Promoting patients health in intensive care units by family members and nurses: A literature review

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Abstract:
BACKGROUND: Hospitalization in intensive care units (ICUs) can cause physiological and psychological challenges for patients and their family members. Using a family-centered approach in provision of visiting hours promotes the health of patients. The purpose of this study is to review the perception of nurses and family members of patients in ICUs about visiting their patients.

METHODOLOGY: The published articles in the last 10 years from 2008 to 2018 on the perception of nurses and family members of patients in critical care units about visiting their patients searched for in databases including ScienceDirect, PubMed, Cochrane, Google Scholar, SID, Scopus, CINAHL, OVID, IRANDOC, and Magiran using keywords “family members perception,” “nurses’ perception,” “intensive care units,” and “visiting” in English and Farsi, and finally, 15 articles were selected.

RESULTS: Results showed that nurses do not have appropriate viewpoint about visiting patients in ICUs, and they discussed and outlined the barriers of visiting patients given the benefits of family members’ presence.

CONCLUSION: There are several limitations on the process of family members visiting their patients in the ICUs. It is essential to modify the nurses’ attitudes and remove the organizational limitations in this area.

Keywords: Family-centered approach, intensive care units, perception, visiting

Introduction

Family is the constituting element of society, and all family members’ health is greatly affected when a family member suffers from a disease. When this happens, family life faces changes.[1] Hospitalization of a critically ill patient in an intensive care unit (ICU) can cause physiological and psychological problems for the patient and family members.[2] Critical and acute diseases may require hospitalization in the ICU, which is usually done without prior preparation in the patient and family members. In most of the cases, they do not have enough time to adapt to the critical situation caused by life-threatening problems.[1] Family members are not ready to deal with the fact that one of them is struggling with a critical disease so that it creates disturbance and confusion in them.[3] Therefore, after hospitalization of a family member in an ICU, the rest of the family members experience severe stress and worry. The stressors in the family members include uncertainty, disruption in normal daily life, unknown environment, and sudden emotional disruption.[4] The main concerns of the family of patients in ICUs are the life-threatening clinical condition and the care provided to the patients. The point is that 20% of hospital deaths happen in the ICUs and this raises more anxiety and concern in the family members.[5] On the other hand, family satisfaction is one...
of the important tools to study the quality of care in the ICUs. Family satisfaction is the reflection of needs and expectations made by family members of the patient admitted in the ICU by the individuals who take care after the professional health. Moreover, limited access of the family members to their patients in the ICU is a major factor in the delay in disease treatment process. Several studies have shown that to have a faster recovery, patients in the ICUs need the constant and active presence of their family members in the ICU.[3]

Scientific evidence shows that unlimited presence and active participation of the family members may improve care safety for patients in ICUs and create satisfaction in patients and their family. This is more important for patients unable to have verbal communication.[8] Preparing the bedside setting by nurses for the presence and participation of the patient’s family members in ICUs is essential.[9] Taking into account that ICUs are one of the most stressful places in a hospital, they can cause a severe emotional crisis for the patients and their family members.[10] It is essential, thereby, to prepare the ground for the presence and participation of the family members of patients in ICUs. In addition and taking into account that respecting human rights and dignity of patients and supplying individual needs of patients are of the main principles of nursing, recent years has witnessed an increase in interest in moral issues and respecting human dignity of care seekers in nursing profession.[11] Respecting patients and their rights ensure people that they have received quality care for their disease.[12] It also has a deep physiological and psychological effects on the patient.[13] This is also perceived as a worrying experiment for the patient and the family members who disrupt the process of adapting and regaining health in the patient and family members. In this situation, nurses can help the patient and family members to improve their health condition.[14] Paying attention to the viewpoints and needs of patients and their family members lead to a better perception of their situation and a higher chance to provide a peaceful environment for them.[15] Taking into account changes in patients care approaches in the ICUs from individual-centered to family-centered, it is essential to lower visit limitations in the ICUs and provide the chance for more participation of the family members in the care program. There are many benefits in family members’ presence in the ICUs and many experts have emphasized on family member’s participation in the treatment and care process. However health care personnel, and nurses in particular, do not have a positive attitude towards this issue and strict visit limitations are still practiced in some hospitals.[6] The majority of nurses supported strict limitations on the presence of family members in the ICUs due to wrong beliefs such as intervention of family members in the treatment process and the increased risk of infection. There are no proper policies to help nurses facilitating the participation of family members in providing care services to their patients and have a longer presence next to their patient’s bed. Having a deeper insight into these factors sheds light on the obstacles and the ways of improving health and welfare of patients and their family members. Making any improvement in the status quo entails examining and surveying the facilitators and obstacles as perceived by nurses.[16]

Nurses’ positive attitude toward family members’ presence not only plays a key role in preparing the ground for lowering visiting and family member’s presence limitations in ICUs but also facilitates active participation of family members in care program and use a family-centered approach in providing care to patients. Taking into account the importance of nurses’ and family members’ attitudes with regard to lowering visiting limitations in the ICUs, the purpose of this article is to review the perception of family members and nurses in critical care units about visiting patients.

Methodology

Objective of study
This is a review article which provides an evaluation on the publications in regard to family members and nurses’ perception about visiting patients who admitted in the ICUs.

Selection of articles
Given the objective and questions of the study, articles published in English and Farsi between 2008 and 2018 and indexed in ScienceDirect, PubMed, Cochrane, Google Scholar, SID, Scopus, CINAHL, OVID, IRAN DOC, and Magiran were searched for. Manual search of the articles was done in Google Scholar. To find the best keywords, Mesh and Thesaurus browsers were used. Advanced search option was used in all databases using keywords “intensive care units,” “perception,” “visiting,” “family-centered approach,” and the Farsi equivalent of the keywords. Title, abstract, and full text were included in the search. The reason for choosing this time limit was the notable advances made in humane holistic care in the ICUs with an emphasis on improving patients’ and family members’ health. Over the last decade, health policies in developed countries have led to such advances.

Inclusion and exclusion criteria
Inclusion criteria included original research articles published in Farsi and English on nurses and family members’ perception of the presence of family members in adult ICUs next to their patients. Exclusion criteria included the research population being children and research setting being burn-ICUs.
The search for articles yielded 700 articles, and 37 articles were found through manual search on the named databases above. Then, the identical articles were eliminated, and titles and abstracts of the rest were examined to remove irrelevant articles. Afterward, the full texts were examined based on the inclusion criteria and in terms of the quality of research. As a result, 15 articles were eliminated from the study based on the inclusion and exclusion criteria such failure to include nurses’ viewpoint, focusing only on health personnel, failure to include family members’ viewpoints, providing irrelevant results, unavailability of full text or abstract, published in languages other than Farsi and English, content published in conferences, as book chapters, studies conduct with other objectives, and articles published beyond the time limit. Eventually 12 papers in English and three in Persian remained in the study. Figure 1 illustrates the study process and the number of articles in each step. Inclusion and exclusion criteria are listed in Table 1.

Assessing the quality of articles
At the beginning of the study, the critical appraisal skills program (CASP) was used to evaluate the quality of the articles. The articles which had more than 3 “no” answer in CASP checklist are considered as low-quality articles and did not receive appropriate rating score. These articles were excluded from the review.

Data extraction
When the quality of articles was examined by CASP checklist and the article included for review, the articles’ data including authors’ name, year of publication, country, objective, sample size, sampling method, methods to survey family members and nurses’ attitude, type of intervention, and summary of findings were collected for further evaluation.

Data analysis
A narrative review was adopted for data analysis and reporting the findings.

Results
Totally, 15 articles remained in this review study.

General specifications of the articles
There were 22 articles that examined family members of patients’ and nurses’ perceptions about visiting patients based on the selected articles. There were 12 articles in English and 3 articles in Persian.

Type of studies
There were nine quantitative studies (seven descriptive quantitative studies and two quasi-experimental quantitative studies), two qualitative studies (one grounded theory and one mixed qualitative), and four review studies. The descriptive studies had used researcher-designed questionnaires to examine nurses’ and family members’ perceptions about the presence and participation of family members in the ICU and the improvement of health condition of patients and family members. Quasi-experimental studies adopted different interventions to measure family members’ support and cardiac indices. To control intervening variables, these studies used a control group and compared the results in the intervention and control groups. One of the two qualitative studies used grounded theory method to examine the communication between health team staff and the family members. The other one used a mixed method to find a better perception of the family.

Table1: Inclusion and exclusion criteria

| Criteria                | Inclusion                                                                 | Exclusion                                                                 |
|-------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Type of study           | Original research articles published in credible journals and dissertations in credible universities | Articles submitted to conferences, book chapters                           |
| Objective               | Studies to survey nurses and family members’ perception of visiting patients in ICUs | The object of articles examines the perception of people who were not nurses or family members |
| Type of publication     | Published in Farsi and English, full text available                       | Studies published in other languages full text and abstract unavailable   |
| Study population        | Nurses in ICUs and family members of patients in ICUs                      | Other personnel in health system                                           |
| Date of publication     | 2008-2018                                                                 | Not published between 2008 and 2018                                       |

ICUs=Intensive care units
members’ experiences and ways to facilitate their presence in the ICUs. Review studies have emphasized health personnel’s support for the family members, mutual understanding, and obstacles on the way of family members’ participation in providing care to their patients and comparing different models of visiting patients in the ICUs. The research population in all these articles had been selected through a nonrandom sampling method.

### Effectiveness of interventions

In case of interventional studies, the supporting interventions of the family members improved their satisfaction, while the changes in cardiac indices were not significant. This means that there is no reason for imposing restrictions on patients visit time. In addition, the presence of family members in the ICUs can improve health condition of patients and mental security of the family members.

### Discussion

Although researchers all around the world including Iran emphasize the benefits of the presence of family members next to the patients’ bed in the ICUs, the results showed that there is not an appropriate perception toward visiting patients who are admitted to the ICUs among nurses and family members of patients. The practical strategies of hospitals do not support this, and nurses’ insistence to impose visiting limitations on family members has created several challenges and degraded patients and their family members’ satisfaction. Taking into account that having a visit from family members is one of the main needs of patients and that family members also need to visit their patient during hospitalization in the ICUs, nurses as the main activists in health profession need to be informative about the positive and negative effects of visiting patients in the ICUs to their family members. The following section discusses some studies in this field with emphasis on the difference between the perception of nurses and family members of patients in ICUs, visiting hours, current policies practiced in hospitals, and benefits and drawbacks of visiting. The objective is to attenuate or remove the challenges.

Hospitalization in an ICU is a stressful experience for patients and their family members and this leads to severe disruption and changes in the patient and family members’ lives. In such situations, nurses and other members of medical team need to focus on the needs of patients and their family members as well.[17] To answer this essential need, to improve satisfaction of patient and their family members, and to alleviate the struggle that nurses have with patients and family members, a new idea of flexible unlimited visit has drawn a great deal of attention in recent years. Several studies in the ICUs have shown that unlimited visits create a relationship between nurses and family members of patients. That is, during the visit time, nurses can give more information to the family members, answer their questions about nursing care provided to the patient, and attenuate anxiety and doubts in the family members and patients.[16] Usher reported in a study “family members visit in adults ICU” that the presence and participation of one of the family members could improve safety of cares and satisfaction in the patient and family.[8] In Heidari et al. study titled “ICU nurses’ perception of their role before patients’ family members,” reported that part of the nurse’s task is to take care of the family of critically ill patients in ICUs. They also highlighted a contrast between family’s expectation of nurses and nurses’ perception so that nurses are not interested in involving family members in providing cares. One obstacle in the way of facilitating family members’ presence in ICUs is the heavy load on nurses.[18] Alizadeh et al. noted in their study “visiting patients in ICUs and nurses’ beliefs” that visiting was one of the key needs of patients in ICUs, and despite all the benefits, limitations on visiting are still imposed in the ICUs in Iran. This approach creates altercations between nurses and visitors. The regulations of visiting patients in ICUs should not be revised in Iran in the past 40 years. However, before making any change, it is essential to examine nurses’ beliefs and find challenges. The point is, nurses’ beliefs affect their behaviors. Moreover, it is imperative to adopt approaches to improve nurses’ attitudes and decrease their resistance in this area. Officials of hospitals need to hold educational courses for patients on proper relationship with patients and family members. In addition to nurses’ support of family members’ presence in ICUs, there is a need for multidisciplinary cooperation to alter the attitudes and behaviors of personnel toward involvement of family members.[19]

Borhani et al. found in their study “the relationship between personnel of ICUs and family members” that nursing was supposed to be proper interaction between the patient and nurse and that a proper therapeutic relationship between nurse and patient had a vital role in the quality of nursing care. In addition, failure to create such relationship between nurse and family members of the patient and the patient leads to a higher level of stress and tension in the care team.[20] Hunter et al. conducted a study titled “surveying patient visit policies in the UK-based ICUs” and maintained that hospitalization in an ICU was a stressful experience for the patient and their family members. They argued that based on recent studies, adopting a more flexible visit policy decreases anxiety and increases satisfaction. However, 80% of hospitals in the UK followed visit limitation policies and restricted visiting patients in ICUs by their family members based on traditional
approaches. It was believed that visits intensified infection problems and presence of family members interrupted the care process. While the recent studies do not support the traditional excuse to impose visit limitations, only less than one-half of health centers permit visiting patients in ICUs by their family members short after hospitalization.\textsuperscript{[21]} Abvali \textit{et al.} emphasized in their study “the effects of support program on the satisfaction of family members of patients in ICUs” that family was a supportive element for the patient and they can act as a factor that facilitates the recovery process. The family members are not there just to visit their patient in the ICU, but they also act as care provider agents for their patients. While nurses in the ICUs mostly focus on patients’ needs and less concerned about the family members’ needs, social-psychological needs of the family members must be a priority for nurses in ICUs. Through this, the family members feel more satisfaction and quality of services is guaranteed. In addition, the struggle between family members and nurses is minimized and family members’ involvement in providing care after discharge is promoted. They recommended that the nurses and other health personnel should receive education on social-psychological skills and behaviors to support family members during hospitalization.\textsuperscript{[22]} In a study titled “the structure of patient/family-centered care in ICUs,” Rippin emphasized that the reason for visit limitation in ICUs was the lack of support of personnel and protection of professional privacy. In addition, the personnel needed to remain concentrated on physical condition of critically ill patients. However, new approaches emphasize on constant involvement of family members in providing care and their presence next to the patient’s bed. Realization of a flexible visit policy needs professional clinical nurses with adequate dynamism in terms of interpersonal, social, and cultural aspects. Such nurses need to create an integrated relationship with the presence of family members next to the patient’s bed. Rippin emphasized that physical space and structural design of ICUs were barriers of flexible visits. Most of the rooms in the ICUs are small and without accommodations for the presence of family members. Creating better spaces to facilitate the presence of family members was recommended to attenuate stress in family members and patients, shorten hospitalization term, and facilitate other positive health outcomes.\textsuperscript{[23]} Results of recent studies are consistent with Athanasiou \textit{et al.}’s study “family members’ visits in ICUs from nurses’ point of view in Greece” and Ciufo \textit{et al.}’s study “A systematic comprehensive survey of care models in adults ICUs.” These two studies reported that nurses in the ICUs resisted family members’ visits as they thought that the visits added to the physical and mental load of their work and interrupted nursing care services.\textsuperscript{[24,25]} Garrouste-Orgeas \textit{et al.} showed in their study “perceptions about 24 h visit policy in ICUs” that the majority of patients preferred receiving care from their family members and that the family members had a good perception of care. However, a small percentage of the family members independently participated in providing care to patients in ICUs as most of them demonstrated symptoms of anxiety and depression.\textsuperscript{[26]}

Salavati \textit{et al.} showed in their study “surveying the effects of planned visit on physiological indices in patients in CCU” that due to the structure and philosophy of coronary care units, visiting is highly restricted and nurses believe that family members add to the risk of infection, disturb patients’ rest, and cause physiological changes such as increased heartbeat, hypertension, and anxiety. However, the study showed that planned visits improved physiological indices of patients and polls showed that not only the majority of patients did not find the visits as a stressor, but also they found peace and tranquility as a result of the visits.\textsuperscript{[27]} Bélanger \textit{et al.} conducted a study titled “hospitals visit policies—patients, family members, and officials’ points of view; a review study to change the status quo.” They highlighted the need to revise the policies about visiting patients and presence of family members to ensure more flexibility for the care seekers. To prepare the ground for change, there was a need to inform the patients and their family members about visit policies and the relationship between patients, family members, and personnel. The majority of the personnel did not support the idea arguing about increase in their workload and higher risk of infection for the patient caused by the presence of family members next to patients’ bed. There was a need to win the personnel’s support to facilitate the whole process of changes.\textsuperscript{[28]} Gundo \textit{et al.} reported in their study “comparing nurses and family members’ perception of the family’s needs in ICUs” that the nurses mostly degraded family members’ needs and nursing education was to blame for this. Lack of specialized educations might hinder provision of comprehensive care to critically ill patients and family members. It is essential therefore to provide continuous educations to nurses in ICUs.\textsuperscript{[3]} The strengths of this study is to examine the perceptions of family members and nurses over the past 10 years in both English and Persian researches. The limitations of this study include not having access to all of the world’s most useful scientific databases, not having access to gray information, and selection of articles in the last 10 years despite a review of articles in the past 20 years. Suggestions for future research can be used to compare the studies done for children and adults in this field, using articles except for English and Persian languages.
Conclusion

Nurses and family members of patients in the ICUs have different perceptions of the reasons and importance of imposing visit limitations. There is a need to standardize executive protocols in this field. To facilitate the implementation of new visit strategies, it is essential to change the nurses’ attitude toward family members’ visit. To this end, well-equipped hospitals, experienced nurses, and less workload and shifts per week can change the negative attitudes of nurses about family members visiting their patient; higher satisfaction in the patients and family members is achievable when the health personnel pay attention to the needs of patients and their family members at the same time.

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Conflicts of interest

There are no conflicts of interest.

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