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**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.3827514>Available online at: <http://www.iajps.com>**Research Article****NEEDLE-STICK INJURIES IN HOSPITAL STAFF****Dr. Faizan Saeed, Dr. Muhammad Usman, Dr. Muhammad Adeel Hassan**
Bahawal Victoria hospital (BVH) Bahawalpur**Article Received:** March 2020**Accepted:** April 2020**Published:** May 2020**Abstract:**

A needle stick injury is a percutaneous wound, occurs due to needle point as well as due to other sharp instruments. Most common in those people, who are handling needles in the medical settings. These injuries are occupational hazard in medical community. Needle stick injuries are the most common health care workers issue. A total staff of 80 was included in the study. The mean of the staff was 29.22 ± 2.34 years, mean age of the females was 25 ± 2.54 years and mean age of males was 30.32 ± 2.56 years. There were 30 (37.5%) females and 50 (62.5%) males in the study.

Keywords: *Needle Stick Injuries, Hospital Staff*

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INTRODUCTION:

Needle-stick injuries (NSIs) are known as “a piercing injury by a possibly contaminated instrument with another person’s body fluid”. The United States National Institute of Occupational Safety and Health (NIOSH), explains needle stick injuries are wounds caused by needles, i.e., hypodermic needles, blood collection needles, intravenous (IV) stylets, and needles used to attach parts of IV transfusion systems. Students of nursing, medical and paramedical remains on high risk to exposed with blood-borne diseases like Hepatitis-B (HBV), Hepatitis-C (HCV) and human Immunodeficiency virus (HIV) through sharp injuries. It was evidenced that high prevalence (61.5%) of sharps exposures among Nursing students in a Taiwan Nursing school. Health care with contaminated injections put the people at risk of HIV infection. In low- and middle-income countries, an estimated 40% of injections are with injection equipment that is unsafe. Recent research in sub Saharan Africa and Thailand propose that 1% and 3% of all HIV infections are due to usage of unsafe injections.

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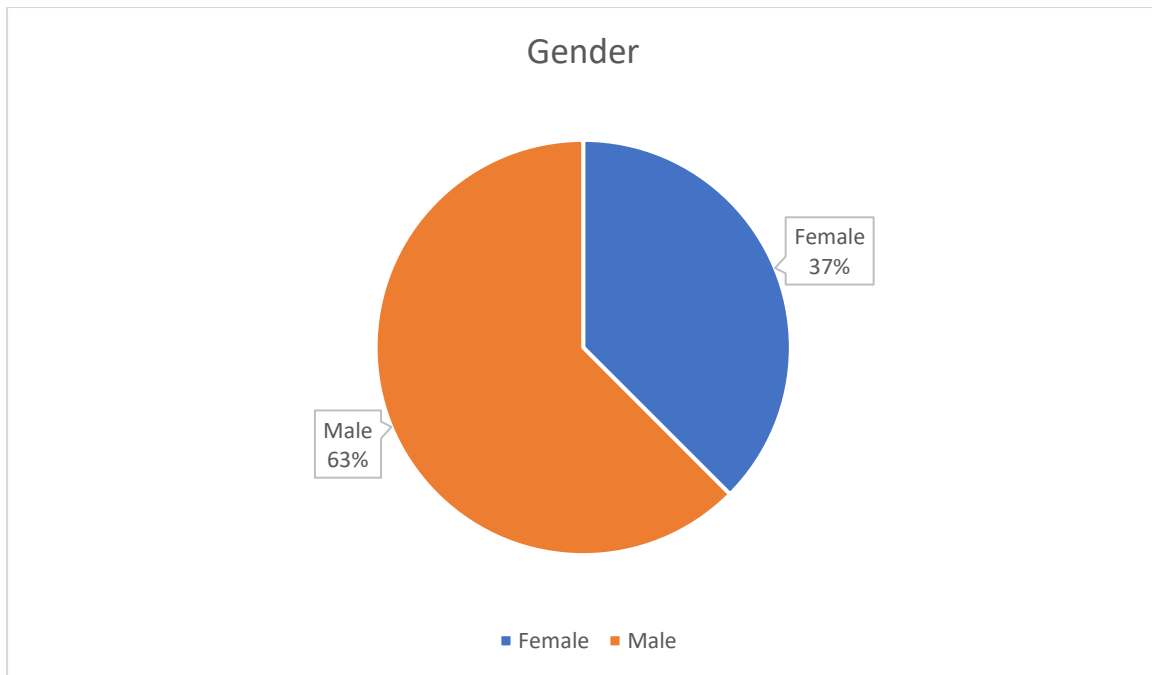
the unsafe collection and disposal of sharps waste. During surgery percutaneous injuries occur regularly due to which patient are at high risk of infection with blood borne pathogens (Tokars, 1992). The majority of gloves tears have an unknown mechanism that leads sharp injury, causes to transmit Blood borne pathogens in operating room. Needles should not recap after use because it can lead to an injury to health care providers. Needle stick injuries are responsible to transmit blood-borne diseases through the passage of the hepatitis B virus (HBV), the hepatitis C virus (HCV), and the Human Immunodeficiency Virus (HIV), the virus which causes AIDS.

MATERIAL AND METHODS:

This study was conducted in different hospitals. The data was collected from doctors, nurses and other hospital staff on a predefined proforma. Different Likert type questions were asked. All the responses were collected and analyzed in SPSS Ver. 25.0. The qualitative variables were presented as frequency and percentages. The quantitative variables were presented as mean and standard deviation. Relevant statistical analysis was performed.

RESULTS:

A total staff of 80 was included in the study. The mean of the staff was 29.22 ± 2.34 years, mean age of the females was 25 ± 2.54 years and mean age of males was 30.32 ± 2.56 years. There were 30 (37.5%) females and 50 (62.5%) males in the study. Fifty percent of the hospital staff told that, they have enough knowledge about the needle-stick injuries and that they always take care of protectives during handling the instruments. Rest of the staff was also aware about this type of injuries, but they do not take enough protectives, to prevent this injury. Five of them also suffered from this injury, during surgical procedures.



DISCUSSION:

Needle-stick and Sharp Injuries (NSIs) are accidental skin penetrating wounds caused by sharp instruments in a medical setting. They are defined as an accidental skin penetrating wound caused by hollow-bore needles such as hypodermic needles, blood-collection needles, Intra-venous (IV) catheter stylets, and needles used to connect parts of IV delivery system, scalpels and broken glass. Healthcare Workers (HCWs) face a high risk of an occupational exposure to blood, which can lead to the transmission of pathogens causing an infection and resulting in hazardous consequences for their health. Hepatitis B, Hepatitis C, and Human Immunodeficiency Virus (HIV) are of utmost concern because they can cause significant morbidity or death. The common high-risk situation of such an occupational exposure is percutaneous injury which is a high-risk injury.

The introduction of safety devices is one of the main starting points for avoidance of needle-stick injuries, and acceptance among healthcare workers is high. Further targets for preventive measures, such as training in safe working routines, are necessary for improvement of safe work conditions. Engineered devices can significantly reduce the incidence of such injuries even cost analyses indicate that use of these devices will be cost-effective in the long term. But introduction of such devices should accompany with the necessary education and training, as part of a comprehensive sharp's injury prevention and control program. A British study states that a smaller number of NSIs occurs when using safety syringes and to avoid NSIs, education plays a vital role particularly with effective implementation of the change to safety syringes with appropriate training.

Healthcare organizations can improve staff safety by investing wisely in educational programs regarding approaches to minimize NSIs risks.

CONCLUSION:

Needle-stick injuries are an important and continuing cause of exposure to serious and fatal diseases among health care workers. Greater collaborative efforts by all stakeholders are needed to prevent needle-stick injuries and the tragic consequences.

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