Implementation of Infection Control Bundle in an Inpatient Rehabilitation Facility

Kim Schober MSN, RN, CRRN
Lubbock Christian University
Trustpoint Rehabilitation Hospital of Lubbock

BACKGROUND & SIGNIFICANCE

- The CDC reported 721,800 Healthcare Associated Infections (HAIs) in United States hospitals for 2013. The report goes on to state over half of the reported infections developed outside of the intensive units ("Data and Statistics | HAI | CDC," 2015).
- The primary source of admission to rehabilitation facilities is acute care hospitals where patients have a high rate of skin colonization of multi-drug resistant organisms (MDROs) that could lead to the development of infection during rehabilitation treatment.
- Rehabilitation facilities are charged with the task of decreasing HAIs within their facilities while effectively rehabilitating patients within a limited number of treatment days.
- No research was found to evaluate the effectiveness of utilizing daily patient bathing along with a more lenient two-tiered infection control policy.
- Patients must be educated how to decrease infection while in the rehabilitation facility and after discharge and re-introduce into the community.

LITERATURE REVIEW

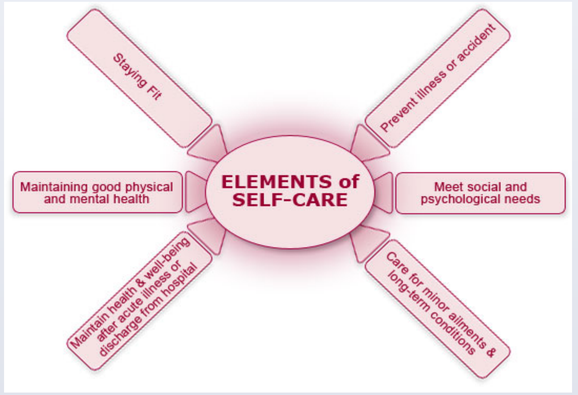
- Increased time on isolation during rehabilitation been shown to have adverse effects on the patient's length of stay (Colorado, Del Torro, & Tarima, 2014)
- Rehabilitation nursing focuses on returning the patient to the community and to their previous state of self reliance while maintaining their health (Wayne, 2014)
- As a portion of the infection control bundle, the patients are asked to shower if possible instead of taking bed baths. Showering washes bacteria and infective spores off their skin and down the drain. Showers have been associated with improved patient satisfaction scores in cardiac rehabilitation patients (Lopes, Nogueira-Martins, & de Barros, 2013)

- Equipment in the hospital are frequently contaminated with infectious bacteria despite disinfection recommended by the CDC. Daily showers and frequent patient handwashing help to remove skin contamination on the patients in the IRF who are utilizing equipment in the rehabilitation gym (Wright, Marvel, Neubrander, & DesMarteau, 2014)

CONCEPTUAL FRAMEWORK

Dorothea Orem's Self Care Model assumes:

- People should be self-reliant, and responsible for their care.
- A person's knowledge of potential health problems is needed for promoting self-care behaviors.



- Rehabilitation Nursing's focus it to return patient to their previous state of self reliance
- Educating the patient infection potential, encouraging daily baths, and the importance of handwashing will assist the patient to return to their optimal level of health and self care while avoiding infection during and after their stay in the Inpatient Rehabilitation Facility.

HYPOTHESIS

Does implementation of daily showers and a two-tiered infection control bundle reduce infection rates in a inpatient rehabilitation facility?

METHODOLOGY

- A combined retrospective and prospective design will be used to test the effectiveness of the Two-Tiered Infection Control Bundle in reducing infection rates in an inpatient rehabilitation facility.
- Retrospective infection rates from a six month period will be compared to prospective infection rates from a six month period following implementation of the infection control bundle.
- Chi-square will be used to test the proportional difference ($p<0.05$) between infection rates in each group and analyzed using *SPSS* version 22.

RESULTS

- The researcher believes the new Infection Control Bundle will:
  - Decrease the infection rate in the IRF
  - Decrease the length of stay for patients with MDROs and C-Diff infected patients
- The researcher believes educating staff and patients on the incidence of MDROs and C-Diff will result in:
  - Increase compliance with patient's daily bathing and hand washing routines
  - Increased compliance with hand washing for the patients and staff
  - Increased compliance with infection control policies
  - Increase patient's awareness of infection containment after discharge

REFERENCES

References available upon request at:
KSchober0995@LCU.EDU