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Barriers, Perceptions and Compliance: Hand Hygiene in the Operating Room & Endoscopy Suite

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**Background**

- Non-surgical scrub hand hygiene (HH) practices, including alcohol-based antiseptic hand rubs, provide a safe and effective intervention in preventing the spread of infection.
- Nevertheless, HH compliance is low in the operating room (OR) and endoscopy procedures rooms with 2% and 8% compliance of foaming in/out respectively.
- Endoscopy procedure rooms (EPR) exhibit an overall baseline compliance rate of 21.4%.
- In 2011 there were 1.9 surgical site infections (SSI) per 100 surgeries.
- Two-way and three-way contingency tables were used for analysis.

**Objective**

We examined the barriers and perceptions of HH in the OR and EPR.

**Methods**

- Two separate but similar IRB approved voluntary, anonymous surveys containing 25 Likert-scale and 1 free response questions were distributed to health care personnel at medical conferences and in common work areas in both the OR and EPR.
- Resultant data was analyzed using Statistical Analysis Software (SAS version 9.4).
- Pearson chi square and Fisher’s exact tests were performed using Survey containing 25 Likert-scale and 1 free response questions.
- There is adequate HH practice in the OR at VCUHS.

**Results**

- A total of 271 (36%, n=774) OR and 29 (33%, n=89) EPR surveys were collected.
- Total self reporting of foaming in/out compliance was 73% (n=392) in the OR and 95% (n=40) in the EPR.
- The greatest barrier to HH in OR was inconvenience (49%, n=187).
- The greatest barriers to HH in the EPR were inconvenience and forgetfulness (20%, n=40).
- OR environmental services (EVS) personnel were aware of the HH policies (100%, n=40).
- The importance of HH was emphasized in EVS training (80%, n=115).

**Conclusions and Implications**

- Despite poor observed HH compliance, the majority of OR and EPR respondents are aware of HH policies and the benefits in reducing HAIs.
- There is adequate access to foam in the OR/EPR and it is physically tolerated.
- Although HH practices are encouraged in both areas, OR/EPR managers poorly role model HH.
- OR nurses are empowered HH advocates, knowledgeable of the benefits of HH and may serve as change agents to improve HH compliance.
- Hospitals promoting HH in the OR/EPR should:
  - Be knowledgeable of perceptions and barriers across services.
  - Increase the awareness/education of HH to all providers.
  - Empower employees to address colleagues’ HH.
  - Remind supervisors to lead by example.
  - Measure HH compliance with feedback to managers and frontline providers.

**References**