

Determining the Psychosocial Impact of Isolation Precautions on ICU Patients and Families

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1 Background

The impact of isolation precautions on patients has already been well established; patients in isolation experience a negative impact on mental well-being, including higher scores for depression, anxiety, and anger (Abad, Fearday & Safdar, 2010). Furthermore, research has suggested health care workers are less likely to spend time with patients on isolation precautions (Saint. Higgins, Nallamotheu & Chenoweth, 2003).

However, no research has specifically investigated whether similar effects are seen in visiting family members, who are required to wear isolation gear when visiting their loved one in the hospital. Determining whether there are similar adverse effects of isolation precautions on family members is the first step in determining what quality improvement interventions, such as increased education on isolation precautions, may improve the hospital experience of patients and families on isolation precautions.

2 Methods

We conducted a non-experimental mixed-methods research study on two surgical intensive care units. Subjects were selected in a convenience sample of family members of patients both on and off isolation precautions who had been in the ICU >48 hours. Each subject was qualitatively interviewed regarding their thoughts and feelings on isolation precautions, then given a quantitative series of surveys assessing their levels of anxiety, depression, and satisfaction with their loved one's care. The surveys used were:

- Critical Care Family Needs Inventory (CCFNI)
- Life Orientation Test (LOTS)
- Anxiety Survey
- Center for Epidemiological Studies Depression Scale (CED-S)

Responses to interviews were sorted, and themes extracted through recognition of commonly named feelings and ideas. Data from the surveys was analyzed using Pearson's chi-squared test.

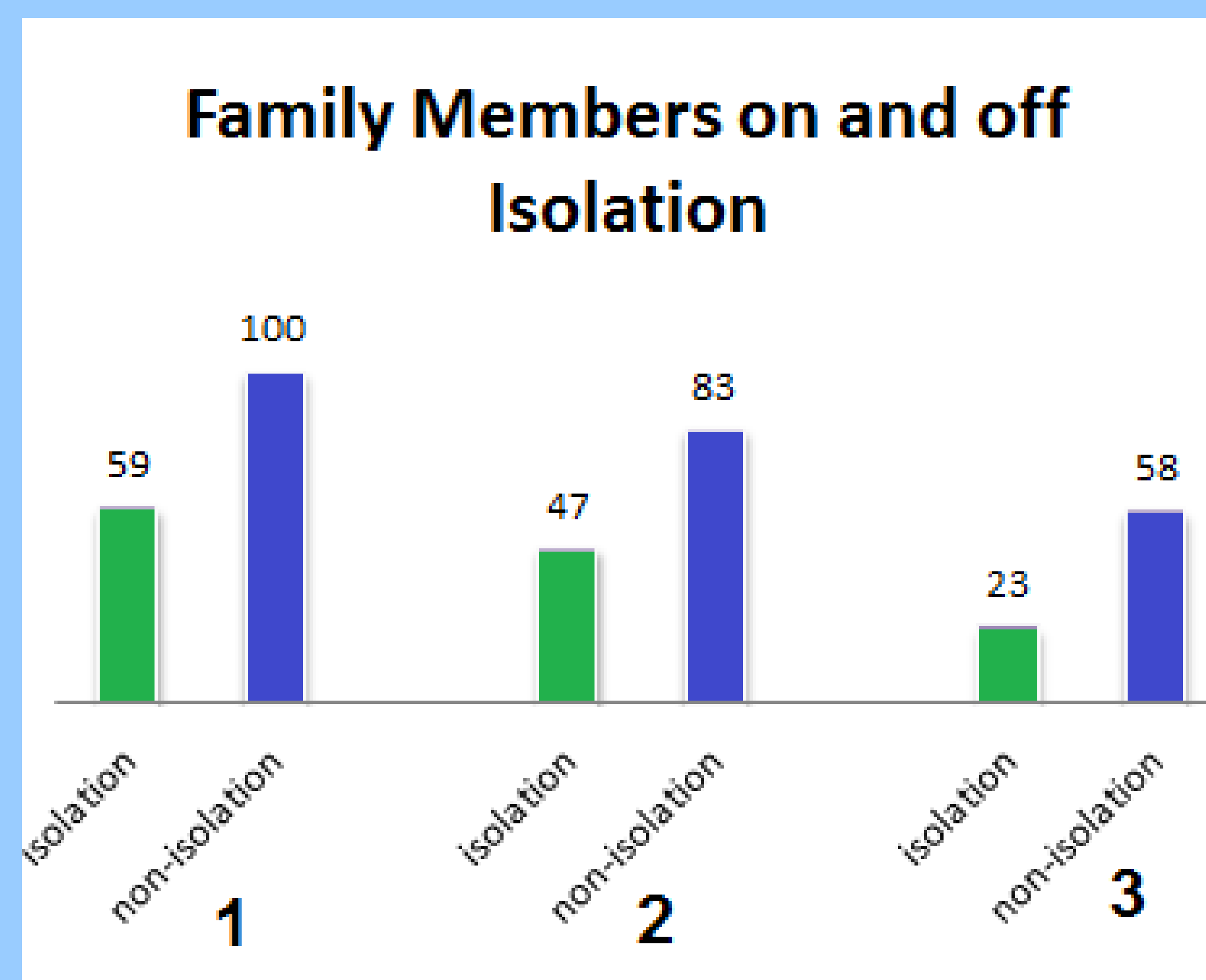
3 Results

31 family members were interviewed (19 isolation, 12 non-isolation). Of these, 29 also filled out the surveys (17 isolation, 12 non-isolation).

Common themes from interviews with family members of patients on isolation precautions included:

- Lack of understanding of isolation precautions, i.e. "I don't know [why he's on precautions]. I just gotta put a gown on."
- Generally, precautions do not impact interactions with the patient, i.e. "We'll still hold his hands and talk to him and make sure he's ok"
- Perception that precautions imply the health of the patient is worse, i.e. "It makes me feel like [he's] is sicker than the other patients."

No significant differences were found in depression or LOTS scale. Non-isolation family members showed higher levels of anxiety on 2 out of 20 questions. Several significant differences were found in responses to the CCFNI, depicted below.



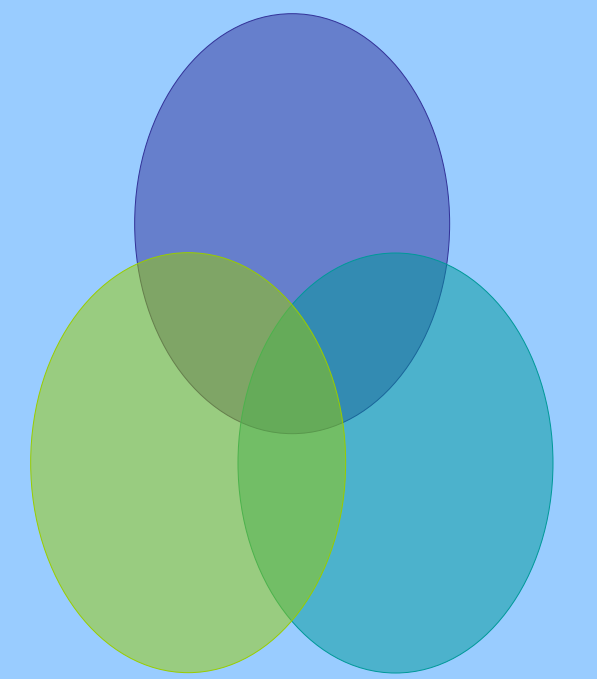
1. Percent of family members on and off isolation precautions responding they "understand what is happening to the patient and why things are being done" almost all the time on the CCFNI.
2. Percent of family members responding "any of the staff members [have] shown interest in how you are doing" almost all the time on the CCFNI.
3. Percent of family members responding "there are some things about the medical care the patient receives that could be better" none of the time on the CCFNI.

4 Conclusions

• Results of the qualitative interview suggest that family members could benefit from greater education regarding isolation precautions

• Despite praising staff in interviews, results of the Critical Care Family Needs Inventory survey indicated that family members of patients on isolation felt that some aspects of care could be better, again providing support for education-related interventions

• Further research is needed to establish the impact of isolation precautions on family members, and what patient-family centered interventions could make a difference.



5 Future Directions

Future studies could further establish the impact isolation precautions on family members in settings other than intensive care, and investigate whether additional education for family members of patients on isolation precautions would make a difference in their understanding and perceptions of isolation precautions and patient care.

6 References

- Abad, C., Fearday, A., & Safdar, N. (2010). Adverse effects of isolation in hospitalized patients: a systematic review. *Journal of Hospital Infection*, 76, 97-102.
- Saint S, Higgins LA, Nallamotheu BK, Chenoweth C. (2003). Do physicians examine patients in contact isolation less frequently? A brief report. *Am J Infect Control*, 31, 354-356.