

# The Impact of Isolation Precautions on Family Members in the Surgical ICU

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## 1 Background

Strategies to prevent spread of hospital acquired infection and drug resistant pathogens in a hospital include: strict hand hygiene precautions, placing patients in private rooms, and personal protective equipment (PPE) (e.g. gloves, gowns) during patient care (Calfée et al. 2008).

Patient visitors are instructed to wear PPE if the patient has been placed on isolation precautions. However, interviews have shown that people are oftentimes confused by the meaning of isolation precautions, or are never told of the infection (Newton, Constable & Senior 2001). One Hopkins study found that only 39% of MRSA carriers' caregivers were told they have MRSA. (Sengupta, Rand, Perl & Milstone, 2011)

## 2 Objectives

Determine family knowledge about placement on isolation precautions

Find out if family members can appropriately name the bacteria responsible for contact precautions

Ascertain if hospital staff members are disseminating information to families appropriately

## 3 Methods

Family members of isolation as well as non-isolation patients were identified on the SICU and Weinberg Intensive Care Unit (WICU). They were asked to participate if the patient had been on isolation precautions for at least 48 hours, and if they felt comfortable to be interviewed. Qualitative and quantitative data were collected. Family members were interviewed and responses were recorded and analyzed for themes.

Family members were also asked to complete a total of four questionnaires for quantitative results. These included:

- Life Orientation Test
- Critical Family Needs Inventory
- Depression Scale
- Anxiety Survey

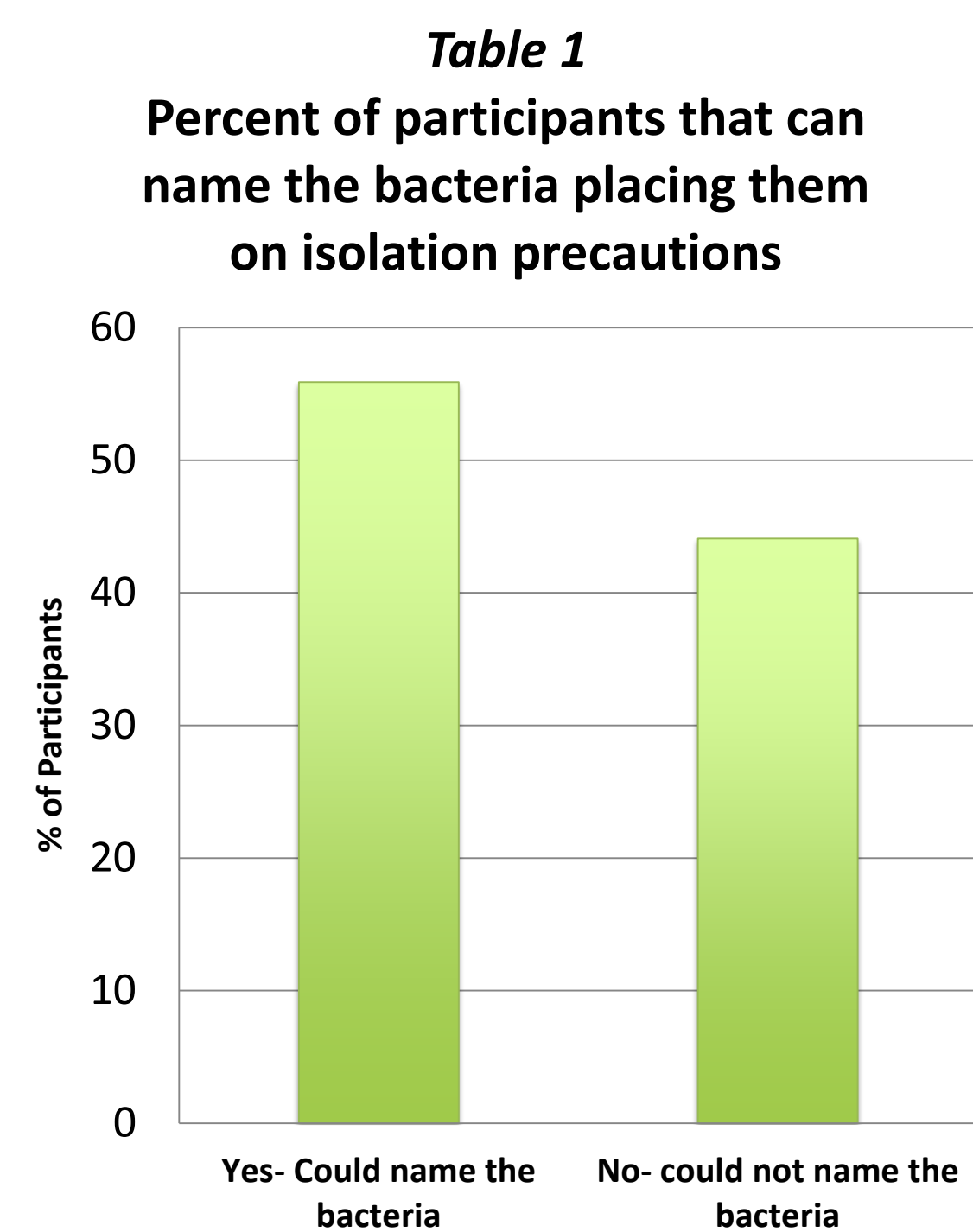
This study was IRB approved by Johns Hopkins Hospital. Verbal consent was taken from all participants before every interview.

## 4 Results

The sample included 51 interviews of family members (37 isolation patients and 14 non-isolation patients). Below is a sampling of question responses from the qualitative interview. Non-isolation participants tended to be less aware of PPE as compared to isolation participants.

Question 1: *Can you tell me in your own words, why your family member is on isolation precautions?*

Common words used: don't know, MRSA, VRE, bacteria, sick



Question 4: *How do you think your family member has benefited from the isolation procedures?*

Common words used: protective, safety, germs, infection, bugs

Quote: "I can only assume that it is more beneficial to be in that situation than being open to the public. Because if someone was to walk in, she might get something."

Question 6: *Did you see other families in the ICU visiting patients who did not have to wear gowns and gloves, if yes, how did that make you feel?*

Common words used: different illnesses, hassle, fine

Quote: "No, looks like everyone is wearing it."

## 5 Conclusions

While compiling the results from the qualitative interviews, common trends emerged. First, approximately 44% of family members were unable to name the infection that was responsible for placing the patient on isolation. Next, many people were under the impression that the patient was on isolation to prevent infections. They failed to realize that the patient already had the colonization and the main goal was to limit the spread of that infection to others on the unit. Lastly, some thought everyone was required to wear gowns and gloves on the unit. This further indicates a lack of knowledge about the patient's condition and the purpose of PPE.

## 6 Future Directions

Based on the results from the qualitative interviews and questionnaires future projects can include:

- Baseline and continual evaluation of nurses knowledge and adequacy of teaching about PPE
- Re-education of patient visitors about PPE and the infection the patient acquired in the hospital
- Campaign to incorporate the family more in patient care

## 7 References

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