Literature Review of Nosocomial Infections Passed Through Nurses’ Personal Items

Corina Hickman
Department of Nursing, Dominican University of California, San Rafael, California

Abstract
- Nosocomial infections are infections whose development is favored by a hospital environment.
- In 2011, CDC stated that there were 721,800 nosocomial infections.
- Nosocomial infections can develop due to non-sterile environments, contaminated hospital equipment, or dirty room environment.

Problem Statement
- In 2002, nosocomial infections killed approximately 99,000 patients, representing about 1.7 million cases a year that are traced back to nosocomial infections; and hospitals need to do more education and put more of an importance on the cleanliness of all employees’ hands.

Literary Findings

Scrub
- Pathogenic bacteria was found on all scrubs
- Majority of the bacteria was found on pockets (pants and shirts), area of abdomen, and the crotch area.
- Literature found that it was not the scrubs that were the problem, but it was hands and the contamination of the hands.

Cell Phone
- One article found that cell phones used at the hospital were more colonized pathogen microorganisms.
- The other two studies found that pathogenic microorganisms were found on their phones.
- For these studies, their phones were tested to see if they had any pathogenic microorganisms on their phones.
- The results indicated that the cell phones may serve as a reservoir for contamination of the cleanliness of the employees’ hands.

Stethoscope
- There was pathogenic bacteria found on all of the stethoscopes’ diaphragm.
- The literature concluded that all stethoscopes worn by nurses and other healthcare providers should be sanitized between each patient.
- Literature found that it was not the scrubs that were the problem, but the smooth surfaces of new smart phones does not allow pathogenic microbes to stick to the phone.
- The smooth surfaces of new smart phones does not allow pathogenic microbes to stick to the phone.

Professional Practice
- The research design will be a quantitative survey design and the instruments, created for this study, are: demographics include: age, gender, length of time as a nurse, length of time at current hospital, educational background, average hours worked per week, 12 or 8-hour shifts, do you work at more than one hospital, and depency.

Survey
- Cell Phone
  - How confident are you, on a scale from 1 to 10, that your cell phone is germ free?
  - Do you keep your cell phone on you while you are working on the floor?
  - Do you bring your cell phone out while you are working?
  - If yes, what do you use your cell phone for?
  - Approximately, how many minutes a shift is your cell phone out of your pocket?
  - Do you wash your hands before and after touching your phone?

- Scrubs
  - Are your scrubs brought from home or supplied by the hospital?
  - How often do you wear the proper PPE as to not get contaminated?
  - Are your scrubs laundered or left unwashed?

- Stethoscope
  - Stethoscopes have the potential of being a fomite

Research Proposal
- The research design will be a qualitative survey design and the instruments, created for this study, are: demographics include: age, gender, length of time as a nurse, length of time at current hospital, educational background, average hours worked per week, 12 or 8-hour shifts, do you work at more than one hospital, and depency.

Survey
- Cell Phone
  - How confident are you, on a scale from 1 to 10, that your cell phone is germ free?
  - Do you keep your cell phone on you while you are working on the floor?
  - Do you bring your cell phone out while you are working?
  - If yes, what do you use your cell phone for?
  - Approximately, how many minutes a shift is your cell phone out of your pocket?
  - Do you wash your hands before and after touching your phone?

- Scrubs
  - Are your scrubs brought from home or supplied by the hospital?
  - How often do you wear the proper PPE as to not get contaminated?
  - Are your scrubs laundered or left unwashed?

- Stethoscope
  - Stethoscopes have the potential of being a fomite

Indications for Clinical Practice
- The importance of this study is to see if nurses have the time to properly don the correct PPE while working and if nurses are washing their hands as much as they need to. In all of the literature review that was read the two things that nurses need to make a priority when working are; proper hand washing and using alcohol to clean their stethoscopes between patient contact. There are 1.7 million cases a year that are traced back to nosocomial infections; and hospitals need to do more education and put more of an importance on the cleanliness of all employees’ hands.

References

Acknowledgments
- I would like to thank Dr. Peters for giving me the confidence to present my work and for believing in me. I would also like to thank my fellow for never giving up on the throughout my nursing school career.