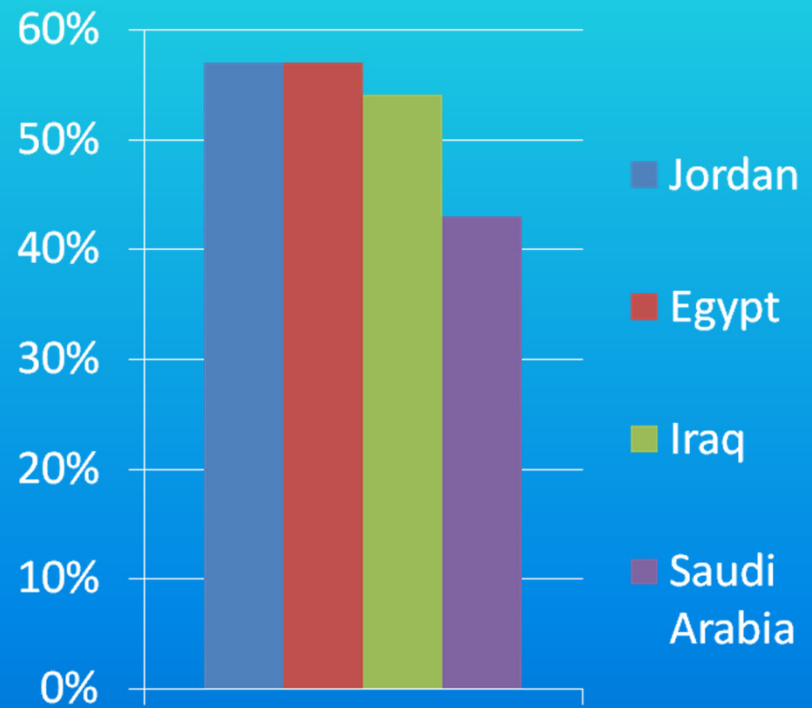
Total times of NSI



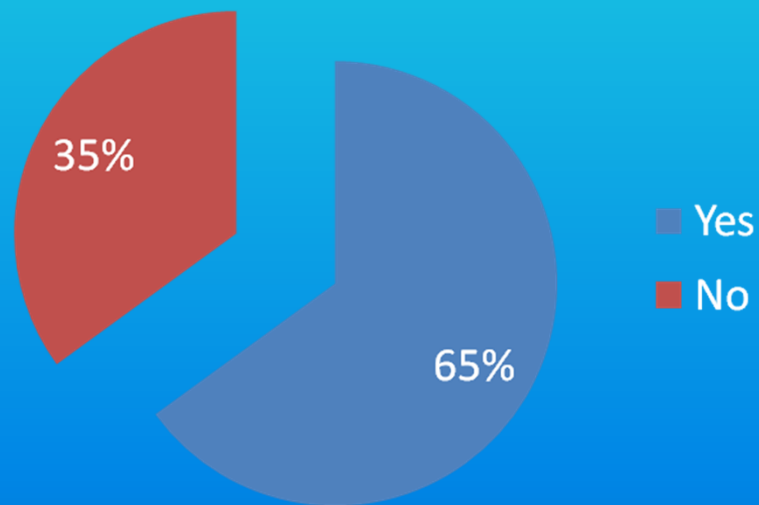
Reporting NSI by total students



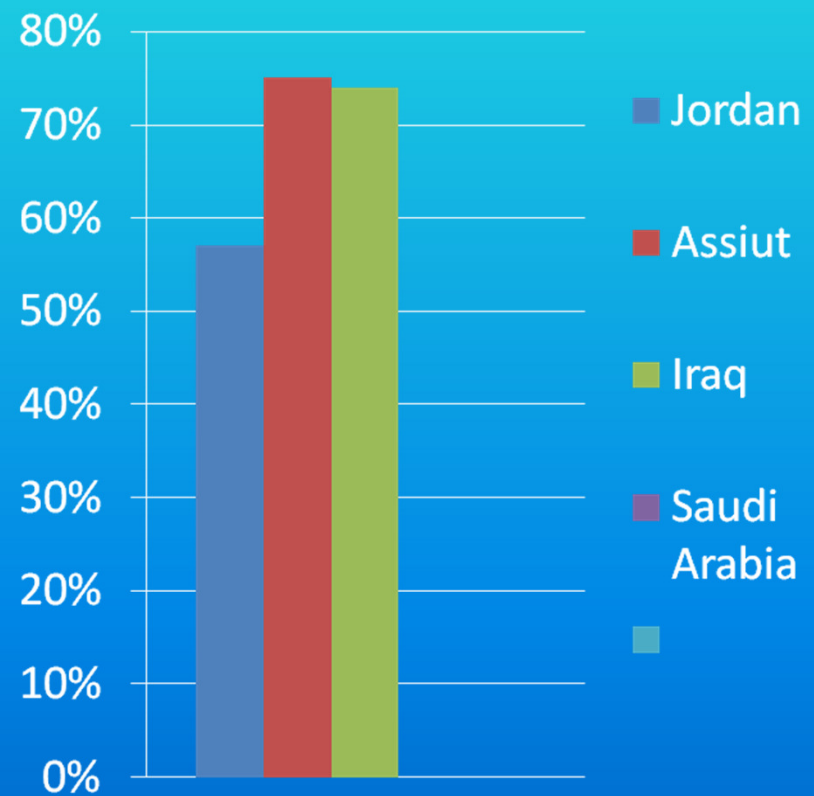
Reporting NSI by total students by universities



Recapping the needle



Recapping the needle by universities



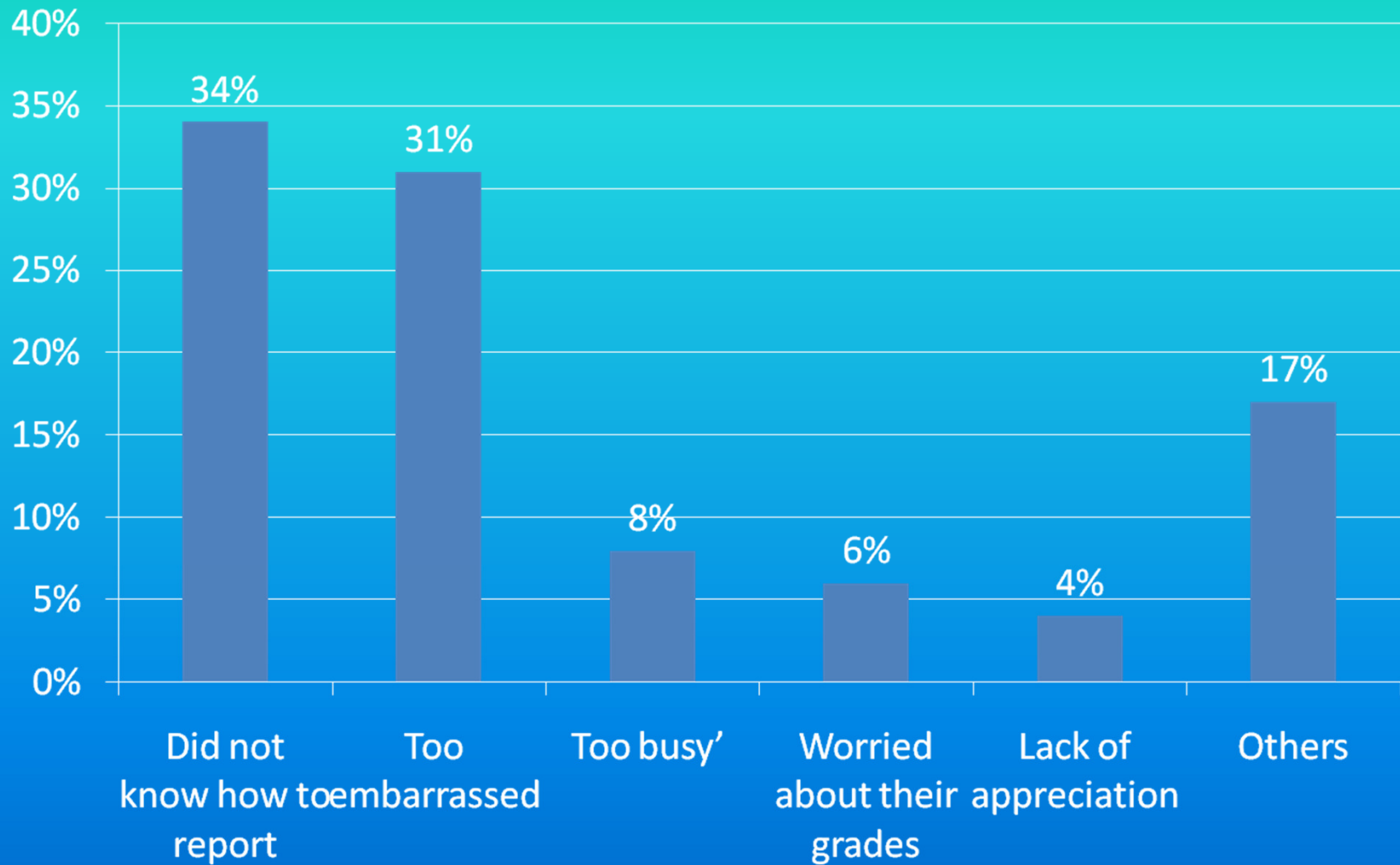
Correlation the study level did the NSI occurred by University

Items	Jordan	Egypt	Iraq	Saudi Arabia	Total No & %	P-Value
Second	66(18)	259(69)	20(5)	32(8)	377(72)	0.000
Third	0(0)	23(22)	76(72)	6(6)	105(20)	0.000
Fourth	8(44)	7(39)	0(0)	3(17)	18(3)	0.000
Every year	1(4)	22(85)	0(0)	3(11)	26(5)	0.000

Correlation the Location of Needle Sticks Injury (NSI) by University

Items	Jordan	Egypt	Iraq	Saudi Arabia	Total No & %	P-Value
Medical surgical	15(9)	123(74)	17(10)	11(7)	166(32)	0.000
ICU	10(20)	8(16)	26(51)	7(14)	51(10)	0.000
Laboratory	5(24)	7(33)	0(0)	9(43)	21(4)	0.000
Pediatric	0(0)	7(88)	0(0)	1(12)	8(1)	0.000
Emergency	34(31)	15(14)	50(45)	11(10)	110(21)	0.000
Other	11(7)	153(91)	0(0)	4(2)	168(32)	0.000

Reasons for didn't report



Risk and Safety concerning NSIs Incidence and circumstances

Universities Variables	Mean scores				
	Jordan	Egypt	Iraq	Saudi Arabia	Total
Experience of NSI	0.46	0.39	0.49	0.27	0.4
Did you tell someone	0.57	0.57	0.55	0.43	0.55
Did you recap the needle	0.09	0.43	0.25	0.45	0.35
Have you done any blood test after injury	0.17	0.15	0.43	0.43	0.15

CONCLUSIONS

- The results of this study point to the fact that there were high percentage of students exposed to needle stick and this is a serious indicator. As well as the consequences this confirms the lack of knowledge and experience among students toward recapping the needle, reporting and doing a blood test after the injury .

Cont.,

- Also not all students had awareness about the global preventive measures, acupuncture safety device or how to deal with the contaminated needle.

- There is a risk of acquiring blood-borne infections through NSI, as the students admitted to not following all the standard precautionary measures, indicating a lack of adequate knowledge among these students about the consequences of needle stick injuries.

- Therefore, proper steps are needed to promote the awareness of and educate students about the dangers and prevention of injuries.



Thank

You