Needs of family members of critically ill patients: A comparison of nurse and family perceptions

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BACKGROUND: Critical illness often occurs without warning. leaving families feeling vulnerable and helpless with no clear knowledge of what to expect from health care professionals or patient outcome. The challenge for critical care nurses (Registered Nurses [RNs]) is to provide care for aggressively managed, critically ill patients while attending to the needs of stressed family members.

PURPOSE: The purpose of this study was to explore differences in the perceptions of the needs of family members of critically ill patients and RNs' perceptions and the extent to which these needs were met.

METHODS: A descriptive, exploratory design was used. Thirty critical care RNs and 20 family members at a small community hospital critical care unit comprised the sample. Participants were surveyed using the Norris and Grove 30-item version of Molter and Leske's Critical Care Family Needs Inventory and a 30-item version of Warren's Needs Met Inventory. Survey data were analyzed using descriptive and inferential statistics.

RESULTS: Statistically significant differences ($P \leq .05$) were demonstrated for nine items on the Critical Care Family Needs Inventory and for 22 items on the Needs Met Inventory. Family members rated all items as being of greater importance than did the RNs.

CONCLUSIONS: Family needs were categorized according to Leske's dimensions of assurance, proximity, information, comfort, and support. By implementing specific cost-effective strategies to increase family access to the patient, to improve communication with the physician and the health care team, and to create a family-friendly environment, critical care RNs can meet family member needs and improve the quality of nursing care. (Heart Lung® 2007;36:367–376.)

In the critical care setting, family members frequently serve as the spokesperson and protector if the patient is physiologically or psychologically compromised.[1] Advanced technology, acute patient conditions, and informed consent laws complicate this important role. Because critical illness often occurs without warning, families may feel vulnerable and helpless with no clear knowledge of what to expect from health care professionals or in regard to the injuries and expected outcome.[2] Further issues such as changes in family structure, family stress, and disorganization are barriers that may compromise the family member's ability and performance in this important role.[3] Family members need support to effectively appraise, cope, and adapt to the stress of having a loved one in the critical care unit (CCU).[4] The challenge for the critical care nurse is to provide care for aggressively managed, critically ill patients while attending to the needs of family members.

Nurse–family relationships in critical care are extremely important, especially if a family–patient relationship is compromised by the patient's physiologic state.[5] Highly technical equipment used to treat patients and complicated disease conditions can become barriers that interfere with patient/family communications. For example, a patient may be sedated to improve the effectiveness of a mechanical ventilator or be unable to speak because of the effects of a stroke. Changes in a patient's condition may occur rapidly and require consideration of ex-

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tensive or complicated treatments. Approximately three-quarters of all patients are unable to participate at the time when difficult decisions about the goals of treatment must be made[6]; thus, physicians and nurses must rely on family members to speak for the patient, consent to complicated treatments or procedures, or, when appropriate, approve termination of life support efforts. The family's needs must be considered alongside those of the patient if holistic care is to be practiced.[7,8]

Nurses in the CCU act as a resource for the families of critically ill individuals.[1,9,10] Nurses provide or coordinate interventions such as information sharing, family conferences, open visiting hours, and bedside family/patient interactions to meet the family's need for support, comfort, information, proximity, and assurance.[11,12] Inconsistencies in providing resources to meet these family needs may have an effect on family perception, appraisal, and adaptation to the crisis, which could ultimately affect patient outcomes.[13-17] Investigation of family members' and nurses' perceptions of the needs of families in the CCU may provide insight into improving practices within this unit.[13] The purpose of this study was to explore family-centered practices in a small community CCU. The focus of this study was to (1) compare intensive care nursing perspectives on the needs of families with those identified by families and (2) explore nursing and family perspectives of what has been done or could be done to meet family needs.

CONCEPTUAL FRAMEWORK

Concepts from family systems theory and crisis theory provided the framework for this study. The term "family" includes all those in the patient's primary support system, which may consist of a traditional nuclear family with childrearing responsibilities, nontraditional, blended, older, or extended family members.[18] Individual family members can be viewed as complex interdependent subsystems within the family system, separate from yet open to the environment.[2] Nurses are key figures with whom critically ill adults and their family members interact.[2] Ultimately, this interdependent relationship has been shown to benefit the patient.[10,19,20] Individual nurses in the critical care setting, as part of the critical care subsystem of health care, are subject to the rules, beliefs, and expectations of the unit. Family members and nurses belong to separate interdependent open systems with perceptions that may differ in the importance and degree to which family needs have been met.[2,21]

Admission to a CCU signifies a life-threatening situation and can precipitate severe stress within a family.[18] According to Leske,[2] "Past experiences, interpretations of current happenings, cultural backgrounds, religious beliefs, and family traditions" all affect the perception a family has of the illness. Family members' perceptions are further influenced by adequacy of information, visualizing patient's responses, and adaptive coping.[18]

When in crisis, support is one of the resources families use to facilitate coping, shape perception, and promote adaptation.[14,18] Supportive interventions used in critical care are those that focus on decreasing feelings of isolation, strengthen coping efforts, and enhance adjustment to illness. Eventually, the family's ability to adapt and provide support to the patient may affect patient outcomes.[11,13] Bedside nurses support the family in the form of nursing interventions that assess family understanding, explain routines and procedures, and clarify family interpretations that have a positive effect on family stress and coping.[16] According to Kirchhoff et al,[9] nurses at the bedside are mediators and interpreters of information that helps "patients' family members understand what physicians are saying and the relevance of that information for a patient's prognosis and decisions about treatment." Inconsistencies in providing supportive resources to family members may have an effect on the family's appraisal of the crisis and adaptation to it.[4,11]

BACKGROUND LITERATURE REVIEW

Needs identified by families were formally investigated and ranked in 1979 by Molter[22] in an exploratory descriptive study. A list of 45 "need" statements developed by Molter from a literature review and a survey of 23 nursing students were used in structured interviews with 40 family members of critically ill patients.[22] A follow-up study by Leske[10] developed Molter's 45 identified needs into a tool known as the Critical Care Family Needs Inventory (CCFNI). Results from 55 family members in three separate hospitals supported content validity of the instrument.

Leske[12] studied the internal psychometric properties and factor analysis of the CCFNI tool with 677 family members over a 9-year period (1980-1988). Cronbach's alpha coefficient ranged from .88 to .98. The resulting five dimensions of the CCFNI were labeled as (1) support, (2) comfort, (3) proximity, (4)

information, and (5) assurance.[11] The significance of these five major areas has been defined by Leske[13] in the American Association of Critical-Care Nurses national protocols for practice. Providing support to families assists with coping and stress, augments family resources, and maintains strength to support the patient. Providing comfort for families helps reduce stress and anxiety. Providing proximity to the patient helps family members maintain relationships, remain emotionally close, and offer support to the patient. Providing information lays the foundation for decision-making and coaching of the patient, reduces anxiety, and provides a sense of control. Providing assurance for hope about the patient's outcome promotes confidence, security, and freedom from doubt about the health care team and system. The CCFNI has been used in numerous research studies worldwide to identify, rank order, and evaluate family members' needs.[3,23-29]

Warren[30] and Watson[31] further addressed family member needs by asking whether the identified needs were being met. A second survey, the Needs Met Inventory (NMI), was developed with permission to determine the extent to which identified needs were perceived as met 36 to 48 hours after admission. The NMI uses the same 45 items on the CCFNI ranked on a 4-point Likert scale, with 1 as never met, 2 as sometimes met, 3 as usually met, and 4 as always met. Findings from this study ranked assurance, support, and comfort as the most important needs perceived as having been met.[30]

Findings from studies using the CCFNI and NMI vary regarding perceived family needs.[19,22,32-34] These studies indicated that (a) nurses' perceptions of family needs were different from the needs perceived by family members,[19] (b) family members and nurses identified many similar important needs, yet family members ranked some needs more important and less satisfactorily met than did the nurses,[32] and (c) critical care nurses were only moderately accurate in their assessment of the importance of relatives' needs.[33] In addition, the assurance, information, and proximity subscales were ranked highest for family members and nurses, whereas support and comfort ranked lowest.[22]

Interviews of nurses in focus groups by Chelsa[35] found that many nurses were unable to see the value of including the family in care and instead highlighted heroics of medical and technical care. Some nurses viewed family members as interference and thought that the ideal family was cooperative, quiet, and followed the rules. Other nurses found value in family interactions and improved patient outcomes.[36] In an effort to maintain control and cope with the stress of critical care, some nurses used strategies to distance themselves from families.[36]

Studies using the CCFNI and NMI suggest a continued need to focus on family-centered care in the CCU. Similarities and differences in the importance and satisfaction of meeting family needs as perceived by family members and nurses do exist. Subsequent qualitative studies support the use of input from nurses and family members to examine supportive nursing interventions, which lead to improved care practices. This study used components of the CCFNI and NMI tools to explore similarities and differences in the perceptions of family needs by nurses and family members in an attempt to identify areas for improved family-centered care practices at this particular facility.

RESEARCH QUESTIONS

Primary research questions investigated in this study using modified versions of the CCFNI and NMI were as follows: (1) Is there a difference in the perceived needs of family members of critically ill adults and critical care nurses at this facility? (2) To what extent are these needs perceived as met by family members and critical care nurses?

STUDY DESIGN

A descriptive, exploratory design was used for this study. The study was conducted in a 375-bed community hospital with a 16-bed CCU in northern California. Approval was obtained before data collection from the institutional review board for human protection. Formal written consent was obtained from all subjects before data collection.

A convenient sample of 50 subjects, 30 critical cares nurses, and 20 family members of critically ill patients participated in this study. Critical care nurses in the study were full- and part-time registered nurses (RNs) who only worked in critical care. Family member inclusion criteria were an adult, 18 years or older, related to the patient by blood, marriage, adoption, or nontraditional family relationship, who was considered the patient's support system and visited while the patient was in CCU. For this study, a critically ill adult patient was defined as a patient who had been treated in the CCU for a life-threatening event or illness for a minimum of 48 hours.

INSTRUMENT

A four-part paper-and-pen survey tool was used to collect data. The first part was a demographic

questionnaire to collect information regarding education, ethnicity, age, and gender for the family members. The CCU nurses' demographic tool included ethnicity, age, gender, nursing education, and years of nursing experience. The second part was a 30-item version of the CCFNI (reliability alpha = .85), adapted from the 1986 Norris and Grove study.[19] Permission to use a 30-item version of the CCFNI tool was obtained from the copyright author Jane S. Leske. Items were ranked on a Likert scale from 1 (not important) to 4 (very important). The third part was a 30-item version of the NMI adapted from the 1993 Warren study.[30] Permission to use a 30-item version of the NMI was obtained from the author Nancy A. Warren. Items were ranked on a Likert scale from 1 (never met) to 4 (always met). The Cronbach's alpha was rated at .93 for this study. The last part contained two open-ended questions: (1) In your opinion, what has been done to help meet family needs? (2) What suggestions do you have that would help meet the needs of family members?

DATA COLLECTION

Data collection for this study took place over a 5-month interval. The researcher solicited volunteers in the CCU. The purpose of the study was explained, and written consent was obtained. A copy of the consent form and experimental subjects bill of rights form was given to each participant. All family members were given a survey 48 or more hours after admission of their relative to the CCU. A private area was provided in waiting areas near the CCU for participants to complete the survey. Family members were first asked whether they had any pressing needs that should be addressed before completing the survey. Nurses were contacted individually after shift report or during break time. The researcher was available to clarify information during the 20 to 30 minutes it took for individuals to complete the survey.

DESCRIPTION OF SAMPLE

The mean age of patients related to family members was 60.2 years (standard deviation [SD] = 24.7; range: 18-89 years; n = 16). Seven patients (44%) were aged more than 75 years. There were 10 male patients (62%) and six female patients (38%). The main medical diagnosis of these patients included myocardial infarction (three), sepsis (three), respiratory failure (four), head trauma (two), diabetic ketoacidosis (two), pulmonary embolus (one), and meningitis (one).

The mean age for family members was 48 years (SD = 11.1 years; range 33-78 years; n = 20), 5 (25%) were male, and 15 (75%) were female. Eighteen (90%) of the family members had some form of college level education, and 10 (50%) held a baccalaureate degree or higher.

The mean age of critical care nurses was 48 years (SD = 8.0 years; range 28-57 years), 23 (78%) were female, and most (56%) had a baccalaureate degree. Nursing experience varied from 3 months to 36 years with a mean of 16.5 years (SD = 10.5 years). Forty-three percent had 10 or fewer years of nursing experience, and 43% had 20 or more years of experience.

RESULTS

Data were analyzed using descriptive and inferential statistics. Means were obtained for the CCFNI and NMI items. Family member and critical care nurse group means for CCFNI and NMI items were compared using the *t* test. The confidence level was set at $P \leq .05$. Statistically significant differences between groups were demonstrated for 9 items on the CCFNI and for 22 items on the NMI. These results were found to be similar to previous studies. Answers to the two open-ended questions were grouped, according to content, into corresponding categories based on Leske's dimensions of (1) support, (2) comfort, (3) proximity, (4) information, and (5) assurance.[11,13] Discussion will center on this study's two main research questions.

DIFFERENCES IN PERCEIVED NEEDS

The first research question was, "Is there a difference in the perceived needs of family members of critically ill patients and nurses at this facility?" As presented in Table I, nurses and family were in agreement with 5 of 12 (42%) of the most important needs of family members. That is, for the 12 needs rated as most important by family, only 5 of the ratings of perceived importance by nurses were not significantly different. These needs were (1) to have questions answered honestly, (2) to be assured that the best possible care was being given to the patient, (3) to have explanations given in terms that are understandable, (4) to feel there was hope, and (5) to talk to the doctor every day.

Nurses and family were not in agreement on the needs (1) to know the prognosis, (2) to talk with the nurse each day, (3) to know how the patient was being treated, (4) to know why things were done for the patient, (5) to be called at home about changes in the patient's condition, (6) to receive information

Table I
Means, *t* tests, and significance ratings of perceived importance of needs

Needs	Family N = 20 mean	Nurse N = 30 mean	*t*	*P*
1. To have questions answered honestly	3.95	3.87	.95	.35
2. To know the prognosis	3.95	3.60	2.64	.01*
3. To talk with the nurse each day	3.95	3.53	2.47	.02*
4. To know how the patient was being treated	3.95	3.69	2.30	.03*
5. To know why things were done for the patient	3.90	3.53	2.89	.01*
6. To be called at home about changes in the patient's condition	3.85	3.40	2.72	.01*
7. To receive information about the patient once per day	3.85	3.53	2.03	.05*
8. To be assured that the best possible care was being given to the patient	3.85	3.77	.71	.49
9. To have explanations given in terms that are understandable	3.80	3.70	.71	.48
10. To feel there was hope	3.80	3.41	1.85	.07
11. To know exactly what was being done for the patient	3.80	3.21	2.99	.00*
12. To talk to the doctor every day	3.80	3.70	.71	.48
13. To be told about transfer plans	3.70	3.17	2.99	.00*
14. To know specific facts about the patient's condition	3.65	3.00	2.92	.01*
15. To see the patient frequently	3.65	3.45	1.13	.26
16. To feel that hospital personnel cared about the patient	3.58	3.73	.95	.35
17. To feel accepted by the hospital staff	3.50	3.37	.76	.45
18. To have visiting hours or restrictions changed for special conditions	3.45	3.41	.17	.86
19. To have someone concerned with the family member's health	3.40	3.23	.78	.44
20. To have a telephone in the waiting room	3.30	3.17	.50	.62
21. To have directions regarding what to do at the bedside	3.25	3.17	.43	.67
22. To talk about the possibility of the patient's death	3.21	3.43	1.15	.26
23. To have a specific person to call at the hospital when not there	3.20	2.86	1.25	.22
24. To be told about other people who could help with problems	3.16	2.90	1.25	.22
25. To know about the types of staff taking care of the patient	3.00	2.69	1.25	.22
26. To have explanations of the environment before going in	2.90	3.03	.60	.55
27. To have visiting hours start on time	2.85	3.10	.91	.37
28. To have friends nearby for support	2.84	3.07	1.11	.27
29. To help with the patient's physical care	2.75	2.53	.83	.41
30. To talk about feelings	2.65	3.10	1.82	.08

*$P \leq .05$.

about the patient once per day, (7) to know exactly what was being done for the patient, (8) to be told about transfer plans, and (9) to know specific facts about the patient's condition. The differences between family and nurses perceptions of importance on these nine items were statistically significant (Table I). Nurses rated all nine of these items as less important than did family members.

PERCEPTIONS OF NEEDS MET

The second question posed was, "To what extent are these needs perceived as met by family members and critical care nurses?" The results displayed in Table II suggest that family members and nurses report differences in perceptions about the extent to which needs are met for 11 of the 12 needs rated

Table II
Means, *t* tests, and significance ratings of perceived extent to which needs were met

Needs	Family N = 20 mean	Nurse N = 30 mean	*t*	*P*
1. To see the patient frequently	3.95	3.07	7.14	.00
2. To talk with the nurse each day	3.90	3.63	2.16	.04*
3. To have a telephone in the waiting room	3.84	3.66	1.29	.20
4. To have visiting hours or restrictions changed for special conditions	3.83	2.97	5.29	.00*
5. To receive information about the patient once per day	3.80	3.30	3.89	.00*
6. To be told about transfer plans	3.76	3.10	4.28	.00*
7. To feel that hospital personnel cared about the patient	3.75	3.30	3.11	.00*
8. To have questions answered honestly	3.75	3.20	3.25	.00*
9. To be assured that the best possible care was being given to the patient	3.65	3.20	2.96	.01*
10. To have visiting hours start on time	3.60	2.59	6.43	.00*
11. To feel there was hope	3.55	2.90	3.71	.00
12. To feel accepted by the hospital staff	3.55	2.90	3.52	.00*
13. To have explanations given in terms that are understandable	3.55	2.97	4.06	.00*
14. To know how the patient was being treated	3.50	3.10	2.42	.02*
15. To know specific facts about the patient's condition	3.45	2.87	3.69	.00*
16. To know the prognosis	3.40	2.75	3.88	.00*
17. To have someone concerned with the family member's health	3.35	2.93	2.02	.05*
18. To have a specific person to call at the hospital when not there	3.35	2.27	4.88	.00*
19. To know exactly what was being done for the patient	3.35	2.73	2.88	.01*
20. To know why things were done for the patient	3.35	2.90	2.34	.02*
21. To help with the patient's physical care	3.25	2.40	4.26	.00*
22. To know about the types of staff taking care of the patient	3.20	2.73	2.24	.03*
23. To have friends nearby for support	3.17	2.52	2.98	.01*
24. To be told about other people who could help with problems	3.00	2.63	1.67	.10
25. To have directions regarding what to do at the bedside	3.00	2.60	1.84	.07
26. To talk to the doctor every day	3.00	2.77	1.07	.29
27. To be called at home about changes in the patient's condition	2.94	2.73	.83	.41
28. To have explanations of the environment before going in	2.85	2.59	1.23	.23*
29. To talk about the possibility of the patient's death	2.50	2.80	1.06	.30
30. To talk about feelings	2.44	2.57	.53	.60

*$P \leq .05$.

highest on the CCFNI by the families. For the NMI, a statistically significant difference in the perception of needs met between the two groups was found for 22 of the items. Family members reported their needs were met to a greater extent than did the nurses on all 22 items. The two items ranked as more completely met by nurses than by family members were (1) to talk about the possibility of the patient's death and (2) to talk about feelings, although these differences were not statistically significant.

Four (33%) of the top 12 needs family members considered most important on the CCFNI also were ranked in the top 12 most frequently met, as measured by the NMI by family members. These items were related to comfort and proximity. Six of the top 12 needs family members considered of highest importance were not ranked in the top 12 as most frequently met (NMI). These items were related to information, comfort, and proximity.

STRATEGIES TO MEET NEEDS

The open-ended question placed at the end of the survey gave nurses and family members an opportunity to provide comments and examples of strategies

Table III
Comments to open-ended question: "What helps meet family members' needs?"

Nurses' perceptions	Family members' perceptions
Assurance: compassion, accommodation, explanations, continuity of RN, interpreters if needed, frequent communication with RN, awareness of special needs	Assurance: compassion, accommodation, questions answered, caring nurses, "on-top-of-it nurse" who answered questions was a great confidence builder
Proximity: flexible open visiting hours, exceptions to rules, frequent updates, available nurses	Proximity: flexible open visiting hours, exceptions to rules, sleep-overs for family, thorough updates daily, called when changes made, seeking family for visits
Information: structured interdisciplinary family conferences, interdisciplinary rounds, accessible doctors, verbal, written, and continuous explanations, clear communication, specific information	Information: direct and open communication with doctors, direct contact with doctors, explanations offered, knowledgeable RNs, assessing family needs
Support: interdisciplinary team, chaplains, volunteers, offering resources, family involvement in care, explanations of environment	Support: chaplains, volunteers, talked with the family daily physical, spiritual, and emotional support were provided "there was an effort to meet all the family needs"
Comfort: physical environment, music and touch therapy for the patient, holistic attitude	Comfort: physical environment, phone, private space, felt accepted and welcome by staff

RN, Registered nurse.

that help meet family needs. These responses were grouped into Leske's five dimensions (1) assurance, (2) proximity, (3) information, (4) support, and (5) comfort, according to which family need was addressed (Table III). Table III can be used to enhance current strategies that meet the needs of family.

Strategies that helped family members feel assured were among the most frequently mentioned. Both nurses and family members mentioned compassion and accommodation as helpful in meeting the need for assurance. Nurses mentioned that explanations, including the use of interpreters, and continuity of care by RNs were important factors to "enhance feelings of support and guidance." Indicators of having met assurance needs were found in family comments, such as "Having an on-top-of-it nurse that could answer questions gave us confidence in the hospital," "He was in good hands when I had to leave," and "I can sleep at night knowing that he is being cared for."

Strategies that increased proximity included open, unrestricted visiting with exceptions to accommodate individual family needs. The need "to see the patient frequently" was ranked number one by family members on the NMI (Table II). Other important strategies included frequent, thorough updates and the ability to receive information over the phone. Family comments such as "It was especially important to the patient's child to allay his fears" stressed the appreciation and importance for liberal visiting in reducing anxiety.

Both family members and nurses mentioned "direct communication with physicians and nurses" as an important factor in meeting informational needs. Family member comments about doctors included (1) "the issue of using a ventilator tube, asking permission, the urgency, was handled very well;" (2) "direct contact with the doctors when something would be done, we were informed;" and (3) "the

doctor explained what was done on a temporary basis and what would be done on a permanent basis." The importance of information from nurses was emphasized in comments such as "availability of knowledgeable RNs was good," "nurses were most reliable and helpful in relaying information from doctors, and the test results," and "most nurses offered explanations of procedures and equipment as they were working even without questions to prompt them."

Strategies that help meet support and comfort needs mentioned by both nurses and family include a comfortable physical environment, interdisciplinary team members, chaplains, volunteers, and case managers. Nurses mentioned a holistic attitude of the CCU that emphasizes family involvement in care. Family members expressed that they "felt accepted and welcomed by staff."

Family members and nurses clearly have similarities and statistically significant differences in their perceptions of the importance of needs and the extent of meeting family needs. Results from this study suggested that, for this sample, the most important needs family members have can be met with assurance, proximity, and informational nursing interventions. Nurses and family members generally agreed on the most important needs. Nurses, however, considered the needs of family members as less important and perceived them as having been met less often. Open-ended comments identified characteristics and interventions of the unit that help meet family needs. The study may have limited generalizations because of the small sample size.

NURSING IMPLICATIONS

From these data, recommendations can be made to evaluate current family care practices and make suggestions for improvement. Comments made on the surveys to the open-ended question "what helps meet family members needs?" can be used to evaluate current strategies. The assurance needs of family members may be met with interventions involving caring and compassionate attitudes, accommodating nurses and staff, and answering family member questions in an honest and consistent manner. Nurses approach the family with awareness and respect for their anxiety level by repeating information, as needed, offering to listen to concerns, and gently guiding the family through the unfamiliar critical care experience.

Family systems evolve over time to allow greater adaptability and tolerance to change[19]; therefore, family proximity needs may change over the course of the patient's hospitalization. Proximity needs may be met by flexible open visiting and updating the family representative daily. Nurses can ask the family for a contact person, phone number, and preferred time to call for daily updates. Interdisciplinary care conferences and patient rounds can be scheduled to include family in the patient's planning of care. Beepers may be signed out to family members to ensure contact if the family needs to leave the facility. Special considerations for a family member to stay overnight at the bedside in a cot can reduce anxiety for a disoriented patient and/or patients with foreign language barriers.

Information needs may be met by assessing family concerns, giving clear consistent verbal and written explanations, and assuring direct communication with doctors. Physicians can be encouraged to write specific information that they have reviewed and/or shared with the family in the progress notes of the patient's care record to ensure consistency in information sharing. Family members can be encouraged to use the computer kiosk in the waiting area for consistent information regarding the CCU, policies, staff, and area resources. Nurses can give family relevant standardized handouts and pamphlets to keep and refer to over time.

Specific interventions implemented in this CCU during and since the completion of this study address some of these identified needs in the areas of proximity, information, and support. Information and support needs have been addressed by installation of a computer kiosk in the waiting area, a project developed by staff CCU nurses concurrent to this study. The introductory page is divided into five sections (1) the staff, (2) the unit, (3) the patient, (4) the hospital, and (5) the community. The staff section displays photos of CCU nurses and medical staff members with their credentials and specialty areas. The unit section gives information on the cardiovascular program, neurosurgery program, critical care intensivists program, critical care room tour, and critical care mission statement. The patient section has links for information for the family, patient care plans, and medical equipment. The hospital gives information, history, and a visual tour of the hospital. The community gives links to maps, restaurants, hotels, and city information links.

A formal interdisciplinary family conference format is used to discuss patient care goals with the family on the unit in the conference room. Patients are now screened during the morning disciplinary

rounds as to the need for the conference. Criteria for the conference are family request, patients who have been mechanically ventilated for more than 3 days, and complicated cases in which the patient's code status is in question.

Visiting hours remain flexible, but there is a lockdown policy for 1-hour intervals at 7 A.M., 3 P.M., 7 P.M., and 11 P.M. for nurses to share confidential information in report. Some nurses are more rigid then others about this policy. Family members are not usually included in the daily interdisciplinary rounds. Information is shared over the phone with a designated family contact person through a special code related to the patient's identification number. Updates and confidential information can then be relayed in a timely manner to this preauthorized family member as needed. A new family pamphlet, "Critical Care Visitor's Guide," designed by the critical care nurses, was published in January 2007. A family exit survey is handed out on transfer from the CCU.

Meeting the needs of family members helps reduce anxiety, builds family confidence in the health care system, and ultimately improves patient outcomes. Nurses are a primary resource for family members in the CCU.[1,9,10] Although nurses and family members may perceive needs differently, periodic study and reassessment of family needs may provide insight into current and future family care practices. In this small community-based hospital, many of the interventions in this unit are nurse-driven through process improvement committees and unit projects. Many nurses who participated in this study voiced a noticeable difference in their awareness and attitudes about family members' needs. One nurse commented, "It made me more aware of how CCU is perceived, how important our role is, and how significant we are to the family. We really make a huge difference in the whole experience for the patient and family." Other comments included: "The nurse meets most family needs informally, based on their training, experiences, and inclination. No formal program is in place to give consistent, baseline training of the staff in these needs." "In the CCU I feel the staff honestly tries to service the family as well as the patient. The times when family may feel ignored are usually when patient care is complicated."

FUTURE STUDY

Limitations of this study include the small sample size. Follow-up research could include a larger sample size, the use of confederate pairs to match family member responses to nurse responses, surveying family members about which interventions best meet their needs, and the use of a family needs survey during admission to the unit to identify family needs.

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