

Introduction

"Needlestick injuries (NSI) affect approximately 1,000 people per day across U.S. hospitals. Needlestick injuries cost an estimated \$3,042 per victim annually, according to the report. The costs go toward laboratory fees for testing exposed employees, associated labor and counseling and post-exposure follow-ups." (Beckner's Clinical Leadership & Infection Control, 2020). It was noted at an urban teaching hospital that needlestick injuries are an issue. Researchers believe this number is an underestimate of the actual amount of needle stick injuries. The purpose is to increase the education of staff nurses on the topic of needle stick injuries.

Literature Review

We thoroughly reviewed 56 studies to gather information for preventing needlestick injuries. 15 studies were cross sectional, 1 was methodological, 5 were meta-analyses, 6 were experimental, 3 correlational, 7 were descriptive, 1 was a prospective survey, 1 retrospective analysis, 1 systematic literature review, 4 exploratory, 7 phenomenological, 5 quasi-experimental. Common themes identified were nurses were the most likely to have needlesticks out of healthcare workers, education and training was the prevention strategy most likely to prevent needlesticks, safety devices once educated on decreased needlesticks, most common factor that causes this is burnout and stress, most are not reported so the actual number is underreported, and the need to get tested for disease transmission after

Educational Handout

NSI PREVENTION
needle stick injury prevention

Almost 6 out of 10 injuries were not reported to the appropriate person with the main reason being time restraint.

PREVENTION

- Use proper safety mechanisms, never recap needles, & put sharps in designated containers.
- Follow standard precautions, infection prevention, & general hygiene
- Participate in blood borne pathogen training
- Report injuries immediately

WHAT TO DO IF A NSI OCCURS

Immediately follow these steps if a NSI occurs;

1. Wash needles ticks with soap and water
2. Report incident to supervisor
3. Immediately seek medical treatment

HOW TO REPORT A NSI

1. Determination of employee exposure
2. Implementation of methods of exposure control, including:
 - Standard precautions
 - Work practice controls
 - PPE
 - Housekeeping
3. Hepatitis B vaccine
4. Post exposure evaluation and follow up
5. Employee education and training
6. Record keeping
7. Procedure for evaluating circumstances surrounding an exposure incident
8. Surveillance

PROTECT YOURSELF AND OTHERS- USE SHARPS WITH SAFETY FEATURES

NOW YOU SEE IT. **NOW YOU DON'T.**

BE PREPARED. Anticipate injury risks, and ensure that you use safety devices with safety features whenever it is available.

BE AWARE. Learn how to use the safety features on sharp devices.

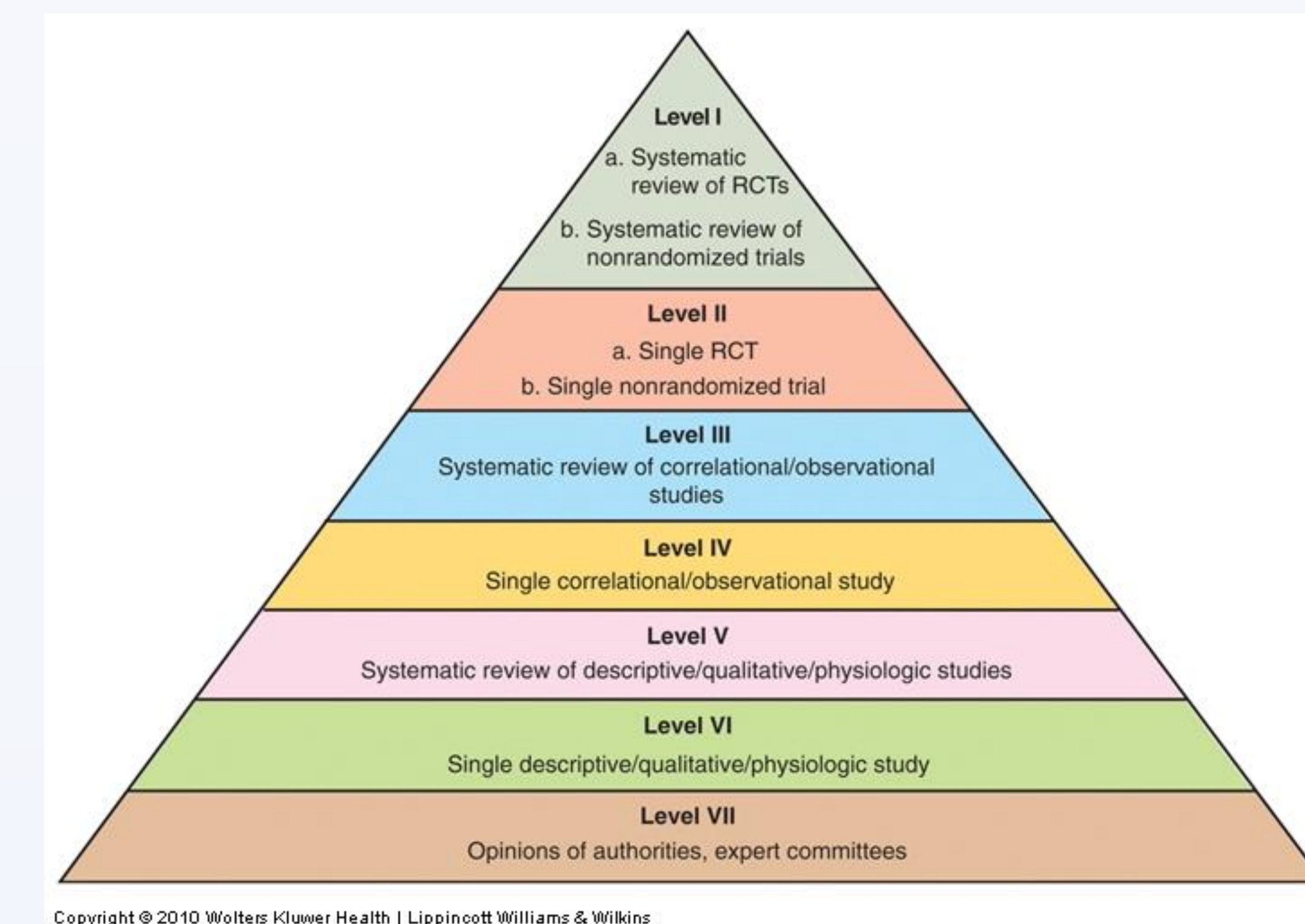
DISPOSE WITH CARE. Engage in safe disposal practices and dispose in the appropriate container.

sharps

Background and Significance of Research

The aim of this quality improvement project was to assess the cause of the large amount of needlesticks that occur in the nursing field with particular focus on the cost of NSIs, why they occur, prevention methods, incidence rates, diseases that occur from NSIs, protocols following needlestick injuries, and rates of reporting.

The significant of our research about needle stick injuries (NSI) was to determine the incidence of NSI, prevention methods, education strategies, when and where NSI occurred, safety mechanisms, cost, and testing protocols. However, our focus was on preventing NSI. NSI can lead to serious diseases like Hepatitis C and HIV. This can be prevented by proper needle safety and prevention tactics, along with education on how to report and treat these injuries in event of their occurrence.



Clinical Significance

Nurses are more likely to suffer a needle stick injury due to be the most involved with one-on-one patient care.

- Nursing student education and continued education of employed nurses have proven to be the best prevention methods to avoid needlestick injury
- Starting education from early on (in nursing school) leads to improvement in clinical Use of safety devices reduces the chance of encountering sharps. Safety devices are available, including cannulas, syringes with special safety features, needle-less access devices, and devices on IV tubing systems Nurses have the highest rate of burnout There is a positive relationship between the amount of stress felt by nurses and the incidence of needlestick injury
- Needlestick injuries are underreported
- Diseases that are caused by needlestick injury include: Hepatitis B, Hepatitis C, and HIV

In conclusion, continuance on needle stick prevention education and the protocols to follow when such events occur are a necessary implementation.

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