

Nursing

A Study to Evaluate the Needs of Family Members of Critically Ill Patients in the ICU

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Problem

According to the Society of Critical Care Medicine (2013), more than 5 million patients are admitted annually to intensive care units in the United States. Affected by these admissions are not only the patients, but the many family members as well, who deal with crises such as illness or even death. Stress can manifest itself in many different ways, affecting the family unit and patient clinical outcomes. Nurses are in a position to help guide practices as being an integral part of the health care team and being most accessible to the patient and their loved ones. In order to provide quality care and improve standards, needs of family members accompanying the critically ill patient should be routinely examined.

Purpose

The purpose of this research study was (1) to identify the top five needs of family members of critically ill patients in the intensive care unit (ICU) at a rural hospital in west central Georgia, utilizing the landmark Critical Care Family Needs Inventory (CCFNI) (Molter, 1979).

Review of Literature

Numerous studies across many disciplines continue to indicate that a hospitalization in the intensive care unit can be a very stressful event for the family of the critically ill patient. A descriptive study by Molter (1979) became the benchmark model for several studies using the CCFNI instrument over the past several decades (Paul & Rattray, 2008).

A literature review revealed several examples of studies that employed the CCFNI instrument using small sample groups to identify ICU family needs. In one study, a sample of 50 family members in a 22 bed ICU responded to the CCFNI. The data analysis indicated that assurance was the leading need of families of patients in the ICU (Obringer, Hilenberg, & Booker, 2011). Another study by Bailey, Sabbagh, Loiselle, Boileau, & McVey (2010) reported a modified version of

the CCFNI used in a cross-sectional descriptive pilot study using a convenience sample size of 29 family members in a 22 bed ICU. This study focused on family information needs versus satisfaction of care. Additionally, a descriptive study of 101 patient-relative pairs and 45 intensive care unit staff was conducted to assess opinions of caregivers, families, and patients about involvement of families in the care of intensive care unit patients. This study aimed to evaluate the prevalence of symptoms of anxiety and depression in family members and to measure family satisfaction with care. The study revealed symptoms of anxiety in 58% of 101 family members and symptoms of depression in 26% of 101 family members. Furthermore, 97% of the 101 family members were willing to participate in care. The research showed that families need information, reassurance, support, and to be near the patient (Garrouste et al., 2010).

The CCFNI has been utilized globally to identify family needs of hospitalized patients. Although family needs have been identified, based on a review of research, there is a lack of definitive information that interventions are being implemented to address the identified family needs.

Research Question

The research question for this study was, "What do family members of critically ill patients perceive their most important needs to be while in the intensive care unit?"

Research Method

Design

A descriptive design utilizing the 45 item CCFNI was used to describe the top five family needs reported by 20 subjects. This design allowed researchers to obtain data within the natural setting and without any manipulation of variables.

Framework

This study utilized *Crisis Theory* as a framework, first theorized by Erich Lindemann in 1944. Crisis theory and the crisis invention model can be applied to ICU families in acknowledging how sudden changes in a family member's health can put the family unit at risk and impact basic problem solving skills. Identifying and responding to the needs of families is a core element of nursing interventions (Varcarolis, 2010, pp. 528-530).

Setting

This study was conducted in the field setting of the medical-surgical intensive care unit at West Georgia Health, LaGrange, Georgia. At the beginning of the study, there were 16 beds in the unit. Within five weeks of the start of data collection the facility reduced the bed count to eight.

Sampling Procedure and Characteristics

A convenience sample of 20 families was used for this study. Individuals accompanying an admitted patient to the ICU were approached in person, informed about the purpose of the study and invited to participate. Written consent was obtained by those agreeing to participate and meeting the criteria (Appendix A).

Inclusion criteria were: the family member had to be over 18 years of age, be a first degree relative or any other person identified as family by the patient, be able to speak and read English at a ninth grade level, have a family member admitted to the intensive care unit for a minimum of 48 hours and take part in the study within 72 hours of the patient's admission (Appendix B). Those excluded were family members of pediatric patients, family members of previously hospitalized patients (within the last six months) and family members of employees at West Georgia Health.

Data-collection strategies and instrument

The sample recruitment process and data collection took place over a nine-week period, from February 2014 through April 2014. During the data collection period, 42 family members of critically ill patients were approached resulting in 20 completed surveys. Three subjects met the original inclusion criteria regarding length of stay. The research team realized the criteria were too restrictive and made the decision to revise the inclusion criteria to include subjects who completed the survey and did not have a family member employed by WGH.

The instrument used for the study was the 45-item Critical Care Family Needs Inventory (CCFNI) developed by Molter in 1979 and revised with Leske in 1991 (Appendix C). Permission was granted by Molter to utilize the 1991 version of the CCFNI (Appendix D). This questionnaire utilized a Likert scale with category values of 1, 2, 3 and 4 respectively, representing 'Not important', 'Slightly important', 'Important' and 'Very important'.

The questionnaire packages were provided to subjects for completion while patients were being treated in the ICU and were collected upon completion. This was effective in achieving a completion rate of 47.6%.

Retrieving, storing and analyzing data

During the data collection term, the surveys were assigned a confidential number. Upon completion of each data collection session, researchers returned completed sealed surveys to a designated team member responsible for securing the files. Security measures included the following: hard copies were stored in a locked file cabinet and relevant data were extracted for entry into a database that would be stored on a secure server within the LaGrange College Nursing Department. Data analysis included a full review and entry into a Microsoft Access database for tabulation. All demographic and questionnaire responses were assessed

for validity related to study criteria. A frequency distribution table was generated from the database for final counts and the ranking of the top five family needs.

Ethical Considerations

Approval was obtained from the Institutional Review Board at LaGrange College and West Georgia Health prior to beginning the research study. In addition, permission to use the CCFNI was granted by the developers, Molter (1979) and Leske (1991).

During the course of the research study, all perspective family members were given written and verbal information explaining the study. Participation in the study was completely voluntary, and all family members were given the option to withdraw at any time. Upon withdrawal from the study, any information obtained was destroyed. Subjects were encouraged to direct any questions or concerns to the researchers. Furthermore, if a concern arose, contact details were provided. None of the subjects who participated in the study contacted the researchers or supporting faculty with questions.

No identifying information was used on the survey (Appendix C), only a form identifying number, ensuring anonymity. All Health Insurance Portability and Accountability Act of 1996 (HIPAA) rules regarding personal healthcare information were strictly followed. Informed consent was signed by the participant and a researcher (Appendix A). There were no associated risks with this study and no human rights were violated during the course of the research.

Timetable

Planning for this study was completed in November 2013. The research proposal was approved by LaGrange College Institutional Review Board on January 23, 2014. Recruitment of the sample subjects began on February 10, 2014 and was completed on April 9, 2014. Data findings were analyzed in April 2014.

Budget and Statement of Resources

This study involved both available resources and those associated with cost. Available at no additional cost was access and use of the ICU at West Georgia Health, as well as donated time of the research group. Originally \$417.00 was the anticipated budget, but actual costs were only \$123.00, and this was supported by a grant from the LaGrange College Undergraduate Research fund.

Results

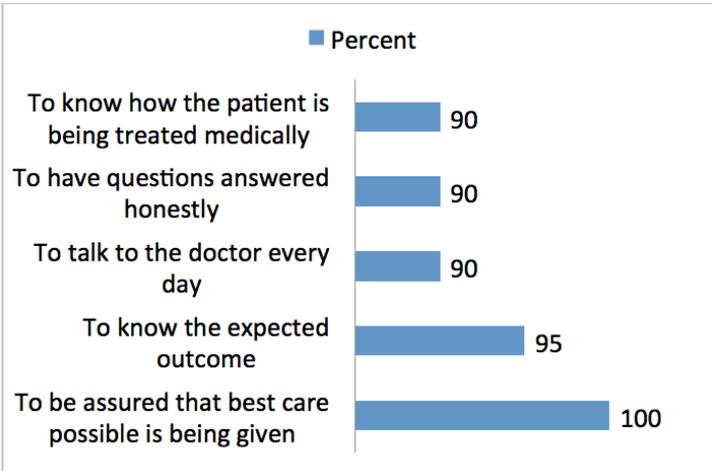
Discussion

The analysis showed a study response equaled 47.6% of projected target (40 subjects). Responder demographics included 75% female, 25% male, 10% less than high school education, 60% high school graduates, 15% Associate's degree, 15% Bachelor's degree, 5% in age group 25-34, 25% in age group 35-44, 5% in

age group 55-64, 35% in age group 45-54-44 and 30% over 65 years of age . The relationship to patient was 40% Child, 20% Sibling, 20% Parent and 20% Spouse.

The surveys were analyzed by ranking the needs of family members indicated on the surveys. The CCFNI is ranked by a Likert scale from 1, considered not important, to 4 considered very important. Figure 1 represents the top five needs statements based on data collected. One hundred percent of the subjects ranked assurance as their number one need. Honest communication, information updates, and patient comfort remained key needs of subjects surveyed. The results of the data align with the five domains of family needs identified the CCFNI landmark study. These domains are assurance, information, proximity, comfort and support. Furthermore, the findings validate the ongoing utilization of the CCFNI by other nurse researchers as reflected in the review of literature.

Figure 1



Limitations

The small sample size and a rural setting of the hospital were limitations of this study. A larger overall census lending to a larger sample size would be significant in obtaining a more homogenous representation. During the data collection period, the facility reduced the number of ICU beds from 16 to eight. Daily ICU patient census during that same period averaged approximately four patients per day. Additionally, this study was conducted during the time of hospitalization, which can influence both participation and the family member’s perception of their needs. A follow up retrospective study would be a valuable tool for comparison of needs. Other factors that may have influenced the results of the study were abbreviated length of stay in the ICU and potential outcome of the ill relative.

Conclusion

This study supports the importance of studying family needs in the ICU setting and validates the use of the landmark CCFNI tool. Additionally, the results support that this inventory instrument is valid and reliable. Recommendations for future studies include: longer data collection time frame, multiple facilities, and expansion of the inclusion criteria related to patient length of stay and timing of family member completion of the survey.

Implications for Nursing Care

Nursing interventions need to focus on communication and quality patient care. As the data states, families need to know their loved ones are getting the best care and that the nurses and the health care team are available to respond affectively as conditions change. Ongoing communication with the patient and family must remain a nursing priority. Knowledge gained from this study related to family needs and the nurse's role in family centered patient care provides opportunities for further analysis.

Acknowledgements

The research group would like to thank our faculty sponsor, Dr. Maranah Sauter of the LaGrange College Nursing department for her support, as well as the LaGrange College Undergraduate Research Fund for allowing us the funding and the opportunity to complete this study. Last but not least, we thank West Georgia Health for access of their ICU throughout this study.

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Appendix A Informed Consent for Participation in Study

A study to evaluate the needs of family members of critically ill patients in the ICU

You are invited to be a part of this study. The research is being conducted by the following group of nursing students at LaGrange College: Shelby Gentry, Ryan McArthur, Janessa Millegan, Ellen Morris-White, Shannon Scott, and Lisa Williamson. Our faculty sponsor is Maranah Sauter, R.N. PhD, Associate Provost, LaGrange College. You may ask any questions to any of the researchers to help you understand about this study.

We are conducting this research in an effort to describe the most important issues for the families of patients in the Intensive Care Unit (ICU). You will be given instructions, then asked to fill out a Critical Care Family Needs Inventory survey, which should take approximately 20 minutes. Our goal is to point out the issues that need to be focused on to improve the ICU experience for the family. You were chosen for this research because you have a loved one as a patient in the ICU.

No foreseeable risks are involved with this study. All information will be confidential, as the survey will not require your name or the patient's name. The survey may be identified by number for record keeping purposes. The results will also be reported in total, so no family or patient may be identified. These results will be stored on a designated jump drive and presented to a nursing class and the hospital as totals.

Participation in this study is voluntary. You may choose not to participate

in this survey. If you do choose to participate, you will be able to withdraw at any time.

This study will be carried out by the research group and overseen by the LaGrange College Institutional Review Board, which is a committee that protects rights of participants and ensures they are protected from harm.

Should you have any questions, you may contact researcher Lisa Williamson at 706-302-3443 or lrwilliamson@student.lagrangecollege.edu.

Thank you for your time and participation.

I, _____, have read or had read to me the previous information relating to this study. I have had the opportunity to ask questions. I have had my questions answered to my satisfaction. I voluntarily agree to be a participant in this study.

Signature: _____

Date: _____

I, _____, the researcher, have read the information on this form to the participant and answered any questions to the best of my ability to ensure understanding. I state that the participant has given voluntary consent and in no way been coerced to participate.

Signature: _____

Date: _____

Appendix B Demographics

A study to evaluate the needs of family members of critically ill patients in the ICU

Please mark the answer that best describes you.

What is your age?

- Younger than 18
- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 or older
- Prefer not to answer

What is your gender?

- Male
- Female

What is the highest level of education you have achieved?

- Less than high school degree
- High school degree or equivalent
- Associate degree (e.g. AA, AS)
- Bachelors degree (e.g. BA, AB, BS)
- Master's Degree (e.g. MS, MA, MBA)
- Doctorate degree (e.g. PhD)

What is your primary language?

- Arabic
- English
- Korean
- Spanish

What is your relationship to the patient?

- Spouse
- Significant Other
- Parent
- Child
- Sibling

How long has the patient been in ICU?

- 24 hours to 36 hours
- 37 hours to 48 hours
- 49 hours to 72 hours
- More than 72 hours

Is any family member an employee off this hospital?

- Yes
- No

Thank you for your time and participation! What is your primary language?

Appendix C CRITICAL CARE FAMILY NEEDS INVENTORY

DIRECTIONS: This survey will help us know what your needs are during this difficult period. Read each need statement and then check how important the need is to you at this time.

NEEDS STATEMENTS	1	2	3	4
1 = Not Important 2 = Slightly Important 3 = Important 4 = Very Important				
1. To know the expected outcome.				
2. To have explanations of the environment before going into the critical care unit.				
3. To talk to the doctor every day.				
4. To have a specific person to call at the hospital when unable to visit.				
5. To have questions answered honestly.				
6. To have visiting hours changed for special conditions.				
7. To talk about feelings about what has happened.				
8. To have good food available in the hospital.				
9. To have directions as to what to do at the bedside.				
10. To visit at any time.				

NEEDS STATEMENTS	1	2	3	4
1 = Not Important 2 = Slightly Important 3 = Important 4 = Very Important				
11.To know which staff members could give what type of information.				
12.To have friends nearby for support.				
13.To know why things were done for the patient.				
14.To feel there is hope.				
15.To know about the types of staff members taking care of the patient.				
16.To know how the patient is being treated medically.				
17.To be assured that the best care possible is being given to the patient.				
18.To have a place to be alone while in the hospital.				
19.To know exactly what is being done for the patient.				
20.To have comfortable furniture in the waiting room.				
21.To feel accepted by the hospital staff.				
22.To have someone to help with financial problems.				
23.To have a telephone near the waiting room.				
24.To have a pastor visit.				
25.To talk about the possibility of the patient's death.				
26.To have another person with me when visiting the critical care unit.				

NEEDS STATEMENTS 1 = Not Important 2 = Slightly Important 3 = Important 4 = Very Important	1	2	3	4
27. To have someone be concerned with my health.				
28. To be assured it is <u>alright</u> to leave the hospital for awhile.				
29. To talk to the same nurse every day.				
30. To feel it is <u>alright</u> to cry when I want to.				
31. To be told about other people that could help with problems.				
32. To have a bathroom near the waiting room.				
33. To be alone whenever I want.				
34. To be told about someone to help with family problems.				
35. To have explanations given that are understandable.				
36. To have visiting hours start on time.				
37. To be told about chaplain services.				
38. To help with the patient's physical care.				
39. To be told about transfer plans while they are being made.				
40. To be called at home about changes in the patient's condition.				
41. To receive information about the patient at least once a day.				

NEEDS STATEMENTS	1	2	3	4
1 = Not Important 2 = Slightly Important 3 = Important 4 = Very Important				
42. To feel that the hospital personnel care about the patient.				
43. To know specific facts concerning the patient's progress.				
44. To see the patient frequently.				
45. To have the waiting room near the patient.				

Are there any other needs that you have? If so please write them below.

Appendix D

November 30 2013

Dear Ellen:

Please feel free to use Critical Care Family Needs Inventory for your research, giving Jane Leske and myself appropriate referencing. You may adapt the tool to meet the needs of your research but it may affect the psychometrics of the tool. Data concerning the psychometrics of the tool can be found in Jane Leske's article published in the May 1991 issue of Heart & Lung, Vol 20(3): 236. I've enclosed a copy of the tool that is scored by calculating the means for each item. There is no total score. Then rank the items according to their mean. Jane has identified the dimensions of needs and it is easy to discuss them in those terms.

Good Luck in your studies.

Sincerely,

Nancy Molter