See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/236086013

Family needs and involvement in the intensive care unit: A literature review

Article in Journal of Clinical Nursing · March 2013

Impact Factor: 1.26 · DOI: 10.1111/jocn.12065 · Source: PubMed

CITATIONS

15

READS

385

4 authors:



Abbas S Al-Mutair

Al Mana College for Health Sciences

18 PUBLICATIONS 44 CITATIONS

SEE PROFILE



Virginia Plummer

Monash University (Australia)

52 PUBLICATIONS **126** CITATIONS

SEE PROFILE



Anthony Paul O'Brien

University of Newcastle

122 PUBLICATIONS 451 CITATIONS

SEE PROFILE



Rosemary Clerehan

Monash University (Australia)

69 PUBLICATIONS **456** CITATIONS

SEE PROFILE

REVIEW ARTICLE

Journal of **Clinical Nursing**

Family needs and involvement in the intensive care unit: a literature review

Abbas Saleh Al-Mutair, Virginia Plummer, Anthony O'Brien and Rosemary Clerehan

Aims and objectives. To understand the needs of critically ill patient families', seeking to meet those needs and explore the process and patterns of involving family members during routine care and resuscitation and other invasive procedures.

Methods. A structured literature review using Cumulative Index to Nursing and Allied Health Literature, Pubmed, Proquest, Google scholar, Meditext database and a hand search of critical care journals via identified search terms for relevant articles published between 2000 and 2010.

Results. Thirty studies were included in the review either undertaken in the Intensive Care Unit or conducted with critical care staff using different methods of inquiry. The studies were related to family needs; family involvement in routine care; and family involvement during resuscitation and other invasive procedures. The studies revealed that family members ranked both the need for assurance and the need for information as the most important. They also perceived their important needs as being unmet, and identified the nurses as the best staff to meet these needs, followed by the doctors. The studies demonstrate that both family members and healthcare providers have positive attitudes towards family involvement in routine care. However, family members and healthcare providers had significantly different views of family involvement during resuscitation and other invasive procedures.

Conclusion. Meeting Intensive Care Unit family needs can be achieved by supporting and involving families in the care of the critically ill family member. More emphasis should be placed on identifying the family needs in relation to the influence of cultural values and religion held by the family members and the organisational climate and culture of the working area in the Intensive Care Unit.

Key words: acute care, critical care, family, family care, needs

Accepted for publication: 28 August 2012

Introduction

The admission of a family member to the intensive care unit (ICU) places heavy stress on a family. The critical illness of a family member often occurs without any warning, and the stress for families is generally unanticipated. Stress is manifested through psychological pre-occupations, anxiety, uncertainty and the fear of losing a family member (Leske 1986, Horn & Tesh 2000). Many healthcare providers tend to view family members as merely an extension of the critical care patient, without placing any emphasis on the needs of the families (McLaughlin 1993). However, this perception is becoming unsustainable because the profession is moving towards more holistic care, and the family influence

Author: Abbas Saleh Al-Mutair, MSc, PhD Candidate, Department of Nursing, Monash University, Melbourne, Vic.; Virginia Plummer, PhD, RN, FACN, FACHSM, BN/BEHP Course Coordinator, Department of Nursing, Monash University, Melbourne, Vic.; Anthony O'Brien, PhD, RN, Senior Clinical Lead Research and Associate Professor, Clinical Nursing Centre for Practice Opportunity and Development, Hunter New England Health/The University of Newcastle, Newcastle, NSW; Rosemary Clerehan, PhD, Associate Professor and Director, International Postgraduate Academic Support, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Vic., Australia

Correspondence: Abbas Saleh Al-Mutair, PhD Candidate, 3/23 Highland St, Kingsbury, Melbourne, Vic., 3083, Australia. Telephone: +61 0411596486.

E-mail: abbas4080@hotmail.com

and presence have a strong impact on the patient's response to treatment (McLaughlin 1993). The family acts as a buffer for patient anxiety because when family anxiety is high, they will be unable to support the patient and inadvertently transfer their anxiety to the patient (Leske 2002). Accordingly, caring for the family is an important component of caring for the patient. This can be achieved when the family members are supported and involved in the care of the patient (Beeby 2000). Involvement of family members in routine daily living activities such as feeding the patient, helping with bathing, linen change, providing pressure and back care and turning the patient as well as family presence during resuscitation and other invasive procedures enable the family to be involved in the care of their loved one.

Aim

The aim of this review of the literature was to describe the experiences of ICU healthcare providers and family members of adult critically ill patients in ICU, regarding family needs and involvement in the care.

The following specific research questions will be used:

- 1 What are the family needs of critically ill patients?
- 2 How well are those needs being met and by whom?
- 3 What are the family members and healthcare providers attitudes towards family involvement during routine care and resuscitation and other invasive procedures.

Methods

To collect the literature, a comprehensive search was carried out on the following databases: CINAHL, Pubmed, Proquest, Google Scholar and Meditext and retrieved articles published between January 2000 and July 2012. Records were retrieved using a combination of the following search terms 'family', 'families in intensive care', 'family involvement in patient care', 'family involvement in nursing care', 'family needs', 'critical care nurse perceptions of family needs', 'nurses perceptions of family needs', 'attitude of healthcare providers', 'family presence in cardio-pulmonary resuscitation (CPR)', 'health professionals', 'nurses' with 'family witnesses resuscitation' and 'relatives'.

The inclusion criteria established for this literature review were that the research:

- 1 Published in English;
- 2 Addressed aspects of family needs and family involvement during routine care and resuscitation and other invasive procedures;

- 3 Involved subjects/informants who were healthcare providers such as nurses, doctors and relatives or significant others of patients; and
- 4 Conducted in adult intensive care units.

 Publications were excluded if they cover the topics of:
- 1 Paediatric care.
- 2 End-of-life care.

A hand search of critical care journals was also carried out for any recently published studies that were not included in the electronic databases. After collecting the research articles, they were reviewed for a general understanding of the contents. The quality of the studies included in the review was appraised using Polit and Beck (2012) guide to critique research. As a result of the search performed, over 45 articles were retrieved, and only 30 articles met the initial selection criteria. Of the 15 excluded, nine studies did not meet the inclusion criteria, and six were excluded from the review because of poor quality. Accordingly, a total of 30 articles were included in the literature review, published between 2000 and 2012. Of the studies, 19 (63.3%) adopted a quantitative research design, using a survey; ten (33-3%) adopted a qualitative research design using an interview method or open-ended questionnaire and one study adopted a mixed method design using a survey and a semi-structured interview. Twelve studies were related to family needs and meeting those identified needs, eight dealt with family involvement in routine care and the remaining ten studies focused on family presence during resuscitation and other invasive procedures (see Table 1-3). The studies examined the perspectives of family members or healthcare providers or compared the two perspectives. Those studies chosen were conducted in different locations, languages and cultures including USA, Canada, Britain, Sweden, Norway, Australia, Turkey, Jordan, Germany, Greece, Hong Kong, Iran and Saudi Arabia.

Results

The research articles were then critically analysed and divided into distinct but inter-related areas: family needs, family involvement in routine care and family presence during resuscitation and other invasive procedures, these are the focus of this paper.

Family needs

The main focus of the family needs studies was the identification of the importance of those needs. The review revealed that all of the family needs studies, which adopted

Table 1 Studies on family needs

Authors	Aim	Setting	Method – design	Population
Al-Hassan and Hweidi (2004)	To identify the needs of Jordanian families of hospitalised critically ill patients	CCUs of four large hospitals	Quantitative descriptive study using CCFNI	158 family members
Yang (2008)	To achieve an understanding of the needs and experiences of Korean families in ICU	Nine medical ICUs of nine general hospitals	A triangulation mixed methods design using CCFNI and semi- structured interview	85 families for the quantitative inventory and 25 family members for the interview
Omari (2009)	To identify the self perceived needs of adult Jordanian family members who have a family members admitted in the ICU and to explore whether these needs were being met and by whom	Six ICUs of three hospitals	Quantitative –descriptive study using CCFNI	139 family members
Bailey et al. (2009)	To describe family members perceptions of informational support, anxiety, satisfaction with care and the interrelationships with these variables	Medical-surgical ICU of a teaching hospital	A cross-sectional descriptive correlational pilot study using a modified version of the CCFNI and a satisfaction with care questionnaire	29 family members
Bond et al. (2003)	To discover the needs of families of patients with sever traumatic brain injury during the families experience in neurosurgical ICU	Neurological ICU of a level I trauma center	Exploratory qualitative descriptive design using interview	Seven family members
Fry and Warren (2007)	To examine the perceived needs of the critical care family members in the waiting room viewed through their own words and to stimulate discussion about the meaning of the language expressed by the participants	ICU of large hospital	Qualitative- Heideggerian hermeneutic contextual analysis using interview	15 family members
Keenan and Joseph (2010)	To identify family needs of a critically ill member who sustained a severe Traumatic Brain Injury and to determine whether these needs change over time	ICU of large hospital	Qualitative approach with semi-structured interview	25 family members
Takman and Severinsson (2006)	To investigate the healthcare providers (registered nurses, physicians and enrolled nurses) perceptions of the needs of critically ill adult patients' significant others based on CCFNI	21 medical and surgical adult ICUs of eight emergency hospitals	Qualitative approach using open-ended questions	Two hundred and thirty-two enrolled nurses, 292 registered nurses and 79 physician from Sweden and 275 registered nurses and 36 physicians from Norway
Kosco and Warren (2000)	To determine whether nurses' perceptions of meeting families' needs were correlated to the families' perception of these needs being met	Adult ICU of large hospital	Comparative, descriptive, exploratory study –using structured interview (CCFNI)	45 family members and 45 nurses

Table 1 (Continued)

Authors	Aim	Setting	Method – design	Population
Hinkle et al. (2009)	To describe the family members' needs of patients with critical illness identified by family members and nurses and to compare and identify the differences in the needs identified by family members visiting patients with critical illness and nurses working in ICUs	Six ICUs of large medical center	Qualitative approach	101 family members and nurses
Kinrade <i>et al.</i> (2010)	To study the needs of Australian relatives whose family member is unexpectedly admitted to the ICU and compare them with perspectives of family needs	ICU of regional hospital	Descriptive quantitative design using questionnaire	25 family members and 33 nurses
Chatzaki et al. (2012)	To define the needs of families with ICU patients in the suburban/rural population of Crete Island	Closed-model, mixed medical-surgical 11-bed ICU	Prospect cohort study	230 family members

a quantitative research design used the Critical Care Family Needs Inventory (CCFNI), as the data collection instrument to investigate the importance of family needs. The CCFNI is a self-report questionnaire developed by Molter (1979) and has been used in over 50 studies listing the needs statements on a four-point Likert-type scale from '1' not important to '4' very important. The instrument consists of 45 needs statements and is divided into five dimensions: assurance, information, proximity, comfort and support (Leske 1986).

The assurance dimension consists of seven items, which concerned the family's need for being re-assured by healthcare providers about the health status of their family member. The information dimension can be explained as families seeking knowledge of the patient's problem in many different ways, and this particular dimension in the reviewed studies consisted of eight needs statements. The need for proximity is understood as the state of being physically near to the patient, as family members are physically and emotionally distressed and they need to be close to their relative. Nine needs statements are defined in the proximity needs dimension. Under the comfort dimension in the CCFNI, there are six statements. Support is a multidimensional need that includes physical, environmental, psycho-spiritual and socio-cultural such as food and a bathroom. The support needs dimension comprises one-third of the 45 statements in the CCFNI and has the largest number of needs statements (15 items), concerning the support needs to be met by healthcare providers, family members, friends and religious groups.

Some studies have used the CCFNI to gather data from family members as well as healthcare providers (Kosco & Warren 2000, Kinrade *et al.* 2010). The CCFNI has also been used to investigate the perceived needs of family members of critically ill patients in ICU from the healthcare providers' perspective, comparing them with the family needs as perceived by the family members. Only a few wording modifications were made on the healthcare providers' questionnaire to make it relevant for them. Generally speaking, findings from studies such as those of Kosco and Warren (2000), Al-Hassan and Hweidi (2004), Yang (2008) and Omari (2009) have demonstrated that family members ranked the needs for assurance and the needs for information as the most important, followed by proximity, comfort and support.

Qualitative methods to explore family needs from the perspectives of family members were used in five studies: Bond *et al.* (2003), Takman and Severinsson (2006), Fry and Warren (2007), Keenan and Joseph (2010) and Hinkle *et al.* (2009). Qualitative approaches of family needs studies enabled family members to present their perspectives more explicitly (Hinkle *et al.* 2009). The qualitative methods also allowed exploring in-depth data, and rich themes were able to be produced (Hinkle *et al.* 2009). The need for information and the need for hope have emerged from the qualitative studies (Bond *et al.* 2003, Takman &

Severinsson 2006, Fry & Warren 2007, Keenan & Joseph 2010). That information should be accurate about the condition of the loved one and be delivered in comprehensible terms.

One of the challenges that healthcare providers encounter in critical care is their ability to identify, meet and to 'satisfy' the family needs of a critically ill patient. Daley (1986) and Molter (1979) suggest that this challenge may be related to the fact that healthcare providers in critical care areas focus solely on patient care and spend little time in meeting their families' needs. The family needs studies have focused on the phenomenon of gaining better understanding of how well families' needs are being met and who is the most appropriate healthcare provider to help the family members to fulfil each need. The family members perceived their important needs as being unmet. They also identified the nurses as the best to meet these needs followed by the doctors.

Family involvement during routine care

There is some evidence to suggest that the inclusion of family members in routine care can provide them with some satisfaction and emotional re-assurance. The review of studies identifying family involvement in providing routine care to their critically ill patient in the ICU highlighted the families desire to be involved in the care of their loved one (Schiller & Anderson 2003, Soderstrom et al. 2003, Eldredge 2004, Vandall-Walker et al. 2007, Benzein et al. 2008, Fisher et al. 2008, Mitchell et al. 2009, Wahlin et al. 2009). Families in the reviewed studies (see Table 2) endorsed the need to be involved in the routine care of the critically ill family member (Soderstrom et al. 2003, Benzein et al. 2008, Fisher et al. 2008). The studies also revealed that when families are involved in this care that their anxiety is reduced through

Table 2 Studies on family presence during routine care

Authors	Aim	Setting	Method – design	Population
Eldredge (2004)	To describe the spouses' helping behaviours at ICU bedside and to explore how well preferences for closeness and helpfulness explain variation in spouses' emotional outcomes during their partners illness	Medical ICU/ Coronary care unit in tertiary teaching hospital	Quantitative repeated- measures design	88 spouses
Vandall-Walker <i>et al.</i> (2007)	To address a gap in the theoretical about how nurses help family members	Seven ICUs of two teaching hospitals	Grounded theory using interview	Twenty family members
Mitchell et al. (2009)	To determine the effect of family- centered nursing intervention on the perceptions of family members of critical care patients of centered care as measured by respect, collaboration and support	Two teaching hospitals	Pretest-post-test design	174 family members (75 control, 99 intervention)
Wahlin <i>et al.</i> (2009)	To describe next of kin empowerment in an intensive care situation	Two general ICUs	Phenomenological method using interview	Ten family members
Soderstrom et al. (2003)	To describe nurses' experiences of interactions with family members in the ICU	ICUs of two hospitals	Qualitative design using interview	10 nurses
Fisher et al. (2008)	To assess the attitudes and values of nursing staff towards family presence during routine nursing care	Rural community hospital	Cross-sectional descriptive study using a survey technique	89 nurses
Benzein et al. (2008)	To investigate the attitudes of registered nurses (RNs) about the importance of involving of families in nursing care	Swedish critical care nurses of diverse hospitals	Descriptive Quantitative study using questionnaire	634 Swedish registered nurses
Schiller and Anderson (2003)	To explore the family members and nurses' perceptions of family involvement in the daily work rounds with the Trauma Team	ICU of large hospital	Quantitative descriptive study using questionnaire	34 family members and ten nurses

the support provided to their loved one (Mitchell *et al.* 2009). Additionally, the studies demonstrate that health-care providers have positive attitudes towards family involvement in routine care, and that staff consider family members as important in the care of their critically ill relative (Benzein *et al.* 2008, Fisher *et al.* 2008). The healthcare providers indicated that the inclusion and

interaction with families can improve communication and build relationships, which ultimately result in providing good care for both patient and family (Schiller & Anderson 2003). Such a positive outcome for patients and their families warrfants further investigation, and it is feasible that such family involvement could provide a basis for improved recovery.

Table 3 Studies on family presence during resuscitation and other invasive procedures

Authors	Aim	Setting	Method – design	Population
Wanger et al. (2004)	To describe the family members' the experiences, thoughts and perceptions of their critically ill patients during resuscitation in the ICU	Coronary care unit of a 700-bed urban community hospital	Qualitative- interview	Six family members
Holzhauser et al. (2006)	To study the attitudes of family members being present during resuscitation	A major tertiary referral teaching hospital	A randomised control trial design	108 family members control group $(n = 40)$ experimental group $(n = 58)$
Knott and Kee (2005)	To explore nurses' beliefs regarding family presence during resuscitation	ICUs of diverse hospitals	Descriptive qualitative using semi-structured interviews	Ten Registered Nurses
Fulbrook et al. (2005)	To explore the experiences and attitudes of the European critical care nurses to the family presence during resuscitation of adult patients	Critical care nurses attended the European Federation of Critical Care Nursing Associations	Quantitative descriptive study using questionnaire	124 European critical care nurses
Badir and Sepit (2007)	To explore experiences and opinions of critical care nurses regarding family presence during resuscitation in Turkey	ICUs of ten hospitals	Descriptive quantitative design using questionnaire	409 critical care nurses
Cunes and Zaybak (2009)	To determine the experiences and attitudes of Turkish critical care nurses concerning family presence during resuscitation	Acute care areas of two university hospitals	Descriptive quantitative design using questionnaire	135 critical care nurses
Koberich et al. (2010)	To explore the German intensive care nurses' experiences and attitudes towards family presence during resuscitation	26th Reutlinger Fortbildungstage	Descriptive quantitative design using questionnaire	164 intensive care nurses
Kianmeher et al. (2010)	To determine the opinions of healthcare providers of family presence during resuscitation and other invasive procedures	ICUs of four teaching hospitals	Descriptive quantitative design using questionnaire	200 healthcare providers
Al-Mutair et al. (2012)	To identify the nurses' attitudes towards family presence during resuscitation	Two major trauma centers	Descriptive study using survey design	132 nurses
Leung and Chow (2012)	To investigate the family members and healthcare providers attitudes towards family presence during resuscitation	ICU of regional hospital	Cross-sectional using survey design.	69 family members and 163 healthcare providers.

Family presence during resuscitation and other invasive procedures

Most of the studies in family presence during resuscitation and other invasive procedures were descriptive using either quantitative or qualitative approaches (see Table 3). The studies reviewed here have examined the attitudes of both family members and healthcare providers towards family presence during resuscitation and other invasive procedures in the ICU. The family members indicated their desire and supported family presence during resuscitation and other invasive procedures (Wanger *et al.* 2004, Holzhauser *et al.* 2006). They also identified further benefits including helping the patient, knowing everything possible was done to save their loved one and provided care and support to grieving family members (Holzhauser *et al.* 2006).

ncreasingly, the reviewed studies highlight that healthcare providers have significantly different opinions regarding family presence during resuscitation and other invasive procedures. Some oppose the family presence for many reasons including that the practice would be offensive and produce stress in staff and that family members may interfere with the treatment (Badir & Sepit 2007, Cunes & Zaybak 2009, Kianmeher et al. 2010, Koberich et al. 2010). Other healthcare providers were comfortable with the family presence and believed that it would positively influence patient care outcomes, agreeing that family presence would re-assure them that the best care was being given to the patient (Fulbrook et al. 2005, Knott & Kee 2005). Importantly, there is an endorsed need for written policies to guide staff during family presence in selected situations in routine or resuscitation and other invasive procedures. Others suggest that a 'nurse facilitator', dedicated to evaluate the readiness of the family members to attend the procedure and explain it to them when they attend, is warranted (Fulbrook et al. 2005, Knott & Kee 2005, Koberich et al. 2010).

Discussion

The integration of family in the care of hospitalised patients is a growing trend in today's hospital care. With regard to family involvement, the attitudes of healthcare providers have changed towards a greater need impetus to understanding family needs and to practically involve them in the care process.

Family needs

Findings from the reviewed studies have highlighted that the family members in several quantitative studies, through

Table 4 Comparison of family members rank order of the CCFNI for three studies

	Ranking: mean			
Dimension	Kosco and Warren (2000)	Yang (2008)	Omari (2009)	Chatzaki et al. (2012)
Assurance	1 (3.16)	1 (3.67)	1 (2.65)	1 (1.09)
Information	2 (2.99)	2 (3.49)	5 (2.15)	2 (1.48)
Proximity	3 (2.95)	3 (3.23)	2 (2.56)	3 (1.49)
Comfort	4 (2.94)	4 (2.93)	3 (2.22)	5 (1.9)
Support	5 (2.57)	5 (2.63)	4 (2.18)	4 (2.11)

In Chatzaki *et al.*'s (2012) study the mean was judged by the lowest, the mean score of ≤ 1.25 was defined as 'most important'.

the use of CCFNI and in qualitative studies, have identified the need for assurance and the need for information as the highest priority needs followed by proximity, comfort and support, respectively.

A comparison of four studies of family needs of critically ill patients was conducted for the purpose of this review, which used CCFNI with different populations. As shown in Table 4, the rank order by mean scores on CCFNI as perceived by family members were assurance, followed by information as the 'most important' needs. Proximity, comfort and support dimensions were the lowest subscales, demonstrating that family members perceived the needs under these dimensions as 'least important'. These quantitative studies using the CCFNI revealed many similarities in the importance of family needs identified by the families in different populations and locations and with different cultural backgrounds. The studies from the United States, Korea, Jordan and Greece (Kosco & Warren 2000, Yang 2008, Omari 2009, Chatzaki et al. 2012) show a number of similarities in the importance of family needs, as ranked by the family members.

The review clearly indicated that family members ranked the family needs significantly differently from the healthcare providers in the ICU. Family members identified information and assurance needs as the highest priority as in the previous reported studies, whereas healthcare providers mainly identified personal, cognitive and trust needs as the highest priority for families with a critically ill member (Takman & Severinsson 2006, Keenan & Joseph 2010, Kinrade *et al.* 2010).

The ability to meet or 'satisfy' the family needs of a critically ill patient is one of the challenges that healthcare providers encounter in the critical care area. Of the family needs studies identified, Kosco and Warren (2000) and Omari (2009) focused on gaining a better understanding of how well families' needs were being met and who met them. Kosco and Warren (2000) found that only three of

the ten most important needs identified were perceived by family members as being met. The findings were similar to a study, which sampled 139 family members from the Muslim community of Jordan by (Omari 2009). Results highlight that none of the 10 most important needs identified by the family members were considered as being met.

The findings of the qualitative studies (Bond et al. 2003, Takman & Severinsson 2006, Fry & Warren 2007, Hinkle et al. 2009, Keenan & Joseph 2010) demonstrate that the need to receive understandable information was identified as important and remained unmet. These qualitative findings added a more in-depth understanding of the family needs issue and confirmed the previously mentioned CCFNI findings. Therefore, healthcare providers should recognise that the family needs information about their critically ill relative to be delivered to them in understandable nonjargonistic language. The use of simple and clear terms in communicating information to family members can foster family members' understanding of their relative's health condition and re-assure them of the quality of care being delivered (Al-Hassan & Hweidi 2004).

In brief, family members with critically ill patient admitted to the ICU identified information and assurance needs as their highest priority (Yang 2008, Omari 2009), whereas healthcare providers mainly identified personal and cognitive needs as the highest priority (Takman & Severinsson 2006, Keenan & Joseph 2010, Kinrade *et al.* 2010). Age, gender, relationship to the patient, length of the patient stay in the ICU and the patient diagnosis were not found to be correlated to the family members' ranking of their needs in previous CCFNI studies (Kosco & Warren 2000, Omari 2009). Also, age, gender, qualifications and working experience did not predict the healthcare providers' ranking needs of the family of the critically ill patient (Takman & Severinsson 2006).

Family involvement during routine care

Eight studies were reviewed, which investigated either the perception of family members towards family involvement in routine care or the healthcare providers or comparing the two perceptions (see Table 3). The inclusion of family members in routine care was found to provide them with some satisfaction. A study by Eldredge (2004) explored the spouses' helping behaviours at the ICU bedside, suggesting that closeness and helpfulness feelings are integrated concepts and attachment helped the family members to understand their spouse's emotional responses to their critical illness. It also facilitated the spouse's feeling that they were helping the patient. This finding was similar to Mitchell

et al.'s (2009) where they argue that partnering with patients' family members to provide fundamental care to the patient significantly improved their feeling of respect, collaboration and support. There is evidence that family involvement in the care of the patient in ICU will empower family members to further support the ICU patient. Some of the informants (spouses, siblings, parents or children of ICU patient) were strengthened by support from other family members or healthcare providers and by being involved in caring for the patient. Wahlin et al. (2009) argue that it is critical to discuss attitudes and behaviours of family members as well as involving them in the care in the intensive care unit to improve the care of family members in the intensive care unit. However, challenging this may be for healthcare providers, the evidence is resoundingly in favour of enabling family presence and support during the intensive care episode of care.

Thus, behaviour of healthcare providers regarding family involvement during routine care is a key priority to facilitate family involvement patterns. Soderstrom et al. (2003) interviewed 10 nurses working in the ICU of two hospitals in Sweden, asking them to describe their experiences of interactions with family members in the ICU. The interviewed nurses considered family members as important in nursing care and important to create contact and engage them in the nursing care. Nurses believed that having a good relationship with families was a prerequisite for providing good care for both patient and family. In this regard, Fisher et al. (2008) revealed congruent results in a survey of 89 nursing staff, which indicated that nurses' attitudes and behaviours regarding family presence during routine nursing care, were favourable. Nursing staff also believed that family involvement was important, and moreover that they were likely to include families in daily care. This is again similar to a study by Benzein et al. (2008) from Sweden that investigated the attitudes of 634 registered nurses about the importance of involving of families in nursing care. This large survey reported that Swedish RNs held a supportive attitude to involving families in routine nursing care.

The involvement of relatives may provide the healthcare providers with the opportunity to develop and build a relationship with families and enhance the care given to the patient and family as a whole. A study by Schiller and Anderson (2003) compared the family members' and nurses' perceptions of family involvement in the daily work rounds with the Trauma Team. A 25-question survey was sent to select family participants in order to obtain their retrospective opinions about the inclusion of family members in the daily work rounds. The ICU nursing staff also

completed an abbreviated survey to document their perceptions as to how family rounds facilitated care. The study reported that the rounds with family members resulted in much improved relationships that the stress diminished, hostility reduced and system dysfunction in the work process was less frequent. Furthermore, family members reported that the daily rounds allowed them to understand the patient's condition and plans for care. No areas of dis-satisfaction were documented by the family members. Additionally, nurses indicated satisfaction with the communication provided by the team and in the resultant facilitation of more positive relations with the families. As an outcome, the presence of family members on daily work rounds has been a success as judged by both the healthcare providers and family members. There have been no reported adverse events of the family inclusion in the daily trauma rounds.

Family presence during resuscitation and other invasive procedures

Significantly, different perceptions can be perceived regarding the presence of family members during resuscitation and other invasive procedures. Six family members, who were barred from the patients' room and asked to wait in another room during resuscitation, were interviewed by Wanger *et al.* (2004). All family members expressed their desire to be with their loved one. They believed that when families were not provided information during resuscitation that they could not determine what was going on. Participants maintained that during the resuscitation of the loved one, the family was in crisis needing re-assurance and informational support to cope effectively.

Two years after the release of the Wanger et al. (2004) study, another study by Holzhauser et al. (2006) explored the attitudes of family members who were present during resuscitation. While Wanger et al. (2004) was a qualitative study, Holzhauser et al. (2006) used a randomised control trial design to study the attitudes of family members regarding family presence during resuscitation. Family members who met the inclusion criteria were randomised to either the control group or experimental group. The control group (n = 40) did not attend the procedure and remained out of the resuscitation room. The experimental group (n = 58)were invited to the resuscitation room during resuscitation. The participants were asked to complete a questionnaire that was developed for the study, based on clinical staff experience and review of literature. Consistent with Wanger et al. (2004), the findings of Holzhauser et al. (2006) demonstrated that the majority of family members in both the control and experimental groups were content to be present during the resuscitation of their loved one. None of the family members participating in the experimental group felt pressured or traumatised to be present. Also, 67% of the control group participants would prefer to be present.

The findings of this research strongly support the presence of family members during resuscitation and have several clinical implications. The results demonstrated that 100% of the family members who were present during resuscitation (experimental group) were glad, they were present to support their relatives, knowing that everything possible has been done, beneficial to their patient's recovery, and reducing family anxiety and fear. They also agreed that their presence helped them to come to terms with the patient's outcomes. Additionally, of those who did not attend the procedure the majority (71·2%), strongly believed that their presence would have helped them to cope better with their loved one's final treatment outcome.

Findings from the reviewed studies identify mixed opinions among healthcare providers about family presence during resuscitation and other invasive procedures. Two studies, using different methods and sampling from different locations, were released in the same year: the first was by Knott and Kee (2005), which explored the nurses' beliefs regarding family presence during resuscitation. The data were gathered from ten registered nurses (RNs), one man and nine women, with a minimum of four years clinical experience working in diverse acute care units through a semi-structured interview. The second study by Fulbrook et al. (2005), explored the experiences and attitudes of 124 European critical care nurses to family presence during resuscitation of adult patients, through the use of a selfadministered questionnaire. Generally, nurses in both studies displayed positive attitudes to the presence of family members and thought that allowing family members to be present would re-assure them to see that everything possible was done to save the patient. Additionally, the two studies endorsed the need for policies to guide the practice, and the nurses participating in those studies also expressed their feeling that there should be a member of the resuscitation team facilitating family members comprehension of what transpires throughout the experience, including providing emotional support, explanations and interpretations of the procedure to the attending families.

Contrary to the previous studies that reported strong agreement with family presence among critical care nurses were two studies, including critical care nurses from Turkey and one from Germany (Badir & Sepit 2007, Cunes & Zaybak 2009, Koberich *et al.* 2010). A further sample incorporated both nurses and physicians from Iran

(Kianmeher et al. 2010) and nurses from two hospitals in Saudi Arabia (Al-Mutair et al. 2012). These four studies concluded that there was a high percentage of opposition among healthcare providers to the family presence. The most common reasons for the participants' opposition were that family members if present, would interfere with the resuscitation team's performance, with the participants suggesting that family members witnessing resuscitation was a traumatic and stressful experience for family. Researchers interpreted the participants' decision regarding the practice of being present during invasive procedures, such as those, which can occur during resuscitation, as being influenced by cultural values and societal traditions. This might well be the case in Germany, where German culture and traditions were thought to be the reason behind the negative attitudes held by the participants (Koberich et al. 2010). The other three studies reporting negative attitudes were undertaken in Muslim communities: these were Badir and Sepit (2007), Cunes and Zaybak (2009) and Kianmeher et al. (2010). The cultural background of a Muslim society is unlike the Western background. Muslim family members are invariably close to each other and more prone to display strong emotions (Kianmeher et al. 2010). This can be understood as the reason to the general opposition and resistance to allow family presence during resuscitation and other invasive procedures.

Studies on family presence during resuscitation and other invasive procedures were restricted to western countries such as US and Europe until 2004 (Leung & Chow 2012). Recently, healthcare providers of nonwestern countries became aware of the practice and conducted studies to examine the staff and families attitudes towards the practice. The practice is relatively new to those countries and the majority of the healthcare providers did not support the practice (Badir & Sepit 2007, Al-Mutair et al. 2012). The same was revealed by Leung and Chow (2012), which investigated the attitudes of both healthcare staff and family members towards the practice in one single study. It was found in that study that the majority of healthcare providers did not accept the practice; in contrast, nearly 80% of the family members welcomed the practice. Healthcare providers with previous experience of family presence were found to be more supportive compared with the healthcare providers with no previous experience. By contrast, in Saudi Arabian study by Al-Mutair et al. (2012) nurses with previous experience of family presence opposed the practice more than nurses with no previous experience (p = 0.001). This was interpreted as healthcare providers concerns about the negative effects on practice of family presence during resuscitation.

Conclusion

The literature has demonstrated that the perceptions of family members and the perceptions of healthcare providers were found to be incongruent in relation to: family needs; and family involvement during resuscitation and other invasive procedures and congruent in family involvement in routine care. Several studies focused on the needs of family members within the critical care environment, adopting a quantitative approach utilising Molter's (1979) CCFNI and obtained very similar results. Most of the studies indicated that family members ranked the information and assurance need statements as highest in importance, while healthcare providers were found to prioritise the family needs differently than did the family members. The review clarifies the family members' perception of how their important needs are not met and identifies the nurses as the best healthcare staff to meet these needs, followed by the doctors.

This review of the evidence surrounding family member involvement during the crisis of an ICU experience demonstrates that family involvement offers potential benefits to patients and families. Both family members and healthcare providers held positive attitudes towards family involvement during routine care and believed that the involvement of family members in aspects of patient physical care would be empowering and supportive to both the patient and their family members. In contrast, studies on family presence during resuscitation and other invasive procedures showed that family members mostly had positive perceptions, while the healthcare providers held mixed sometimes oppositional opinions.

Limitations

Many of the family needs studies have adopted a quantitative approach utilising Molter's (1979) CCFNI and most were repetitions of the work of Moler and Leske (1983). The CCFNI includes very loose criteria for inclusion of subjects, using convenience and small sample sizes, which limits generalisation of the findings. All of the family needs studies obtained data from the family members within 24–72 hours of their family members' admission to the ICU, which could affect the validity of the data because family members experience intense emotions during such times. Only a few studies have sought to uncover family members' and healthcare providers' experience of involvement in care and family needs using qualitative approaches. Additionally, the interview methods conducted in the reviewed qualitative studies were

with a small number of respondents, making it hard to determine whether the interviews were adequate to ensure theoretical saturation. Studies on family presence during resuscitation and other invasive procedures were mainly descriptive quantitative studies using a questionnaire design with healthcare providers, and only a few studies sought to discover the attitudes of family members in depth. It would, therefore, be worthwhile to use qualitative methods in a mixed method study with both family members and healthcare providers to further explore their attitudes of family needs, family involvement and, indeed, any effects of cultural differences in greater depth.

What is already known about the topic?

- The needs for information and assurance have been perceived by the family members as the most important needs followed by the need for proximity, comfort and support.
- Nurses followed by doctors were found to be the best to meet family needs although family needs not always met.
- The perceptions of family members and healthcare providers' of family involvement and needs have been found to be incongruent.
- Family members and healthcare providers' professionals hold mixed opinions towards family presence during resuscitation and other invasive procedures.

What this review adds?

- The literature neglected to recognise the family needs in relation to the influence of cultural rituals, beliefs and values and patient and family members religious views.
- The literature has neglected to take into account the influence of the organisational climate and culture of the

working area on the healthcare providers' perception of family involvement in care.

Relevance to clinical practice

Three principle reasons were acknowledged for identifying and meeting the family needs. First, holistic care that if it is to be practised effectively should include consideration of the family in the care planning (Woolley 1990). Second, meeting the family needs reduces the stress of family members, which ultimately benefit improving patient care (Dyre 1991). Third, family members might be a source of stress for nurses and other healthcare providers and if family stress can be reduced this may serve to reduce stress on healthcare providers (Wilkinson 1995). In addition, the involvement of family in the care of hospitalised patients has implications for the working situation of nurses and other healthcare providers and ultimately for the quality of care delivered to the patient. Angood et al. (2010) stated that family requirements must always be respected and everything possible must be done by healthcare providers to honour the wishes of the patient and family. Family involvement in some of the patient's personal care may serve to decrease the powerlessness and the anxiety the family might experience during the patients admission (Hammond, 1995).

Contributions

Study design: ASA-M; data collection and analysis: ASA-M and manuscript preparation: ASA-M, VP, AO, RC.

Conflict of interest

None.

References

Al-Hassan M & Hweidi I (2004) The perceived needs of Jordanian families of hospitalized, critically ill patients. *International Journal of Nursing Practice* 10, 64–71.

Al-Mutair A, Plummer V & Copnell B (2012) Family presence during resuscitation: a descriptive study of nurses' attitudes from two Saudi hospitals.

Nursing in Critical Care 17, 90–98.

Angood P, Dingman J, Foley M, Ford D, Martins B, Regan P, Salamendra A, Sheridan S & Denham C (2010) Patient and family

involvement in contemporary health care. *Journal of Patient Safety* **6**, 38–42.

Badir A & Sepit D (2007) Family presence during CPR: a study of the experiences and opinions of Turkish critical care nurses. *International Journal of Nursing Studies* 44, 83–92.

Bailey J, Sabbagh M, Loiselle C, Boileau J & McVey L (2009) Supporting families in the ICU: a descriptive correlational study of informational support anxiety, and satisfaction with care. *Intensive and Critical care Nursing* 26, 114–122.

Beeby J (2000) Intensive care nurses' experiences of caring. *Intensive Critical Care Nursing* 16, 151–163.

Benzein E, Johansson P, Arestedt K & Saveman B (2008) Nurses' attitudes about the importance of families in nursing care: a survey of Swedish nurses. *Journal of family Nursing* 2, 162–180.

Bond A, Draeger C, Mandleco B & Donnelly M (2003) Needs of family members of patients with severe traumatic brain injury: implication for evidence – based practice. *Critical Care Nurse* 4, 63–72.

- Chatzaki M, Klimathianaki M, Anastasaki M, Chatzakis G, Apostolakou E & Georgopoulos D (2012) Defining the needs of ICU patient families in a suburban/rural Greek population: a prospective cohort study. *Journal of Clinical Nursing* 21, 1831–1839.
- Cunes U & Zaybak A (2009) A study of Turkish critical care nurses' perspectives regarding family-witnessed resuscitation. *Journal of Clinical Nursing* 18, 2907–2915.
- Daley L (1986) The perceived immediate needs of families with relatives in intensive care setting. *Heart and Lung* 13, 231–237.
- Dyre I (1991) Meeting the needs of visitors

 a practical approach. *Intensive Care*Nursing 7, 135–147.
- Eldredge D (2004) Helping at the bedside: spouses' preferences for helping critically ill patients. *Research in Nursing* & Health 27, 307–321.
- Fisher C, Lindhorst H, Mathews T, Munroe D, Paulin D & Scott D (2008) Nursing staff attitudes and behaviours regarding family presence in the hospital setting. *Journal of Advanced Nursing* 64, 615–624.
- Fry S & Warren N (2007) Perceived needs of critical care family members: a phenomenological discourse. *Critical Care Nursing Quarterly* 2, 181–188.
- Fulbrook P, Albarran J & Latour J (2005)
 A European survey of critical care nurses' attitudes and experiences of having family members present during cardiopulmonary resuscitation. *International Journal of Nursing Studies* 42, 557–568.
- Hammond F (1995) Involving families in care within the intensive care environment: a descriptive survey. *Intensive* and Critical Care Nursing 1, 256–264.
- Hinkle J, Fizpatrick E & Oskrochi R (2009) Identifying the perception of needs of family members visiting and nurses working in the intensive care unit. *Jour*nal of Neuroscience Nursing 2, 85–91.
- Holzhauser K, Finucane J & Vries S (2006) Family presence during resuscitation: a randomised controlled trial of the impact of family presence. *Australasian Emergency Nursing Journal* 8, 139–147.
- Horn E & Tesh A (2000) The effect of critical care hospitalization on family mem-

- bers: stress and responses. *Dimensions* of Critical Care Nursing 19, 40–49.
- Keenan A & Joseph L (2010) The needs of family members of sever traumatic brain injured patients during critical and cute care: a qualitative study. Canadian Journal of Neuroscience Nursing 3, 25–35.
- Kianmeher N, Mofidi M, Rahmani H & Shahin Y (2010) The attitudes of team members towards family presence during hospital-based CPR: a study based in the Muslim setting of four Iranian teaching hospitals. *Journal of the Royal College of Physicians of Edinburgh* 40, 4–8.
- Kinrade T, Jackson A & Tomany J (2010)
 The psychosocial needs of families during critical illness: comparison of nurses' and family members' perspectives. Australian Journal of Advanced Nursing 1, 82–88.
- Knott A & Kee C (2005) Nurses' beliefs about family presence during resuscitation.

 Applied Nursing Research 18, 192–198.
- Koberich S, Kaltwasser A, Rothaug O & Albarran J (2010) Family witnessed resuscitation experience and attitudes of German intensive care nurses. *British Association of Critical Care Nurses* 5, 241–250.
- Kosco M & Warren N (2000) Critical care nurses' perceptions of family needs as met. Critical Care Nursing Quarterly 23, 60–72.
- Leske J (1986) Needs of relatives of critically ill patients: a follow-up. *Heart and Lung* 2, 189–193.
- Leske J (2002) Protocols for practice applying research at the bedside: interventions to decrease family anxiety. *Critical Care Nurse* **6**, 61–65.
- Leung N & Chow S (2012) Attitudes of healthcare staff and patients' family members towards family presence during resuscitation in adult care units. *Journal* of Clinical Nursing 21, 2083–2093.
- McLaughlin P (1993) A standard to meet high expectations: assuring quality care for families of intensive care patients. *Professional Nurse* 9, 170– 175.
- Mitchell M, Chaboyer W & Burmeister E (2009) Positive effects of a nursing intervention on family-centred care in adult critical care. *American Journal of Critical Care* 6, 543–552.

- Moler N & Leske J (1983) Critical Care Family Needs Inventory.
- Molter N (1979) Needs of relatives of critically ill patients: a descriptive study. *Heart and Lung* 2, 332–339.
- Omari F (2009) Perceived and unmet needs of adult Jordanian family members of patients in ICUs. *Journal of Nursing Scholarship* 1, 28–34.
- Polit D & Beck C (2012) Nursing Research: Generating and Assessing Evidence for Nursing Practice. Lippincott Williams & Wilkins, Philadelphia, PA.
- Schiller W & Anderson B (2003) Family as a member of the trauma rounds: a strategy for maximized communication. *Journal of Trauma Nursing* **4**, 93 –101.
- Soderstrom I, Benzein E & Saveman B (2003) Nurses' experiences of interaction with family members in intensive care units. *Scandinavian Journal of caring sciences* 17, 185–192.
- Takman C & Severinsson E (2006) A description of healthcare providers' perceptions of the needs of significant others in intensive care units in Norway and Sweden. *Intensive and Critical care Nursing* 22, 228–238.
- Vandall-Walker V, Jensen L & Oberle K (2007) Nursing support for family members of critically ill adults.

 Qualitative Health Research 9, 1207–1218.
- Wahlin I, Ek A & Idvall E (2009) Empowerment from the perspective of next of kin in intensive care. *Journal of Clinical Nursing* 18, 2580–2587.
- Wanger J, Kent A, Ohio K & Ohio C (2004) Lived experience of critically ill patients' family members during cardiopulmonary resuscitation. *American Journal of Critical Care* 13, 416–420.
- Wilkinson P (1995) A qualitative study to establish the self-perceived needs of family members of patients in a general intensive care unit. *Intensive and Critical Care Nursing* 11, 77–86.
- Woolley N (1990) Crisis theory: a paradigm of effective intervention with families of critically ill people. *Journal of Advanced Nursing* 15, 1402–1408.
- Yang S (2008) A mixed methods study on the needs of Korean families in the intensive care unit. *Australian Journal* of *Advanced Nursing* 25, 79–86.

The Journal of Clinical Nursing (JCN) is an international, peer reviewed journal that aims to promote a high standard of clinically related scholarship which supports the practice and discipline of nursing.

For further information and full author guidelines, please visit JCN on the Wiley Online Library website: http://wileyonlinelibrary.com/journal/jocn

Reasons to submit your paper to JCN:

High-impact forum: one of the world's most cited nursing journals, with an impact factor of 1·118 – ranked 30/95 (Nursing (Social Science)) and 34/97 Nursing (Science) in the 2011 Journal Citation Reports® (Thomson Reuters, 2011). One of the most read nursing journals in the world: over 1·9 million full text accesses in 2011 and accessible in over 8000 libraries worldwide (including over 3500 in developing countries with free or low cost access).

Early View: fully citable online publication ahead of inclusion in an issue.

Fast and easy online submission: online submission at http://mc.manuscriptcentral.com/jcnur.

Positive publishing experience: rapid double-blind peer review with constructive feedback.

Online Open: the option to make your article freely and openly accessible to non-subscribers upon publication in Wiley Online Library, as well as the option to deposit the article in your preferred archive.