Holistic Care for Patients During Weaning from Mechanical Ventilation: A Qualitative Study

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Abstract

Background: Weaning patients from mechanical ventilation is a complex and highly challenging process. It requires continuity of care, the overall assessment of patients, and a focus on all aspects of patients' needs by critical care nurses.

Objectives: The aim of the present study was to explore holistic care while patients are being weaned from mechanical ventilation from the perspective of the critical care nurses.

Methods: The study was carried out in the intensive care units (ICUs) of six hospitals in Ahvaz, Iran, from 2014 to 2015. In this qualitative study, 25 ICU staff including nurses, nurse managers, and nurse educators were selected by means of purposive sampling. Semi-structured interviews were used for data collection. The interview transcripts were then analyzed using qualitative content analysis.

Results: The four main themes that emerged to explain nurses' experiences of holistic care when weaning patients from mechanical ventilation include continuous care, a holistic overview of the patient, promoting human dignity, and the overall development of well-being.

Conclusions: It was found that avoiding routine pivotal expertise, increasing consciousness of the nonphysical aspects of patients while providing treatment and presenting exclusive care, utilizing experienced ICU nurses, and placing more emphasis on effective communication with patients in order to honor them as human beings can all enhance the holistic quality of care.

Keywords: Holistic Nursing, Weaning, Mechanical Ventilation, Qualitative Research

1. Background

Although mechanical ventilation is a life-saving process, it can cause physiological and psychological complications for the patient. An important priority for critical care clinicians is therefore to discontinue mechanical support as soon as possible (1-3). Weaning from mechanical ventilation can amount to up to 40% of the patient's total ventilator time (4). Weaning is described as a gradual reduction of ventilator support until the patient no longer requires ventilator assistance or until a further reduction is neither feasible nor realistic (5). Intensive care unit (ICU) nurses take responsibility for decisions concerning nursing care, which requires both experience and competence. This includes the assessment, planning, implementation, evaluation, and documentation of ventilator care and weaning (6-9). Weaning presupposes the patient's cooperation; thus, it is necessary to create a trusting relationship with her/him (10). Only a small number of qualitative studies have previously explored the weaning process from the perspective of nursing care. These qualitative studies (4, 11, 12) highlight the complex nature of weaning as well as the important role that nurses' play in the procedure.

A holistic approach to weaning was previously proposed as a comprehensive model of caring (10, 13, 14). According to the literature, the experience of nurses is one of the key factors affecting holistic care during weaning from mechanical ventilation (4, 11, 15). Inexperienced nurses rely on only physiological parameters and the patient's medical history, and so their care lacks the holistic approach (e.g., knowing the patient through interaction and continuity of care), which is necessary when making relevant decisions (14). International weaning guidelines (16) emphasize the physical examination of the patient, including a medical diagnosis, breathing related parameters, and sedation. As both the patient's physical and mental status vary, he/she must be assessed on a continual basis (17). ICU nurses spend a large part of their working hours on the...
ward and they must therefore assume responsibility for such an assessment. It is hence important that nurses are attentive to any signs of confusion or agitation in the patient, and that they employ all the tools available for identifying such states (15). Irrespective of whether or not protocols are employed, the weaning process is based on clinical decision making (11), which means that the ICU nurse’s role is of vital importance. The overall assessment of the patient made by the intensive care nurse is the main factor that influences such decision making. This overall individual assessment also enables nursing care to be delivered from a holistic perspective (10).

The aim of holistic nursing is the improvement of the healing of the individual as a bio-psycho-social unity (18). The philosophy behind holistic care is based on the idea of holism, which emphasizes that for human beings the whole is greater than the sum of its parts, and that mind and spirit affect the body (19). In holistic nursing, all aspects of the patients and their effects on the treatment process are considered, and the patients’ thoughts, emotions, culture, opinions, and attitudes are factored in as contributing to recovery, happiness, and satisfaction (20). Based on this approach, the physical and mental manifestations of a disease are now treated as a whole in the medical practice of each specialty (21). Further, holistic care respects human dignity (22). The relationship between the providers of health care and the patients should be founded on respect, relative openness, equality, and mutuality (19, 22), and patients participate in decision making as part of this kind of caring (23). The holistic care paradigm has been presented to the health care systems of many cultures (20), and it can be used in every area of nursing (24). Many nursing theorists, for example Rogers, Newman, and Parse, have also emphasized holistic care (25). Currently, there are no studies that explain patient care from a holistic viewpoint during weaning from mechanical ventilation. Given the complexity of the process and the impact of various factors on weaning, as well as the vital role that nurses play in multidimensional patient assessment, there is a need for studies that describe a nurse’s holistic view of caring. This study describes how nurses assess patients’ multiple needs, both physical and mental, as well as how they provide care based on a comprehensive perspective that extends beyond routine protocols.

2. Objectives

With regard to the role of ICU nurses in the assessment and provision of inclusive care to patients during weaning, the aim of the present study was to describe the holistic view of patient care during weaning from mechanical ventilation.

3. Methods

3.1. Design

A qualitative descriptive design was employed in this study. The study involved the conducting of personal interviews, the transcripts of which were then analyzed with qualitative content analysis. Qualitative content analysis is suggested to be beneficial in exploring peoples’ experiences of specific phenomena, and the goal of qualitative content analysis is to provide knowledge and understanding of the phenomena being studied (26).

3.2. Setting

The study was conducted in the intensive care units of six general hospitals in Ahvaz, Iran, from 2014 to 2015. Four of the hospitals were governmental (two referral and two non-referral), while two of the hospitals were private. Patients were admitted to the ICU for various medical conditions, including medical-surgical disorders, neurosurgical problems, and trauma. Each ICU had eight beds, and the staff worked on three shifts (i.e., morning, evening, and night shifts). Each nurse on each eight-hour shift was responsible for the care of one to three patients. Due to the limited number of nurses working in the ICUs, the nurse who took care of a patient was responsible for the same patient on both days. In order to have the least possible impact on continuity of care, the nurse managers often tried to use the same nurse for the care of patients.

3.3. Participants

The participants enrolled in this study consisted of all the staff in the ICUs of hospitals in Ahvaz. Purposive sampling was conducted and continued until data saturation (27). With the aim of representativeness, information about the study was provided to all the staff of the ICUs. All employees who met the inclusion criteria, including (1) more than six months experience of taking care of mechanically ventilated patients in the ICU and (2) high willingness to participate in the study (n = 57), were divided into three groups of 6 months-5 years, 5 - 10 years, and > 10 years of experience. The participants were classified on the basis of their experience so as to include a broad range of participants with varied levels of experience and to increase the representativeness of the study by understanding staff with low to high levels of experience. From these three groups, participants were randomly selected by a person blinded to the study by drawing names out of a box in order to give an equal chance to all employees on different shifts to participate in the study. Ultimately, up to achieving data saturation, 25 ICU employees participated in the study, including 17 nurses, five nurse managers, and...
three nurse educators. The nurse educators were selected from those with ICU nursing experience who had more than five years’ worth of experience training students in this field.

3.4. Ethical Considerations
After obtaining permission from the Ethics Committee of Ahvaz Jundishapur University of Medical Sciences (ethical approval code 1393.272), the researcher wrote an introductory letter concerning conducting a study in the respective centers, and he received permission to conduct the research by presenting it to the administrators of the various hospitals. Prior to beginning the study, the researcher introduced himself, explained the aim of the study, the voluntary nature of participation, the ability to withdraw from the study at any time, the reason for sound recording and confidentiality, and the accessibility of information to all participants. Finally, informed consent was obtained from all participants.

3.5. Data Collection
Semi-structured, face-to-face interviews were used to collect the required data. All interviews were conducted by a single researcher (the first author), who was a PhD nursing candidate with five years of experience in the ICU. The interview guide included numerous open questions in order to allow participants to express their perceptions and experiences in detail. At the beginning of each interview, the participants were asked to discuss a working day in which care for mechanically ventilated patients was performed. They were then asked to describe their perceptions and experiences of the process of weaning. Next, focusing on the stage of weaning, the main questions of the study were posed as follows: At the time of taking care of the patient, what needs do you pay attention to?, What factors help you to better identify patients’ needs?, and What aspects do you take into account during patient care? The participants were also asked to provide clear and obvious examples of their experiences. Transcripts of the recorded interviews were written on the same day and they were used as original data. Data collection was conducted over ten months in 2014 - 2015. The interviews were conducted in a private room in the ICUs after the work shift ended. Each session lasted approximately 30 - 60 minutes. The interviews continued until no new themes emerged from the data.

3.6. Data Analysis
All data were subject to content analysis using the method proposed by Graneheim and Lundman (26). This method of analysis included the following steps:

1. The content of the recorded interviews was transcribed and reviewed by the researcher several times in order to reach a general understanding.
2. Words, sentences, or paragraphs were considered as semantic units. Semantic units are a collection of words and sentences linked together in terms of content. The semantic units were summarized based on their content.
3. The semantic units reached a level of abstraction and conceptualization, and they were labelled with codes according to the concept behind them.
4. The codes were compared based on their similarities and differences, and they were classified with specified labels in more abstract classes.
5. Finally, by comparing different classes through deep and careful reflections, data content was introduced as the theme of the study.

3.7. Rigor of the Study
The Lincoln and Guba criteria were used to measure the rigor of the study (28). The credibility of the data in this study was evaluated through member check, peer check, and prolonged engagement. After the analysis, the participants were contacted and provided with a full transcript of their respective coded interviews along with a summary of the emergent categories. This was done so that they could approve the interpretations of the researchers. An expert nurse manager and two doctoral students of nursing checked the study process. Prolonged engagement with the participants within the research field, for a period of nine months in this case, helped the researchers to gain the participants’ trust as well as a better understanding of their real world. To help ensure dependability, renewed coding of the interviews was carried out by colleagues who had experience in coding qualitative data. Moreover, the researchers documented the details of the research in order to provide the possibility of external review.

4. Results
Twenty-five ICU staff from six different hospitals were interviewed between October 2014 and July 2015. On average, the interviews lasted for 45 minutes (range 30 - 60 minutes). The study participants had a mean age of 38 years (range 24 - 47 years). Sixteen (64%) participants were female and nine (36%) were male. Of the 25 people who participated in this study, 17 had a bachelor of education in nursing degree, seven had a master’s degree, and one had a PhD in nursing. Among the participants, the average level of experience working in the ICU was ten years (range 3 - 18 years). To distinguish between survey participants and be able to attribute quotations, each person was assigned
a unique alphanumeric code for identification (i.e., P1, P2, P3 P25). Table 1 presents the demographic data of the participants. From the deep and rich descriptions provided by the participants, 1032 initial codes were extracted. After several reviews, the codes were summarized and classified on the basis of similarity and proportion. The inner meaning of the codes was classified into four main themes: continuous care, holistic overview of the patient, promoting human dignity, and the overall development of well-being (Table 2).

4.1. Continuous Care

From the nurses’ perspective, the amount of time spent with patients is incredibly valuable in informing the type of care that will be provided. Compared to the other ICU staff, nurses spend more time with patients, which results in more interactions between patient and nurses. Moreover, these interactions may lead to a greater understanding of the patient’s condition, as well as how best to provide care. With regard to mechanical ventilation, the impact of the treatment processes and overall responsiveness differs among patients, and patients often demonstrate rapid and instant changes. According to the participants in this study, long-term relationships with patients undergoing mechanical ventilation care and the initiation and advancement of weaning were identified as vital factors in understanding both the patients’ hidden and apparent needs. Thus, this expands on each of these factors in two distinct sub-themes: persistent interaction and mutual assurance.

4.1.1. Persistent Interaction

The participants pointed out the value of a sustained and broad relationship with patients. Furthermore, they believed that the uninterrupted and stable involvement of caregivers with patients is effective in promoting motivation and weaning from mechanical ventilation. This factor (i.e., persistent interaction) facilitates effective communication between the nurse and the patient, and it aids in the perception of needs. Additionally, the nurse is able to identify individual patient patterns when they arise. I spend a lot of time during the day with my patient. I can diagnose and understand his/her needs and emotions at every moment. It is only us nurses who continuously communicate with our patients (P2).

Being with the patient was a prominent sentiment in the statements of other nurses. They believed that the best way to understand the various needs of the patient was through the continuation of care, and they considered spending a lot of time next to the patients’ bedside to be a motivating factor for the patient to attempt to wean from mechanical ventilation. This face-to-face contact provides the patient with a feeling of companionship and, importantly, the availability of help in case they encounter an issue. To be able to obtain a full assessment of the patient, it is necessary that I stay at his/her bedside. Interrupted and periodical communications are far less effective (P4).

From the nurses’ point of view, a nurse can only succeed in this procedure when he/she is able to move beyond the patient’s personality when communicating with the patient using his/her personal wisdom in giving care.

4.1.2. Mutual Assurance

According to the participants’, spending time with the patients is a very effective means of acquiring their trust. They believed that the continuous care of patients is essential to building the patients’ confidence and, in turn, continuous care highlights their responsibility and commitment to the patient. When the patient does not see me more than a few times during a shift, he/she does not trust me and doesn’t care for my instructions (P1).

The continued presence of the nurse at the bedside of the patient can facilitate nurse-patient communication and aid in the process of establishing mutual trust. From the nurses’ viewpoint, mutual nurse-patient communication is initiated when the nurse brings the patient into the joint process of communication by creating an atmosphere of trust. This creates a framework in which the patient feels as though he/she is treated as a conscious human with decision-making power and can contribute to conversations regarding his/her own care. We try to build relationships with the patients through face-to-face interactions. The patient meets his/her specific nurse more often and gradually builds trust (P3).

4.2. Holistic Overview of the Patient

The participants stated that it is impossible to begin the weaning process based on only a fixed list of criteria. Instead, an all-encompassing, holistic overview of patients in the complex situation of weaning is essential for providing effective care. Furthermore, the effect of each parameter, including those that are physiological and psychological, varies between individual patients. Thus, in this section, the concept of adopting a holistic overview of each patient is expanded on in three distinct sub-sections: conscious presence, multidimensional overlook, and experimental perceptiveness.

4.2.1. Conscious Presence

According to the participants, purposeful conscious care on the part of nurses plays an important role in creating successful communication during the care process. They declared that with the aim of connecting with the inner world of the patients, they encountered patients with
Table 1. Demographics of the Participants

| Role in ICU      | Age, y | Gender | Qualifications | Experience in ICU, y |
|------------------|--------|--------|----------------|--------------------|
| P1 Nurse         | 32     | F      | BSc            | 7                  |
| P2 Nurse         | 32     | F      | BSc            | 4                  |
| P3 Nurse         | 44     | M      | BSc            | 12                 |
| P4 Nurse         | 44     | F      | MSc            | 8                  |
| P5 Nurse manager | 37     | M      | MSc            | 15                 |
| P6 Nurse         | 27     | F      | BSc            | 16                 |
| P7 Nurse educator| 44     | F      | PhD            | 17                 |
| P8 Nurse manager | 43     | M      | BSc            | 8                  |
| P9 Nurse         | 26     | F      | BSc            | 3                  |
| P10 Nurse        | 36     | F      | BSc            | 6                  |
| P11 Nurse        | 35     | M      | BSc            | 14                 |
| P12 Nurse manager| 46     | F      | MSc            | 17                 |
| P13 Nurse        | 45     | M      | MSc            | 18                 |
| P14 Nurse        | 24     | F      | BSc            | 9                  |
| P15 Nurse        | 38     | F      | BSc            | 3                  |
| P16 Nurse        | 47     | M      | BSc            | 7                  |
| P17 Nurse educator| 33    | M      | MSc            | 12                 |
| P18 Nurse        | 47     | M      | BSc            | 7                  |
| P19 Nurse manager| 39     | F      | BSc            | 14                 |
| P20 Nurse        | 33     | F      | BSc            | 13                 |
| P21 Nurse        | 35     | F      | BSc            | 8                  |
| P22 Nurse        | 42     | M      | BSc            | 15                 |
| P23 Nurse        | 42     | F      | MSc            | 4                  |
| P24 Nurse manager| 46     | F      | BSc            | 13                 |
| P25 Nurse manager| 42     | F      | MSc            | 14                 |

Table 2. Study Themes

| Theme                      | Sub-Theme                 |
|----------------------------|---------------------------|
| Continuous care            | Persistent interaction    |
|                            | Mutual assurance          |
| Holistic overview of the patient | Conscious presence          |
|                            | multidimensional overlook |
|                            | Experiential perceptive   |
| Promoting human dignity   |                           |
| The overall development of well being |                   |

Wisdom, consciousness, and understanding. Furthermore, this led them to consider the individuality of each of their patients. During clinical care when the nurses are engaged at the patients’ bedsides, they made a concerted effort to discover and understand the patients’ feelings and what constitutes their inner self. To understand every condition of the patients, the nurses must be very alert. You should be very conscious at all times (P15). I want to know every need and demand of my patient when I am working next to his/her bedside. I try to pay attention to his/her overall condition while giving care (P10).

At the time of weaning, the patient’s level of consciousness is often somewhat improved, which provides an opportunity for greater mutual communication between the nurse and the patient. Furthermore, the nurses indicated that this increased opportunity for communication provides them with the ability to explore the inner feelings of the patient and provide objective (i.e., purposeful) care during weaning. During this conscious presence, the nurses’ constructive expressions related to every feeling of
the patient enabled them to create a foundation for nurse-patient trust and care. If you are aware and know how to have a holistic view of the patient, you will be able to identify all the key points and discuss them with your patient (P7). When he/she realizes that I notice his/her improvements and positively approach his/her progress, it is very comforting and the patients are encouraged to put more effort into their own progress (P12).

4.2.2. Multidimensional Overlook

From the perspective of the participants, a general examination of all aspects of a patient’s physiological, psychological, and even social and familial dimensions is necessary in order to understand his/her readiness for weaning, as well as for formulating an informed judgment on his/her progress during the weaning process. They considered only holistic assessments. This subclass of extracted codes that was obtained from the nurses’ statements indicates the necessity of ICU staff considering combining objective physiological indicators with subjective criteria in order to inform treatment decisions for individual patients. They pointed out that often none of the physiological and subjective findings, as reported by the staff, are based on experience or intuition gained from considering the patient’s overall condition and so, taken alone, they are not useful. It is necessary to strike a balance between the physiological and subjective parameters to develop a correct and informed judgment on weaning. Weaning requires all the physiological and psychological factors to be considered. You have to dedicate yourself to your patient to be able to notice all of his/her aspects simultaneously (P20). I must have a broad, from-above view of my patient. There are things that cannot be reached easily through fast, routine assessments (P9).

Sometimes, a comprehensive overview of the patient shows his/her uneasiness with independent ventilation in a way that suggests the possibility of obstacles to the weaning process that are not detailed in a conventional index analysis. We should open our minds and see everything at once. The protocols are of course very good, but they do not cover everything (P11).

4.2.3. Experiential Perceptiveness

Participants with more experience stated that with experience comes the capacity for more sensitivity, the ability to recognize effective key factors, and the ability to place the temporary conditions of the patient in the wider context, particularly during weaning. The possession of working knowledge gained through experience with patients undergoing the weaning process directs the focus of nurses’ interventions toward more effective indicators in each patient. The more experience we gain in working with these patients, the more our vision and insight deepens. The indicators that are more effective and vital are considered as more important by us (P8).

Further, more work experience with patients who are undergoing mechanical ventilation will promote the nurses’ communication skills. Factors such as the age, sex, personality, level of education, family structure, and social level of the patients were of particular interest to the participants when establishing channels of communication. This in-depth point of view, which considers broader spectra of certain aspects of an individual when initiating and sustaining communication with patients, requires substantial experience. After so many years of working in the ICU, we are precise with our patient diagnosis. We promptly understand what kind of personality our patient has and how we should behave toward him/her (P18).

4.3. Promoting Human Dignity

The statements made by participants highlight that it is of the utmost importance to respect the notion of individuality and, at the same time, respect patients’ belief systems. This display of respect promotes mutual communication between the two individuals during care, and it allows the nurse to anticipate the needs of his/her patient. They declared that each human has their own take on the meaning of life, which is important and of value to them. We can only know more about our patients’ needs when we learn to respect them. The patient should be important to me and I must never forget that I am dealing with a human (P15). Patients are humans just like us, with a series of beliefs, interests, and viewpoints. They are not just bodies of flesh and bone (P21).

Participants also stressed that in patient-centered professional care, it is essential to maintain patient dignity. It is in this sense that, in line with their work commitments and demands and the holistic professional approach to the patient, patient care should be undertaken in a way that attempts to meet most, if not all, of a patient’s needs, demands, and expectations. Furthermore, care needs to be accompanied by a sense of love and empathy, as well as a deep desire to help. Due to the complex and daunting demands of weaning, being courteous to the psychological needs of patients is of incredible importance. Courtesy towards the patient, as described by nurses in the survey, could be exemplified by particular actions such as providing comfort, empathy, feelings of understanding, assurance, and by communicating based on mutual trust. “I call the patient’s name with respect. I hold his/her hand. I gently wake him/her up and ask him/her about his/her condition. This means respecting the personality of the patient (P19).
4.4. The Overall Development of Well-Being

From the nurses’ perspective, creating, maintaining, and expressing thoughts, images, feelings, beliefs, intentions, desires, wishes, and possibilities concerning the improvement and well-being of a human were vital to holistic care. They therefore insisted on creating a positive atmosphere at the patients’ bedside. Inducing the thought of progress towards health improvements during the weaning stage and gradually bringing the patient closer to normal life can serve to motivate the patient to make progress. Feelings of hope must first be created among the staff and then maintained in the environment surrounding the patient. This concept was illustrated by the sentiments of one particular nurse: If the patient’s physician and nurse have high hopes of recovery for the patient, their belief is directly reflected to the patient. For example, in patients who have had a negative prognosis and when we do not have high hopes for weaning the patient, our performance is subconsciously affected (P10).

The nurses discussed strategies for how to put patients on the path to good health, which included avoiding the use of disappointing words, adding stress to any progress in spontaneous breathing, pointing out other patients in the ward who have succeeded in weaning from mechanical ventilation, and maintaining hope in every possible way. We must first believe that the patient can wean from the mechanical ventilation. It is only then that the patient can accept breathing without the machine. Personally, I try to convey this message to the patient in every possible way, via words, my tone of voice, facial expressions, and body language while giving care to him/her (P17).

5. Discussion

The present study presented four different ideas about holistic care to facilitate weaning. Continuous care was recognized as being critical for gaining understanding and knowledge about an individual patient. Considering the essence of individualized patient care, knowing the patient well is essential for the effective conduct of nurses across all of the significant milestones of the weaning process. The more time spent with the patient, the better the nurse’s recognition of the individual patient’s needs. It is vital for the nurse to know the patient in order to be able to provide care tailored to the individual (29). Stable and consistent communication with continuous, face-to-face contact can bolster the confidence of the patient and enhance the influence of the nurse during the weaning process. These findings are consistent with those obtained by Crocker and Scholes emphasizing that continuity of care is a necessity for knowing the patient (5). Other important results include identifying the patient’s incentives for weaning, personal preferences, coping style, and selecting an appropriate strategy for easier weaning (13, 30). Both the physical and mental status of the patient can vary, and thus they both need to be assessed on a continual basis (15, 17).

Continuous communication facilitates the weaning process (31). Poor communication not only causes anxiety, but can also result in a slow recovery (32). Good communication with patients in the ICU is considered reassuring, whereas poor communication can be disturbing (33, 34). The nurses stated that visual communication and physical contact can relax the patient during the process of weaning. It is necessary to create a trusting relationship with the patient and reflect on his/her physical and mental needs when implementing care (29).

Another important factor in determining the success of weaning is the continual presence of a nurse (13). Knowing the patient is a clinical skill that stems from a continual presence (5, 30). Our study demonstrated that this presence should be conscious and purposeful. Spending time with the patient with conscious awareness and alertness motivates the nurse to pay close attention to all aspects of the patient. Holistic nursing texts refer to this as the conscious presence. Consciousness toward a targeted and efficient mental intention is implemented in the minds of the nurses and it manifests itself in behavior that aims to practice, expect, and believe alertly. While practicing mindfulness in this manner, it penetrates their subconscious minds and leads them to perform optimal patient care (35). Based on our findings, as weaning has morphed into routine and repetitive care, nurses’ sensitivity and attention to key changes may be reduced over time.

The results of this study indicate that continuous care by nurses leads to the consideration and comprehension of all overt and covert aspects of the patient. Furthermore, understanding the patient’s internal perceptions is of great importance, especially when the patient is unable to outwardly express their own needs due to various states of consciousness and/or an inability to speak. Along with paying careful attention to detail, the patient’s overall condition influences judgments regarding the implementation of patient care procedures. Previously, Blackwood described the holistic view of caregivers towards a patient’s indicators during weaning (13). The examination of each patient during weaning is conducted with an overall view and nurses often use a series of measures that assess the patient’s mental and physical conditions in order to make care-based decisions (10). Following the holistic paradigm of treatment, the nurses focused on the patient as a whole, the patient’s physical and mental response during weaning, titration of ventilator settings, and how the patient
managed weaning during mobilization (36).

Long-term experience of working in the ICU is considered a key factor for holism and perceptiveness. This study showed that the increased experience of nurses with the challenging weaning process leads to a better recognition of the impressive features of the patient. Experience is a prominent factor in clinical judgment and independent decision making by nurses (5, 11, 12, 14). The nurses’ experience, confidence, and competence will, undoubtedly, influence their decisions (37).

Due to the uniqueness of every human being, the care dedicated to each patient should be as unique as the individual, and the nurse should not overlook the patient’s belief system. Based on our study, the nurses described the patients as conscious, respectable, worthy, and valuable individuals who possess souls. The nurse’s aim while giving care to a patient is to honor his/her life as a precious gift. A patient who is being weaned has undergone a period of loneliness and helplessness. Therefore, providing patient-centered care that values his/her life and needs can establish and cultivate a keen sense of improvement in the patient. Factors that preserve and promote the patient’s dignity include the following: considering that the patient is enduring pain, showing sympathy, demonstrating care, compassion, competence, courtesy, spending time with patients, and providing them with information (38, 39).

Driving the patient’s health toward well-being has been suggested as one of the leading theories of nursing care from the holistic point of view (35, 40, 41). In our study, the nurses declared that they are trying to direct the patients’ beliefs, thoughts, and desires toward the path to well-being. This helps to create both a positive attitude and a strong motivation for recovery.

An important task for the nurse is to motivate the patient, helping her/him to accept the situation and gather the strength required for the weaning process (42). A unit’s care culture encompasses the values, attitudes, norms, and tacit expectations of those who work there, and it is manifested in the way the work is conducted (43). Previous research has found that the care culture influences the weaning process (44). Our study demonstrated that the nurses attempted to construct a positive atmosphere at the patient’s bedside. The maintenance and promotion of a good incentive is based on the patient’s desires and needs in a positive atmosphere. This positive atmosphere must first be formed among the staff and their corresponding interactions, and then the positive atmosphere will expand to include the patient. According to Rogers’ holistic perspective, because of holistic care provided by the nurse and the nurse’s attempt to help the patient to find the capacity within himself/herself to maximize recovery, the overall sense of individual well-being is improved (41).

A fast, safe weaning process with very few side effects requires a holistic, comprehensive, and all-encompassing patient assessment. Holistic care considers all the physical, mental, social, and spiritual aspects of a patient. ICU nurses develop continuous mutual trust-based relationships with patients while providing them with care at the weaning stage. They attempt to combine their experience with wisdom, consciousness, and attention when they are present at the patient’s bedside. Evaluating and balancing all indices, including objective and subjective indicators, is very helpful in depicting an accurate image of the patient’s condition. Ultimately, over the course of a gradual weaning, holistically focused nurses attempt to create a positive atmosphere of well-being and recovery for patients. In addition to having respect for the dignity of patients, holistic care necessitates that the care provider be courteous to the patient’s demands, needs, emotions, and beliefs. Overall, the quality of patient care can be enhanced by a holistic viewpoint on the part of health care professionals who strive to increase awareness of the nonphysical aspects of patients, focus on treatment and provide exclusive care, utilize experience when considering care, and emphasize effective communication skills. Taken together, the various aspects of a holistic care approach culminate in an intention to honor each patient as a human being.

5.1. Limitations

Due to the limited number of participants, the findings of this study cannot be generalized to all ICU environments in Iran or to all nurses working in ICUs. Interviews with nurses with different levels of experience in different wards did, however, provide accurate data, which led to rigorous findings.

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Footnotes

Authors’ Contribution: Ali Khalafi designed the research, conducted the interviews and data analysis, and prepared the first draft of the manuscript. Nasrin Elahi supervised all stages of the research, especially the data analysis and the preparation of the final version of the
manuscript. Fazlollah Ahmadi acted as a consultant during the research process.

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**References**

1. Blackwood B, Wilson-Barnett J, Trinder J. Protocolized weaning from mechanical ventilation: ICU physicians’ views. *J Adv Nurs.* 2004;48(1):26–34. doi: 10.1111/j.1365-2648.2004.03165.x. [PubMed: 15347407].

2. Boles JM, Bion J, Connors A, Herridge M, Marsh B, Melot C, et al. Weaning from mechanical ventilation. *Ear Respir J.* 2007;29(5):1031–56. doi: 10.18389/09039396.00010206. [PubMed: 17470624].

3. Madani SJ, Saghafinia M, Sedighi Nezhad H, Ebadi A, Ghochani A, Fazel Tavasoli A, et al. Validity of Integrative Weaning Index of Discontinuation From Mechanical Ventilation in Iranian ICUs. *Thrita J Med Sci.* 2015;20(1):62–4. doi: 10.5821/TJMS.12877.

4. Eckerblad J, Eriksson H, Karner A, Edell-Gustafsson U. Nurses’ conceptions of facilitative strategies of weaning patients from mechanical ventilation—a phenomenographic study. *Intensive Crit Care Nurs.* 2009;25(5):225–32. doi: 10.1016/j.iccn.2009.06.008. [PubMed: 19969587].

5. Crocker C, Scholes J. The importance of knowing the patient in weaning from mechanical ventilation. *Nurs Crit Care.* 2009;14(6):289–96. doi: 10.1016/j.iccn.2009.09.005X. [PubMed: 19840275].

6. Martensson E, Fridlund B. Factors influencing the patient during weaning from mechanical ventilation: a national survey. *Intensive Crit Care Nurs.* 2002;18(4):278–99. [PubMed: 12470012].

7. Rose L, Nelson S, Johnston L, Presneill JJ. Decisions made by critical care nurses during mechanical ventilation and weaning in an Australian intensive care unit. *Am J Crit Care.* 2007;16(5):434–43. doi: 10.1016/j.ajcc.2007.07.004. [PubMed: 17724240].

8. Blackwood B, Alderdice F, Burns KE, Cardwell CR, Lavery GG, O’Halloran P. Protocolized vs. non-protocolized weaning for reducing the duration of mechanical ventilation in critically ill adult patients: Cochrane review protocol. *J Adv Nurs.* 2009;65(5):957–64. [PubMed: 19399969].

9. European Federation of Critical Care Nursing Associations, Position statement on nurses’ role in weaning from ventilation 2012 Amsterdam: EFCNA; 2012. [Cited Feb 2]. Available from: http://www.efcna.org.

10. Tingsvik C, Johansson K, Martensson J. Weaning from mechanical ventilation: factors that influence intensive care nurses’ decision-making. *Nurs Crit Care.* 2015;20(3):16–24. doi: 10.1111/ncc.12216. [PubMed: 25269708].

11. Gelsthorpe T, Crocker C. A study exploring factors which influence the decision to commence nurse-led weaning. *Nurs Crit Care.* 2004;9(5):201–21. [PubMed: 15462199].

12. Lavelle C, Dowling M. The factors which influence nurses when weaning patients from mechanical ventilation: findings from a qualitative study. *Intensive Crit Care Nurs.* 2012;27(5):244–52. doi: 10.1016/j.iccn.2011.06.002. [PubMed: 22784559].

13. Blackwood B. The art and science of predicting patient readiness for weaning from mechanical ventilation. *Int J Nurs Stud.* 2000;37(2):145–51. [PubMed: 10684956].

14. Crocker C, Scholes J. Weaning from ventilation needs to be tailored to individual patients and involve them. *Nurs Times.* 2000;106(49):23–91. [PubMed: 10996002].

15. Pun BT, Ely EW. The importance of diagnosing and managing ICU delirium. *Chest.* 2007;132(2):524–36. doi: 10.1378/chest.06-0795. [PubMed: 17699354].

16. MacIntyre NR, Cook DJ, Ely EWJ, Epstein SK, Fink JB, Heffner JE, et al. Evidence-based guidelines for weaning and discontinuing ventilatory support: a collective task force facilitated by the American College of Chest Physicians; the American Association for Respiratory Care; and the American College of Critical Care Medicine. *Chest.* 2001;120(6 Suppl):375S–95S. [PubMed: 11742959].

17. Couchman BA, Wretzig SM, Coyer FM, Wheeler MK. Nursing care of the mechanically ventilated patient: what does the evidence say? Part one. *Intensive Crit Care Nurs.* 2007;23(1):14–14. doi: 10.1016/j.iccn.2006.08.005. [PubMed: 17046259].

18. Papathanasiou I, Sklavou M, Kourkouta L. Holistic Nursing Care: Theories and Perspectives. *Am J Nurs Sci.* 2013;1(1):5. doi: 10.1684/ajns.2013.0211.

19. Tjale AA, Bruce J. A concept analysis of holistic nursing care in paediatric nursing. *Curation.* 2007;30(4):45–52. [PubMed: 18402420].

20. Sellmen D, Andsoy I. The importance of a holistic approach during the perioperative period. *AORN J.* 2011;93(4):482–7. doi: 10.1016/j.aorn.2010.09.029. [PubMed: 21498186].

21. O’Regan P, Wills T. The growth of complementary therapies and their benefits in the perioperative setting. *J Perioper Pract.* 2009;19(11):382–6. [PubMed: 20041625].

22. Davis-Floyd R. The technocratic, humanistic, and holistic paradigms of childbirth. *Int J Gynaecol Obstet.* 2001;75(Suppl) 155–523. [PubMed: 11742839].

23. Olive P. The holistic nursing care of patients with minor injuries attending the A&E department. *Accid Emerg Nurs.* 2003;11(1):27–32. [PubMed: 12718948].

24. Bahrami M. Do nurses provide holistic care to cancer patients?. *Iran J Nurs Midwifery Res.* 2010;15(4):245–51. [PubMed: 22049289].

25. Frisch NC. Standards of holistic nursing practice as guidelines for quality undergraduate nursing curricula. *J Prof Nurs.* 2003;19(6):382–6. [PubMed: 14689395].

26. Graemeuh JH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today.* 2004;24(2):105–12. doi: 10.1016/j.anted.2003.10.001. [PubMed: 14769454].

27. Polit DF, Beck CT. Nursing research: Generating and assessing evidence for nursing practice. Philadelphia: Lippincott Williams and Wilkins; 2012.

28. Lincoln YS, Guba EG. Naturalistic Inquiry. US: SAGE Publications; 1985.

29. Orlando IJ. The Dynamic Nurse-Patient Relationship: Function, Process, and Principles. New York: National League for Nursing; 1990.

30. Jenny J, Logan J. Knowing the patient: one aspect of clinical knowledge. *Image: J Nurs Sch.* 1992;24(2):254–8. [PubMed: 1452178].

31. Schou L, Egerod I. A qualitative study into the lived experience of post-CABG patients during mechanical ventilator weaning. *Intensive Crit Care Nurs.* 2008;24(3):177–9. doi: 10.1016/j.iccn.2007.12.004. [PubMed: 18280735].

32. Patak I, Gawlinski A, Fung NI, Doering I, Berg J. Patients’ reports of health care practitioner interventions that are related to communication during mechanical ventilation. *Heart Lung.* 2004;33(5):308–20. [PubMed: 15454980].

33. Russell S. An exploratory study of patients’ perceptions, memories and experiences of an intensive care unit. *J Adv Nurs.* 1999;29(4):783–91. [PubMed: 10215968].

34. Magnus VS, Turkington L. Communication interaction in ICU-Patient and staff experiences and perceptions. *Intensive Crit Care Nurs.* 2006;22(3):167–80. doi: 10.1016/j.iccn.2005.09.009. [PubMed: 16298132].

35. Watson J. Human Caring Science: A Theory of Nursing. 2 ed. US: Jones and Bartlett Learning; 2011.

36. Cederwall CJ, Plos K, Rose L, Dubeck A, Ringdal M. Critical care nurses managing of prolonged weaning: an interview study. *Nurs Crit Care.* 2014;19(5):236–42. doi: 10.1016/j.iccn.2012.09.002. [PubMed: 24809883].

37. Hancock HC, Easen PR. The decision-making processes of nurses when extubating patients following cardiac surgery.
an ethnographic study. Int J Nurs Stud. 2006;43(6):693–705. doi: 10.1016/j.ijnurstu.2005.09.003. [PubMed: 16256118].

38. Matiti MR, Trorey GM. Patients’ expectations of the maintenance of their dignity. J Clin Nurs. 2008;17(20):2709–17. doi: 10.1111/j.1365-2702.2008.02365.x. [PubMed: 18808619].

39. Walsh K, Kowanko I. Nurses’ and patients’ perceptions of dignity. Int J Nurs Pract. 2002;8(3):143–51. [PubMed: 12000633].

40. Newman MA. Newman’s Theory of Health as Praxis. Nurs Sci Q. 1990;3(1):37–41. doi: 10.1177/089431849000300109.

41. Rogers ME. The science of unitary human beings: current perspectives. Nurs Sci Q. 1994;7(1):33–5. [PubMed: 8139814].

42. Chen CJ, Lin CJ, Tzeng YL, Hsu LN. Successful mechanical ventilation weaning experiences at respiratory care centers. J Nurs Res. 2009;17(2):93–101. doi: 10.1097/JNR.0b013e3181a6a601. [PubMed: 19516103].

43. Flatten H. In: Patient Safety and Quality of Care in Intensive Care Medicine. Chiche JD, Moreno R. P., Putensen C, Rhodes A, editors. Berlin: Medizinisch Wissenschaftliche Verlagsgesellschaft; 2009. The importance of ICU culture.

44. Rose L, Blackwood R, Burns SM, Frazier SK, Egerod I. International perspectives on the influence of structure and process of weaning from mechanical ventilation. Am J Crit Care. 2011;20(1):10–8. doi: 10.4037/ajcc2011430. [PubMed: 2196563].