Family support programme for icu patient relatives

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From DNP Online Community

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1. Introduction / Purpose

Evidence has shown that family members of Intensive Care Unit (ICU) patients develop anxiety, depression, or post-traumatic stress syndrome -like symptoms. Paparrigopoulos (2006), Joint Commission on Accreditation of Healthcare Organizations (JCAHO) (2006) and the Society of Critical Care Medicine recommend family-centered care, but few studies demonstrate successful interventions to " decrease the adverse psychological effect of critical illness on the family. " (Azoulay, 2005)

This project served to examine the feasibility of such interventions, and as a pilot program to investigate research procedures before the design of a controlled trial. Derived from business leadership models, " Facilitated Sensemaking," provided the theoretical framework for the interventions: family members experience a disruption in their lives when a loved one is admitted to the ICU; they adjust with a compensatory process that may be influenced by nursing interventions.

2. Methods

The *' Family Support Program'* was developed consisting of personalized instructions delivered a clinical nurse specialist, and a family visiting kit in zip-locked plastic bag consisting of: a workbook including program introduction and instructions, cognitive recovery activities, activities to perform at the bedside including passive range of motion exercises, and personal care items. The program was offered to 30 consecutive families in a 32 bed “ mixed-use” ICU. All participants were English-speaking adult family members of mechanically ventilated adult ICU patients. To evaluate feasibility, data was collected on program acceptance, time of personal instruction, use of items in the family visiting kit, and family perception of program usefulness. In piloting the research procedure: a *Family Support Program* evaluation, and adapted Critical Care Family Needs Inventory (aCCFNI) was administered and psychometric properties of the instrument — the reliability and validity of the questioner and scoring method — were assessed.

A convenience sample is a study of subjects taken from a group that is conveniently accessible to a researcher. One advantage of this is that it is easy to access, requiring little effort and time. This sampling method suffers from a major disadvantage in that it is not an accurate representation of the population, which can skew results quite radically. Use of a convenience sample is quite popular and prevalent, however, and it can be valid under certain conditions.

Biases and Flaws

Any number of biases can occur in a convenience sample. By selecting from a specific population such as students enrolled in Sociology 101, people visiting a mall between 10: 00 am and 2: 00 pm on Saturdays, or library patrons, the study inadvertently excludes a great deal of the population. Choosing only students in a particular classroom at a certain university can easily exclude certain portions of the general populace, such as children or those without the financial means to attend the school.

Such exclusions are not always a problem. For example, a study on library patrons could easily take a convenience sample of people at a certain library and generalize the results. On the other hand, a study on social attitudes toward people with disabilities should not use only the students in a sociology class, which does not necessarily represent an accurate cross-section of the population. This inability to accurately generalize the results of such a group makes it ineffective for many studies.

Researchers who want more valid results typically take a “ probability sample,” which attempts to get an accurate representation of the population. It is not generally possible to study everyone, but it is possible to randomly assign people to a study with an eye toward retaining a balance of characteristics seen in the population in general. For example, organizations that conduct political polling usually try to draw on a large database of people and select subjects randomly. This randomization increases the chances of a more accurate pool forming to produce results that can be better generalized.

If a convenience sample is used, researchers typically disclose this fact. Good research usually includes a detailed overview of the sampling techniques used, so that people reading about it have a better understanding of how it was conducted. When revealing that a convenience sample was used, the researcher may also present justifications for its use and defend its accuracy.

3. Evaluation / Analysis

Standard statistical methods were applied using SPSS. Each aCCFNI item was ranked in order of importance using a weighted average analysis to measure “ the importance of the need and how well that need was met” (Davidson 2010). The *Family Support Program* evaluation questioner was in the same way analyzed with descriptive statistics.

4. Results

Of the thirty family members approached for the Family Support Program, all consented to participate. 22 surveys were returned. Quantitative analyses of the aCCFNI results determine all 45 needs had some importance. Likewise, all items offered within the family visiting kits were found useful to some family members. 42 Referrals to ancillary services were made for the 30 family members.

5. Discussion / Conclusion

Like previous research, this study demonstrated the importance of each of the 45-aCCFNI needs. A list of top 10 needs was also identified and corresponds with work by other researchers. Several non-generalizable opportunities for unit-specific performance improvement, including parking and other transportation related areas of stress were identified.

27% of family members who participated in the study did not to complete the surveys. The authors speculate that, “ the early critical care period may be too stressful to concentrate on writing.” Only two family members were observed writing in the provided workbook even though the workbook was reported as helpful on the program evaluation questioner. The authors point-out similar phenomenon demonstrated in the literature (Kloos 2008). The small sample size was identified as a study limitation. Results of this study are “ also limited to English-speaking adult family members of mechanically ventilated patients” (Davidson 2010).

The contents of the family visiting kits were refined with feedback received from family members during the study. It was suggested to build a ‘ family supply cart’ to wheeled around the unit and offer supplies to family members.

Operational issues

During the study, many unit-specific issues arose regarding current practice and were forwarded to the leadership team for action. For example, while screening patients for inclusion into the study, the investigator discovered that many patients did not have family members or visitors. A visiting ministry to meet the social needs of those patients has been suggested.

Nurses and families alike were unaware of the hospital’s family room in the medical library equipped with an Internet-connected computer and handy hot-linked Web sites as well as novels. Because of study referrals, the librarian reported an increased use in the family room (M. Robinson, personal oral communication, September 30, 2007). An informational sheet of family-friendly medical information sites was prepared for inclusion in the visiting kit and later use. A note card explaining library services was developed, printed, and stocked in the waiting areas.

As found in studies by Lautrette et al, [31] Melnyk et al, [14] Jones et al, [13] and Kloos and Daly, [33] family members appreciate supportive interventions that are multimodal in nature, both verbal and written. In this study, families also self-reported and it was observed that tactile interventions using common household items for hands-on bedside activities were a welcome addition to the family support services.

CONCLUSION

The Family Support Program based on the model of facilitated sensemaking is not only feasible but also helpful to family members of mechanically vented, adult ICU patients. The demonstrated reliability of the aCCFNI supports its continued use in identifying important needs and evaluating whether those needs are met for families of ICU patients. An overall score weighting importance and needs-met for each item aided in ranking opportunities for improvement. Future research is warranted to continue evaluation of the Facilitated Sensemaking theory and measure effect of these interventions on outcomes (eg, anxiety, depression, symptoms suggestive of risk for posttraumatic stress). Inclusion of this nursing intervention is warranted to assist family members in communicating with the patient as part of the list of bedside activities. Future study design should be expanded to other cultures or patient groups. Educational programs targeted to provide instruction for nurses on how to include family members into daily practice are also warranted. The time the lead investigator spent per family in supportive interactions appeared reasonable for inclusion into the bedside nurse’s practice.

Feasibility was further supported in that family members accepted and used the interventions that were based on concepts of the Facilitated Sensemaking model. Information to assist with decoding by explaining equipment, alarms, and surroundings was notably accepted. Instructions for interacting with or assisting ICU patients were appreciated. The provision of personal care supplies was found to be most helpful and useful. Verbal instructions and hands-on activities were preferred over journaling activities.

References

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