

Analyzing the Concept of Family-centered Care in ICU: Rodgers Evolutionary Approach

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Abstract:

Background and objective: Family centered care is an innovative approach to design, implement and evaluate the health care implemented through a reciprocal participation of providers of the carers, patients, and families. Recognizing and paying attention to the families who have a patient in an ICU is an essential part of nurses' responsibilities. The present study is aimed at clarifying the concept of family centered care and shedding more light into its specifications, outcomes, and results in nursing. **Methodology:** The study was carried out using Rodgers Evolutionary concept analysis approach. Published papers between 1997 and 2018 on family centered care in nursing ICU patients were searched in ScienceDirect, Pub Med, Proquest, Google Scholar, Cochrane, IranMedex, Magiran, and SID. The keywords used in the search were "family centered care, ICU patients, barriers, and executive approaches" and the Farsi equivalents. **Findings:** The key points of family centered care were respecting family members, dynamic and flexible care, giving honest information to family for decision making, cooperating at all care levels of the medical system, proper planning to cooperate with patients and families, and giving family members in optimal patient care. **Conclusion:** Taking into account the critical condition of patients in ICUs, family centered care is one of the ways to give the family members a role in making decision about the cares provided to the patient. This leads to a higher satisfaction in the family members. Given the unique structure of ICUs, the executive barriers of family centered care should be taken into account by the policy makers in nursing profession.

Keywords:

Concept Analysis, Family centered Care, Nursing, Rodgers Evolutionary Approach

1. Introduction

The concept of care is the essence of nursing that creates a basis for evaluation and a sense of commitment and accountability in the nurse [1]. Looking after a patient in critical condition needs a professional clinical environment [2]. Hospitalization is a stressful experience for the patient and the family members [3]. One of the principle rights of patients is to enjoy their family companionship [4]. Social function of family is a major element in patients' health and this function is at risk when the patient is at an ICU. To have a faster recovery process, such patients need the presence of their family members along with nursing services [5]. Family presence next to the patient's bed in an ICU is essential and to make it happen, complicated interdisciplinary connections are needed [6]. Family members are eager to participate in providing care to their patient in an ICU and family centered care enable the family members to fulfill this [7]. Family centered care is a critical concept and a priority in nursing that constitutes the critical elements in security and quality of care. It is a way to fill the gap between the ideal situation and what happen in practice in ICUs. The ethical values of families and patients, as members of the treatment team, are respected in this approach. It is a process that emphasizes on accountability of physicians and nurses to patients and family members [8]. Based on this approach, the patient and their family form a care unit and it is argued that the family members play a key role with regard to the cares provided to the patient. In addition, the family is a key element in the recovery process and supporting the patient in the ICU. The point is that the patients in ICUs are either unconscious or unable to communicate and make good decisions. The work process in an ICU is highly complicated and physicians and nurses need the family members' cooperation and involvement in making key decisions for the patient, planning, and implementing nursing care [9]. On the other hand, family members of the patients in ICUs have specific and urgent needs and gaining their satisfaction is a major part of the responsibilities of experts in ICUs. Satisfaction is a main aspect in evaluating quality of health institutes [10].

The care approach in ICUs has been shifted towards family centered care approaches; however, despite frequent requests by family members and patients to participate in care and treatment process and the importance of such participation, the needs of family members in this area have been neglected in general [11]. That is, the main area of focus of nurses is on meeting the patients' needs and the needs of family members do not receive the attention they merit. Fulfillment of mental-social needs of family members of patients in ICUs should be one of the nursing priorities [12] and through this, the health systems in the developed countries try to create a more desirable care environment, identify the needs of patients and family members, and survey the attitudes of nurses and other members of medical team. Research works support the more active involvement of family in providing care to patients and reject the idea of limiting such involvement and presence of family members. There is no physiological reason for imposing such limitation [13]. However and despite adequate scientific evidences about the benefits of implementation of family centered care, the presence of family members in ICUs is still an ongoing debate [14]. In practice, the family's needs and implementation of family centered care are neglected [15]. Taking into account the positive effect that the family can have on the patients in ICUs, concerns like safety risks for the patient and the risk of hospital infections limits the presence of family members in ICUs [14]. Given the key role of the nurse as a holistic and key care provider who directly interacts with patients and the family members and taking into account the religious and traditional Iranian society that puts emphasis on humanistic care as a good deed that brings God's blessing and rewards, it is essential to eliminate ambiguities and controversies in the implementation of family centered

care in ICUs. Such attempts should lead to new executive strategies based on the background and cultural issues of Iranian society [16]. Comprehensive qualitative studies are needed to recognize and respect humanistic values, prepare cultural background, achieve standard clinical outcomes, and deal with the ambiguities. The present study tries to elaborate on the concept of family centered care in nursing, comprehend and recognize the specifications, circumstances and outcomes, and the evolution of the concept in time. Given that the concept has evolved in time, taking care of patients in ICUs has been affected by background changes and there are several executive barriers in this field. In addition, the concept is a procedural and multi-aspect one and therefore, the effects of different situations, different backgrounds, and key effective individuals on the subject were examined through Rodgers evolutionary concept analyzing approach. The approach gives an integrated picture of different viewpoints and it was first introduced by Wittgenstein (1953& 1968) and Toulmin (1972). The contributions of Price (1953) and Ryle (1971) are also notable. Rodgers Evolutionary Concept Analysis Approach is based on the contemporary philosophical thoughts on concepts and their role in the evolution and development of knowledge. The approach puts emphasis on the dynamic nature of concepts that continuously undergo changes and evolutions in social texture and background and in time. This approach rejects the analysis of philosophical viewpoints like absolutism and originalism that were commonly accepted in the first half 20th century in science. The evolutionary concept analysis approach is mostly based on an inductive approach and gives a basis and ground for further research and survey in future. The objective of analyses in this approach is to describe and elaborate on the concept and the common areas of using this approach include uncovering the specifications of a concept as a basis for further development of that concept.

Taghipour et al.[17], studied Risk analysis in the management of urban construction projects from the perspective of the employer and the contractor. Imbalance between anticipated and actual progress in the development of urban construction projects suggests that there are many obstacles and risks which not only causes the urban management be unsustainable, but the reconstruction and development of urban space is also seriously threatened. The results indicated that the experts listed the most significant risks as the delays in the payment of contractors' claims and statements due to the lack of handling financial instruments, the governance of relationships rather than rules in the tenders resulting from employer actions, low commitment to the quality of work provided by their subcontractors, failure to complete the detail engineering by foreign contractors on time, weaknesses in contractors' financial resources, and offering lower prices than reasonable by contractors to win the tender. Finally, the solutions for eliminating or reducing risks in high risk areas have been offered to provide tranquility for contractors and employers.

Rezvani Befrouei MA et al.[18], discussed Identification and Management of Risks in Construction Projects. Today, risk management in construction projects is considered to be a very important managerial process for achievement of project's objectives in terms of time, costs, quality, safety, and environmental sustainability. Instead of employing a systematic approach for identification of risks, their probability and their effects, most of the studies conducted in this area have focused only on a few aspects of risk management in construction project. The present study aims to identify and analyze the risks associated with development of construction in the greater city of Tehran, employing a comprehensive approach that is consisted of

five aspects. After the collection and observation of the data, the output was examined by Pearson correlation also, using charts and tables. The results indicated that “tight project schedule” present in all five categories- imposed the maximum risk. Also “design variations”, “excessive approval procedures in administrative government departments” and “unsuitable construction program planning” were identified as next high risk factors.

Taghipour et al.[19], studied Analysing the Effects of Physical Conditions of the Workplace on Employees Productivity. One of the issues that today will improve the productivity of any organization is attention to the human factors engineering. The aim of this study was to find the amount of employee’s satisfaction from environmental and organizational factors of their jobs, thus providing guidelines for improving the identified problems which eventually will lead to increase the productivity.

Baghipour sarami et al.[20], studied Modeling of Nurses’ shift Work schedules According to Ergonomics: A case study in Imam sajjad (As) Hospital of Ramsar. In this study, 35nurses working in the emergency ward of Imam Sajjad (AS) Hospital of Ramsar city, Iran, were considered. The final model was implemented with GAMS and at the end, shift working with ergonomic criteria were proposed .The results showed that the proposed working program on one hand will improve satisfaction and efficiency of nurses and on the other hand it can decrease the effects of disorders on shift work.

Taghipour et al.[21], studied Supply Chain Performance Evaluation in IN The IT Industry. The appraisal of several performance measure agendas and metrics already accessible proposes that supply chain performance measure can be detected under different categories such as cost and non-cost. In this study, developed supply chain of IT industry based on BSC from existing decision making models. Then, industrial projects performance and performance evaluation measures have been determined using a designed questionnaire.

Taghipour et al.[22], studied the Study of the Application of Risk Management in the operation and Maintenance of Power Plant Projects. one of the methods used in good decision making, pay attention to risk management, which is known as an important part of project management and control. Risk management has evolved over time and its systematic method has provided managers with a definite path so that they reduce potential threats to a minimum and reach project goals by the least possible deviations. In this paper, subsequent to an introduction of fundamental concepts of risk, risk management, an account of risk management, methods and its techniques are presented. In the end, following a discussion on how it is practically used in projects in a real and practical sample, risk management and its application are implemented and essential investigations are undertaken into its effects.

Mahboobi et al.[23], discussed Assessing Ergonomic Risk Factors Using Combined Data Envelopment Analysis and Conventional Methods for an Auto Parts Manufacturer. occupational injuries are currently a major contributor to job loss around the world. They are also costly for business. The absence of rational analysis is felt in this area, so mathematical analysis is needed to obtain the logical results of these injuries in order to find gaps or loss points of industry. OBJECTIVE: This paper assesses the effect of five demographic factors on ergonomic risk and occupational injuries using an integrated mathematical programming approach. The obtained

results will help managers to carry out any required corrective actions or establish benchmarks.

Taghipour et al.[24], studied Assessment and Analysis of Risk Associated with the Implementation of Enterprise Resource Planning (ERP) Project Using FMEA Technique. Enterprise resource planning (ERP) is one of the latest management tools that can take advantage of information technology to comprehensively gather resources and information in all parts of the organization by an interlocking, system with fast speed and high quality and help users in all organizations and sectors by giving certain modules for managing different sectors such as projects, human resources, and services. Despite the many benefits this system can have for the organization, its implementation and deployment is very risky and costly.

Taghipour et al.[25], studied Construction projects risk management by risk allocation approach using PMBOK standard. Projects' managers in plenty of construction projects which are assumed that are under control, are facing risk as an unknown occurrences and they are attempting to control it and are suffering more costs. Though, by a comprehensible effort and applying risk management, risks are identified and controlled before happening or a plan is provided in order to deal with these occurrences and time and cost are saved. Thus, they have to be controlled and appropriately responded by risk management methods. In this regard, risk management process in PMBOK standard can be a suitable approach to solve this problem.

Taghipour et al.[26], studied The Evaluation of the Relationship between Occupational Accidents and Usage of Personal Protective Equipment in an Auto Making Unit. One of the problems that encounter each work society is occupational accidents. Today, despite the improvements of facilities and working conditions, the possibility of accident occurrence in workplaces and especially in industrial places is inevitable. Since the non-use or misuse of PPE is one of the main causes of accidents in industrial units, the aim of this study is to evaluate the association between occupational accidents and the use of PPE in the body section of a vehicle manufacturing unit. The results showed that there is a meaningful positive relationship between the factor of inadequate PPE and probable hazards of the industrial workplace.

Taghipour et al.[27], studied Necessity Analysis and Optimization of Implementing Projects with The Integration Approach of Risk Management and Value Engineering. Risk management and value engineering have appeared as modern management tools since the mid-19th century and have been used separately in different projects. Due to the ineffectiveness resulting from separate implementation of the two approaches in major projects as well as the similarity between them in terms of their goals and executive structures, this research tries to analyze the separate role of each approach in the project process and examine the possibility of integration and correlation between their different phases. This article aims at introducing and examining a tool that simultaneously has the capability of the two categories.

Taghipour et al.[28], studied Evaluating Project Planning and Control System in Multi-project Organizations under Fuzzy Data Approach Considering Resource Constraints. Projects can be repetitive tasks in specified periods of time and also it may involve some functions which are performed just once. However, in any project, managers and experts consider three basic and important goals: least time, lowest cost and best quality, so all efforts are directed toward achieving these basic goals.

Statistics indicate that projects are either conducted on estimated time or delayed and rarely are delivered before due date.

Taghipour et al.[29], studied Risk assessment and analysis of the state DAM construction projects using FMEA technique. Dam construction projects are the most important projects of the country and absorb a considerable amount of the state budget on annual basis. As they take a long time to be completed, they always face risks and many uncertainties. In this study, the researcher intends to use a highly applied qualitative-quantitative methodology (FMEA) to analyze the risks of state dam.

Taghipour et al.[30], studied the impact of ICT on knowledge sharing obstacles in knowledge management process. Today, knowledge is known as a valuable asset in any organization so management of such insensible asset is one of the factors cause success in organizations. But knowledge can be effective when it is shared across the organization. Therefore, knowledge sharing is a key element in the process of knowledge management. This study aimed to check the impact of ICT on knowledge sharing barriers in one of the mobile operator, in Tehran.

Taghipour et al.[31], studied Assessment of the Relationship Between Knowledge Management Implementation and Managers Skills. The Purpose of this study is to consider the effects of knowledge management implementation on manager's skills of Reezmouj System Company. Results showed that there is a relation between knowledge management.

Taghipour et al.[32], studied Evaluation of the effective variables of the value engineering in services. The value engineering is a systematic method for resolving the problems, reducing the cost and improving the function and quality simultaneously and this leads to the increase of customer satisfaction by investigating and improving the value index. The results of this research which are based on the post managers and specialists responses show that applying value engineering by the post managers has significant effects on reducing the cost, saving time and customer satisfaction.

Taghipour et al.[33], studied Evaluating CCPM method versus CPM in multiple petrochemical projects. Although project management has long been under consideration and various methods have been proposed for timing projects, but they have not been completely responsive to the needs of the project for increasing productivity and customer satisfaction. As a result, increased risks and the incompatibility of the project with the initial Base line plan, necessitate using modern techniques (such as CCPM) as opposed to common methods (such as CPM).

Taghipour et al.[34], studied Application of Cloud Computing in System Management in Order to Control the Process. The implementation and maintenance of organizational resources planning systems is really costly for each business. Large business institutes can pay the costs of organizational systems but due to high costs, small to medium businesses prefer the purchase of these systems and their relevant implementation. Cloud has some advantages in comparison to traditional data centers.

Khodakhah Jeedi et al.[35], studied The Analysis of Effect Colour Psychology on Environmental Graphic in Childeren Ward at Medical Centers. The hospitals are some of architectural spaces, which are assumed as important in terms of design and function due to giving medical services and referrals of various groups of people.

Payamani et al.[36], studied The study of MS patieents life style referred to MS Association (Tehran City,2008). Multiple sclerosis [M.S] is one of the common

autoimmune diseases that effects on central nervous system. There is a close relati on between health and life style, so that we can prevent from rate of disease attacks. Findings showed there were significant relation between educational level, supportive resourc es, number of relapse and self-care dimension in life style. Also, relation between marriage status, family income and nutrition dimension in life style was significant.

2. Methodology

The study was carried out based on Rodgers Evolutionary Concept Analysis Approach. According to this approach, the process of study is nonlinear, circular, and flexible in nature. This approach is constituted of the following steps:

- a. Determining the concept and the keywords
- b. Identifying and choosing the field for collecting data, choosing a specific field and multidisciplinary comparisons.
- c. Data gathering including literature review based on inclusion and exclusion criteria.
- d. Analyzing the data including alternative terms, pertinent terms, references, circumstances, outcomes, and specifications of the concept.
- e. Developing objective examples of the concept (Model Case).
- f. Determining hypotheses and implications of the analysis for further development of the concept.

Given the novelty of the subject, the time limit for searching for the pertinent articles is 1997 to 2016. The search was done using keywords including family centered care, nursing, ICU patients, barriers, and executive approaches and the Farsi equivalents of in ScienceDirect, PubMed, Proquest, Google Scholar, Conhrane, IranMedex, Magiran, and SID. After excluding irrelevant papers like family centered care for children and infants, 27 articles, one book, and three dissertation abstracts remained in the study (qualitative and quantitative studies in Farsi and English) out of 900 articles, books, and dissertations.

2.1. Findings

This section discusses definitions, specifications, recommendations, and the outcomes of family centered care concepts.

2.2. Family Centered Care in Nursing

Family centered care is an approach to design, implement, and evaluate the cares provided through reciprocal cooperation among providers of the care, patients, and families. Every patient and their family form a care unity and the process emphasizes on making the medical team responsive to the patient and their family so that the family members can decide about the care provided to their patient. Family members of hospitalized patients in an ICU normally have the closest relationship with the patient and such relationship can be based on blood relationship or otherwise [13].

2.3. Specifications of Family Centered Care in Nursing

Based on evolutionary concept analysis approach, concepts are formed through identifying general and key specifications of a set of objects or phenomena and

subjects, each appearing with specific meaning under special condition based on such specifications, categorization, and abstraction of concepts. Through this, the process of specialization of concepts is affected by the social interactions and through time and in different social background, every concept bears its unique specifications and functions [37]. Here, family centered care was identified with six specifications viz. respect, personalized care, integrity of information, family support, participation, and reinforcement.

2.4. Respect

Respecting the patient and their family priorities, especially in ICUs, is one of the key responsibilities of nurses [38]. Family member feel a great level of anxiety due to the unique structure of the ICU and treating them properly in such a critical condition is one of the main priorities of nursing care [9,39]. A key factor in family centered care for cardiac patients is to respect patients and their family members [40,8]. From the patients and their family's points of view, demonstrating a respectful behavior throughout the treatment process includes the following items:

- a. Greeting, asking about how the patient feels, and briefing by physicians and personnel who deal with the patients.
- b. Demonstrating proper behaviors by the personnel who interact with the patient, answering the patient and family members' questions, and giving information about any development in clinical condition of the patient.
- c. Respecting privacy of the patient.
- d. Respecting the patient's priorities and choices.
- e. Being accountable to the needs and requests of patients[9].

2.5. Personalized Care

Personalization of care with an emphasis on cultural needs and values of the patient and their family is one of the main specifications of family centered care. The priority and importance of the patient and family's need are not the same in different cultures and societies [41]. Patients and their family members have their own experiences, skills, attitudes, and viewpoints that can be highly effective in changing care system status and realization of care quality and security [42]. Personal needs of patients and their family members must be respected in ICUs [4]. These patients are in critical situation and in addition to complicated and advanced equipment and medicines or therapeutic and surgical needs, they need personalized cares as well [43].

2.6. Integrity of Information

One of the needs of family members of patients in an ICU is to receive reliable information about current and expected condition of the patient [44]. Through establishing medical information integrity relative to the patient and family members' needs, nurses realize the vital role of family and consider the patient and their family as a whole. By providing the required information to the family members, nurses help them to make proper decisions about their patient [45]. Working with family members as a unified team is one of the main concepts of patient care [46].

2.7. Family Support

Family members of the patients in ICUs experience severe stress due to critical condition of their patient and this stressful experience calls for psychological support [43]. Family support is one of the specifications of family centered care in nursing services to patients in ICUs [10]. The main objective of family centered care is to empower the family system (patient and family members) to achieve a higher level of health [47]. Hospitalization in an ICU affects the balance and integrity of a family unit and nurses are one of the most important members of care team and in charge of providing humanistic care to patients and the family members. The aspects of family support are as follows:

- a. Number of occasions of visiting the ICU physician;
- b. Ease of access to the information;
- c. Learning the information;
- d. Authenticity of the information;
- e. Comprehensiveness of the information;
- f. Integrity of the information;
- g. A sense of being involved and receiving support in the process of making decision for the patient.
- h. Checking the care provided to the patient by the family members. and
- i. Adequate occasions of having consultation to find answers to probable questions [48,49].

In general, disease is an unexpected crisis that disturbs the natural realm of adaptation and leads to an experience of damage and crisis in the family. Therefore, families of such patients also need support [16].

2.8. Participation

Cooperating with the family to design a care program for the patient in an ICU is essential. Before implementation of any technique, the family members should give their consent and nurses should be open to families' participation in taking care of the patient [50]. The patient's family is an essential element in the recovery or supporting and preserving patient's health. The point is that the family members are the main links between the patient and nurse so that they are a key source for the nurse [38]. Involvement of the patient and family members has a deep effect on clinical decision making and the outcomes for the patient [13].

2.9. Reinforcement

Reinforcing strengths of families and involving the patient and their family members can have a profound effect on clinical decision making and the outcomes for the patient. The point is that family members usually have first-hand information about the patient needs.

An effective relationship between medical team personnel and the family members has five key elements:

- a. Self-awareness;
- b. Knowledge about patient and family members' cultural beliefs;

- c. Cultural assessment;
- d. Flexibility and dynamism in different fields;
- e. Establishing useful relationship (effective) [13].

Despite the traditional patient-centered approach, family centered care concentrates on patient's family as a unit for providing and organizing the care. According to this approach, it is time to accept the presence of family members beside the patients and integrate them in the design of a humanistic care [15,42]. Family members have a critical role in the recovery process and they should be taken into account the care process [51]. Family centered care recognizes the vital and fundamental role of the family and perceives the patient and their family as a whole. In this way, the family is given a chance to have a say in the therapeutic decisions made for the patient [45].

3. Requirements and Circumstances of a Family Centered Care in Nursing

Based on the reviewed papers, the requirements and circumstances needed for family centered care include perceiving the main family needs, altering the personnel's attitude, educating the personnel and families, and eliminating the executive barriers of family centered care.

3.1. Perceiving the Main Family Needs

Most of the time, the social and mental needs of families with a patient in the ICU are neglected, so that there is a need in health systems to emphasize more on such families [47]. The patient and their family's needs should be a top priority for the nurse [15,41]. When the family members are interested in being with their patient, their presence and involvement will lead to good outcomes [4]. To implement family centered care, the needs of family members should be met, needs like food, easy access to the patient, visiting the patient frequently, no limitation on visiting the patient, opportunity to talk about what should be expected with the treatment process, facilities to perform religious rituals, daily chat with physicians, handling financial issues, access to personnel who have the required information, having information about the treatment process, and early awareness of the disease [45].

3.2. Altering Personnel's Attitude

It is essential to alter the attitudes of the providers of care and modify organizational structure of health institutes. The medical team must feel the need for identifying the families' needs [10]. There should be a proper relationship between the personnel and family members. Altering the attitudes is effective in the way that the personnel treat family members so that personnel in ICUs need to create an effective and friendly relationship with family members and ensure satisfaction of the patient and family members with the nursing cares. Therefore, participation of family members in handling the patient's affairs and helping the nurse increases the sense of mutual respect and cooperation between the family members and medical team [13].

3.3. Educating Personnel and Family Members

Despite the emphasis on the communicational skills in health personnel over the past two decades, structural factors still degrade the quality of such communications. Education and evaluation on a continuous bases help the nurses in adopting a proper

clinical strategy. A cooperative attitude in colleagues, managers, physicians, social workers, social support groups is also effective in this regard [12]. Some of the nurses, patients, and physicians believe that supporting the patient's family through giving reliable information and creating a proper relationship with family members are essential and vital. However, creating an effective relationship is not always an easy task given the tight work schedule of nurses, lack of a supportive and private environment, cultural difference, and hurdles caused by physical and mental disabilities. Communicational obstacles are as follows:

- a. Improper environment;
- b. Negative personal and professional beliefs;
- c. Strategies of the institute; and
- d. Social and cultural factors .

Creating proper relationships with the patient's family members by the nurse is harmonious with the high level of anxiety and frustration that the family members feel. Involvement of family members in the care process makes them feel being part of the medical team rather than being left behind and isolated. Therefore, the family's role and the relationship between the nurse and the patient's family affects the both sides' perception about the critical disease experience [46].

3.4. Elimination of Executive Barriers of Family Centered Care

Despite the evidences about advantages of presence of family members next to patient's bed, the modification process of organizational policies to facilitate unlimited visit time for family members of the patients in ICUs is a slow process. Several studies have argued for the necessity of flexible and free access of family members to their patients in ICUs. Limited visit time in ICUs has caused considerable problems and disorders for the patients, families, the ward, and personnel and nurses in particular [5]. There are several steps for implementation of family centered care including:

- a. Familiarize policymakers, officials, providers of health care services, patients, and family members with the importance and value of family centered care.
- b. Proposing solutions to the officials of providing cares and educations for implementation of family centered care.
- c. Recruiting patient and family guide in health systems.
- d. Providing social educations to the public on the concept of cooperation and its critical role in health institutes [42].

Scientific evidences show that family's access to the patient should be based on the patient's need and there must be no limitation for visiting the patient in terms of time and occasions of visiting. Revising patient visit strategy in ICUs is a necessity as respecting the patient and family members' needs has a key role in the care [12]. The barriers of timely presence of family members next to their patient's bed should be identified and eliminated. The solutions to remove the barriers of involvement of family members in providing cares in ICUs are listed below:

- a. Modification of the current regulations of ICUs.
- b. Providing proper and new solutions to facilitate presence of family members in ICUs [51].

4. Outcomes

Outcomes are events or phenomena that represent the results of implementation of an idea or a concept. In this paper, the outcomes are physical and mental benefits for patient and family members, a higher satisfaction in patient, family, and personnel, acceptance of therapeutic program, improvement of humane relationships, and higher quality of care services.

4.1. Physical and Mental Benefits for Patient and Family

Fulfillment of the needs of families with a patient in an ICU alleviates and reduces the anxiety and pain and improves their perception of the situation [10]. Through this, the family members can participate in providing care to their patient, feel less anxiety, and undergo a better process of adaptation. Implementation of family centered care keeps the family ties strong, creates a sense of security and stability in patient, and supports integrity of family. When the medical team members respect the needs of family members, they feel more support for taking care of their patient and realizing their needs during and after hospitalization [50].

4.2. Higher Level of Satisfaction in Patient, Family, and Health Personnel

The level of satisfaction in family members is basically affected by the information they receive about progress in clinical condition of the patient, honest information from the personnel, and knowledge about the personnel who supply such information. Through ideal implementation of family centered care in a scientific manner, patients will have a more satisfactory hospitalization experience while nurses experience a higher level of professional satisfaction. Family presence in ICU also improves nurses' satisfaction with their carrier. Involvement in providing the cares that do not intervene with technical aspects in the ICU and are usually performed by nurses brings a higher level of satisfaction in the family members. Family's presence also improves their knowledge and information about their patient and the disease [14].

4.3. Acceptance of Therapeutic Program

Learning about the family members' needs increases acceptability of the therapeutic program by the patient and family and fulfillment of their real needs [40]. Presence of family in the ICU increases the family's ability to provide health care after hospitalization so that the family learns more about the disease and condition of their patient [14].

4.4. Improvement of Humanistic Relationships

Learning about the cares provided to their patient improves the relationship between the family and personnel in an ICU [48]. Ideal implementation of family centered care in a scientific manner improves the relationships between patients, families, and nurses and patients' satisfaction with the hospitalization. It also improves nurses' satisfaction with their carrier. Presence of family when invasive measures are taken on the patient is an opportunity for them to better realize the threatening life accidents, comprehend the cause and effect relationships, control their sorrow, observe the services provided by the medical team and cause fewer challenges for the team [52].

4.5. Improvement of Quality of Care

Respecting patient and their family is effective in improvement of quality in ICUs [9]. Family centered care has to do with quality care. Implementation of family centered care leads to health-related outcomes like self-management and higher mental health (e.g. less stress, patient and family members' satisfaction, and fruitful relationship between patient and family). It also improves the quality of care [38].

4.6. Pertinent and Alternative Concepts

Given the cultural and social differences between countries and different perception of one concept, the reviewed articles used different terms instead of family centered care such as "Collaborative Relationship," "Effective Communication," "Respectful Care," "Holistic Perspective," "Individualized Care," and "Empowerment." All these terms convey ideas similar to family centered care.

5. Discussion and Conclusion

Patients in ICUs are in critical situation and usually not able to speak or communicate properly with nurses or other personnel of medical team. The family's role in making decisions about treatment is highly important and effective. Family centered care is one of the approaches to enable patients to make proper decisions with the help of their families. In this approach, the family members and patient are perceived as a care unit and the medical team tries to meet the patient and their family members' needs. Cultural background and personal issues in families are strongly effective in the treatment and care process. In addition to preserving a balanced family pattern, family centered care establishes a proper therapeutic relationship between the patient, family members, medical team, and nurses in particular who spend more time with the patient and family members. However, nurses and the rest of the medical team have functional weaknesses in the areas of cultural and communicational matters so that their communicational performance and techniques still have room for improvement. On the other hand, there are many obstacles in the way of implementing family centered care approach. Despite the heavy load of work of handling critically ill patients, the ICUs are usually understaffed. Implementation of a family centered care needs specially trained nurses with good communicational skill; while, in practices the nurses have to spend most of their time doing the routine procedure of the hospital consisted of covering physical needs of patients and doing paperwork. The situation needs to be revised, so that the nurses could have more time to deal with mental-social needs of patients and the family members. In addition, there is not proper accommodation for the presence of family members next to the patient's bed in ICUs especially during emergency situations. The ICU rooms are usually too small and hospitals have specific rules to limit patient visits in ICUs. These rules are about 40 years old and have not been revised once during this period. Taking into account the results of latest studies on the benefits of presence of family members next to the patient's bed in ICUs and absence of any physiological reason to impose such limitations, it is essential to examine the many obstacles in the way of implementing family centered care. There is a need to increase the number of nurses in ICUs and make a consultant nurse available in ICUs to answer family members' questions and communicate with them or the patients. The physical environment of ICUs should be redesigned to accommodate family members presence and enable fast and timely connection among family members, patients, and health personnel. Routine educational courses on altering attitudes of the personnel about limitations of patient visit or continuous presence of family member next to their patient's bed,

promoting of family centered care, sociological issues, and communicational skills should be provided for the nurses and other members of medical team. Given the specific and hard work condition in ICUs, nurses should be provided with adequate support. The nurses should be informed about the results of research works in Iran and other countries about family centered care and its benefits for patients, family members, and health staff. Nursing ethics, the principles of respecting patient, customized care, integrity of information, family support, family participation, and family members empowerment should be highlighted throughout and nursing programs in academic and clinical educations. Nurses need to feel more responsibility towards the needs of patients and family members. In addition, there is a need for cultural works in the ICUs to prepare the ground for replacement of patient centered care by family centered care. Nursing supervisors and managers and nurses in ICUs should hold educational courses for family members and patients (if possible) on the regulations in ICUs such as access of the family members to patients, drugs administration schedule, routine checkup schedule, consulting with physicians, infection control concerns, and other issues. Through these, the ground for implementation of family centered care is prepared and along with patients and family members' satisfaction with their experienced in the ICU, higher quality cares will be provided to patients and members of society.

6. Research Limitation

Given the nature of the study, 30% of the available papers on family centered care in ICU nursing was used in the study. Limiting the search to Farsi and English published papers eliminated the chance of using papers in other languages. Family centered care was initiated in children and infant wards and since only ICUs and adults were within the scope here, all papers on family centered care in infants and children wards were removed and surely valuable papers were among them. This might have blurred the image of concept. Taking into account the cultural and background issues and limitations of ICUs in Iran comparing with other countries, reanalyzing the concept using a hybrid method is recommended.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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