RESEARCH PAPER

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eISSN 2093-758X
J Korean Acad Nurs Vol.51 No.4, 430
https://doi.org/10.4040/jkan.21075

A Concept Analysis of Quality Nursing Care

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Purpose: This study aimed to perform a concept analysis of quality nursing care. **Methods:** Walker and Avant's concept analysis method was used to carry out this study. **Results:** The defining attributes identified were as follows: caring, the nurse-patient relationship, and patient needs. Antecedents included patient characteristics, individual factors (age, education, knowledge, competence, and experience), job position, and environmental factors. The consequences of quality nursing care have significant influence on both patients and nurses. **Conclusion:** The findings can aid researchers in obtaining a better understanding of quality nursing care, and stakeholders can consider the factors related to quality nursing care and its consequences to improve the nursing process.

Key words: Caring; Hospitals; Nursing Process; Nurse-Patient Relations; Patients

INTRODUCTION

Nursing researchers have described a diversity of concepts related to quality nursing care (QNC). They include, but are not limited to, the quality of care, nursing care quality, nursing care, nursing-sensitive outcomes, nursing outcomes, missed nursing care, and care left undone. However, researchers have treated "QNC" as a complex and vague concept with many definitions, and the concept has been the subject of many complex discussions. Different environments, different job positions, and the diversity of in-patient and out-patient experiences contribute to the challenge of determining a consistent definition. The existing definitions vary, and there are no specific definitions for QNC. Consequently, a consensus concept may not be naturally feasible because of the different perspectives of nurses and patients and their different understanding of treatment, despite the similar features found in their experiences. The concept centered on this commonality would be incomplete and would not consider "quality" holistically [1].

QNC in the hospital is related to complex factors, from upper-level management to patient outcomes. Many studies have tried to explain the predictors and impact of QNC. Prior studies have shown that the nurse's perspective of QNC can be predicted by hospital management, organizational support, nurse practice environment at the unit level, workload, emotional exhaustion, personal accomplishment, and work engagement [2-4]. In addition, QNC is a significant factor of not only adverse events and recurrence [5-7], but also patient satisfaction, hospital commitment, and revisit intention [8,9].

Nurses have the social responsibility of promoting health and preventing accidents and diseases. Quality evaluation, including results of nursing education programs, has traditionally been hampered by the lack of accessible data on the nursing process and patient results. Evidence to support

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Received: April 26, 2021 Revised: June 25, 2021 Accepted: July 23, 2021 Published online August 31, 2021

nursing practice this is committed to patient care is deficient due to the lack of critical data on QNC. Distinctions in methods should be made to reinforce successful quality evaluation and measurement of results in nursing. Instead of seeking significance in the available data, resources have to be redirected to selecting the relevant data [10].

A better understanding of the concept of QNC in hospitals that is explicitly specified in a potentially useful way is needed, in order for QNC to be recognized in the hospital. This concept analysis aids in clarifying the operational definition of QNC. Furthermore, the identification of the antecedents and implications will shed light on the phenomena associated with QNC.

METHODS

1. Study design

This study explored the characteristics of QNC using Walker and Avant's concept analysis [11] approach. The main purposes were to define the characteristics of QNC and to present 'QNC' with a detailed explanation of the concept. The study also developed a conceptualized description of QNC.

2. Data collection and analysis

The time period examined was from 1990 to 2020. A literature search was conducted using the PubMed, Blackwell, Science Direct, CINAHL, and Google Scholar databases. The terms "quality nursing care," "quality of nursing care," "nursing care quality," and "nurse" were searched for in the keywords and titles of articles.

The process of selection started with the inclusion and exclusion criteria. The inclusion criteria were: (1) definitions and attributes of QNC, (2) antecedents, consequences, and empirical evidence of QNC, and (3) published articles in English. The exclusion criteria were: (1) books, (2) letters to the editors, (3) non-peer-reviewed articles, and (4) commentaries. Forty-nine out of 176 potential articles were selected based on the inclusion and exclusion criteria (Figure 1).

All of the authors performed the screening. First, the researchers checked for duplicate articles and articles on studies conducted on a different topic. Then the title was screened for its inclusion of at least one of the search terms ("quality" or "nursing" or "care" or "quality nursing care"). Finally, studies were screened against the exclusion criteria. Articles on studies that examined other aspects of healthcare quality or were not written in English were also excluded.

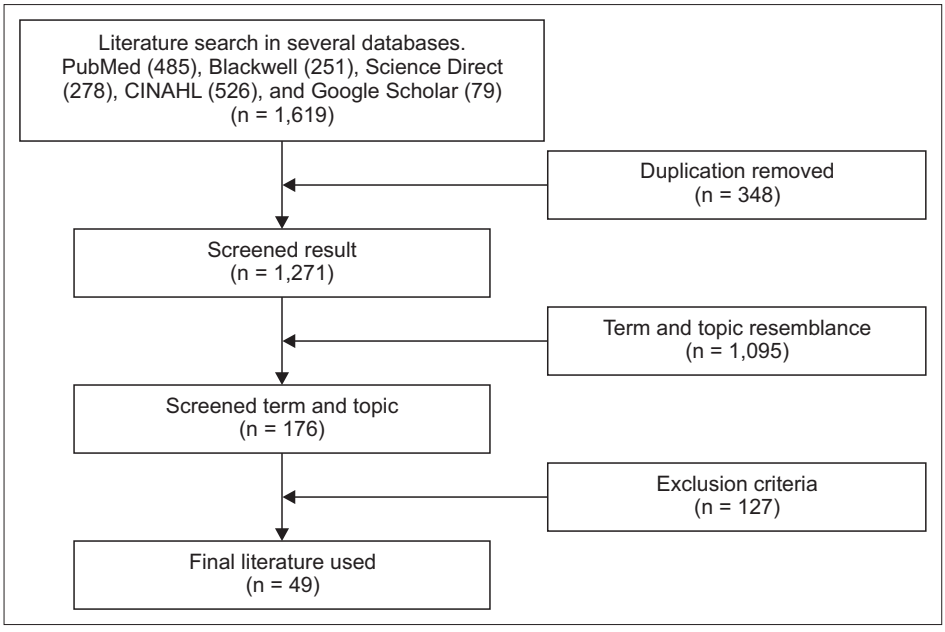

Figure 1. Flow diagram of the selection of studies.

Afterward, three authors reviewed and analyzed the articles independently. Differences were discussed and re-analyzed to achieve consensus. The review of the articles was carried out from September 2020 to February 2021.

Data were extracted, and analyzed using Walker and Avant's eight-step approach of concept analysis [11]: First, the concept was selected, as described in the introduction section; Second, the purpose was determined, as described in the methods section; The remaining steps included defining the attributes, constructing a model case and an additional case, and identifying the antecedents and consequences, and empirical referents. These steps are described in the results section.

3. Ethical considerations

This study was approved by the Udayana University Ethic Research Committee (IRB No. 1258/UN14.2.2.VII.14/LT/2020).

RESULTS

1. Identifying all uses of the concept

The term "quality" is widely used across disciplines. "Quality of care" is commonly used in healthcare, and can be used for any healthcare discipline, including medical practice, nursing, pharmacy, and nutrition. "Quality nursing care" is a term focused specifically on the nursing discipline.

1) Dictionary definitions of quality nursing care

"QNC" does not appear as one term in any dictionary. Thus, the terms are divided into three parts to be clearly defined: "quality," "nursing," and "care."

The definitions of "Quality" in the Oxford Learner's Dictionary are (1) "the standard of something when it is compared to other things like it," (2) "how good or bad something is," (3) "a high standard," and (4) "a thing that is part of a person's character, especially something good" [12]. The definitions for the term in the Cambridge Dictionary of American English are (1) "how good or bad something is," (2) "a characteristic or feature of someone or something," and (3) "the degree of excellence of something, often a high degree of it" [13]. The Lexico defines "quality" as (1) "the standard of something as measured against other things of a similar kind," (2) "the degree of excellence of something," and (3) "a distinctive attribute or characteristic possessed by someone or something" [14]. Thus, "quality" can be defined as the degree of excellence of something.

The word "nursing" has several definitions. The definition in the Oxford Learner's Dictionary is (1) "the job or skill of caring for people who are sick or injured" [12]. According to the Cambridge Dictionary of American English, nursing is defined as (1) the job of being a nurse and (2) the act of a woman feeding a baby with milk from her breasts [13]. Lexico's definitions include (1) The profession or practice of providing care for the sick and infirm, and (2) "a mother breastfeeding a baby" [14]. Therefore, nursing can be defined as a profession in which a nurse provides care.

"Care" is defined in the Oxford Learner's Dictionary as (1) "the process of caring for somebody/something and providing what they need for their health or protection"; (2) "the fact of providing a home in an institution run by the local authority or with another family for children who cannot live with their parents"; (3) "attention or thought that you give to something that you are doing, so that you will do it well and avoid mistakes or damage"; and (4) "a feeling of worry; something that causes problems or worries" [12]. In the Cambridge dictionary of American English, "care" is defined as (1) "the process of protecting someone or something and providing what that person or thing needs," (2) "the process of providing for the needs of someone or something," and (3) "serious attention, especially to the details of a situation or a piece of work" [13]. The Lexico defines "care" as (1) "the provision of what is necessary for the health, welfare, maintenance, and protection of someone or something" and (2) "serious attention or consideration applied to doing something correctly or to avoid damage or risk" [14]. Thus, "care" can be defined as the process of attending to the needs of someone for their health, welfare, maintenance, and protection.

2) Definitions of quality nursing care in the literature

The definition of QNC can be considered from a variety of perspectives, including the patient and family, nurses, nurse

managers, and management [15]. This study focused on the micro-level, specifically how nursing staff in a hospital could make a significant and unique contribution. Past studies suggest that a nurse commonly uses two terms/set of terms to explain QNC. The first is "meet" and "need"; these terms are related to meeting the patient's needs. One study defined QNC as the meeting of human needs through caring, empathy, and respectful interactions within which responsibility, intentionality, and advocacy form an essential, integral foundation [16]. Another study defined it as meeting the patient's psychosocial needs [17]. According to Williams [18], providing QNC means meeting the patient's physical, psychosocial, and extra care needs.

Some studies used the term "standard" to explain the meaning of QNC. QNC engenders patient safety and satisfaction and is conducted by nurses and based on nursing standards [19]. One study conducted in Iran defined QNC as nursing care delivery based on nursing standards with safety, which are important factors in patient satisfaction [20].

2. Determining the defining attributes

An attribute is a term that is repeatedly associated with a concept. The term defines the characteristics that differentiate the phenomenon from a similar one [11]. The relevant resources, which are used to identify the attributes of QNC are presented in Table 1 [16,21-29] (The details of the attributes on each study can be seen in Appendix 1). "Caring" was the most supported attribute in the literature, followed by the "nurse-patient relationship" and "patient needs." Therefore, the conceptual definition of QNC arrived at in this study was the degree of excellence of caring conducted by nurses to meet their patients' needs.

1) Caring

Caring is an essential part of nursing. Caring is a part of the attitude that humans need while they interact with one another. According to the literature, the majority of the attributes are related to caring. Caring can be divided into two parts: care function and the nurse's personal character. Care function refers to how a nurse's feelings can impact his or her caring experiences. Moreover, a nurse's personal character is obviously a major aspect of the care they provide.

2) Nurse-patient relationship

The QNC process involves nurses and patients. The nurse-patient relationship has evolved. Communication and interpersonal skills are important in constructing the nurse-patient relationship. These skills are used to construct a good relationship between individuals. Specifically, the nurse needs the patient's trust during the treatment (Table 1).

Table 1. Attributes, Sub-Attributes and Indicators of 'Quality Nursing Care'

Attributes	Sub-attributes	Indicators
Caring	Care function [21]	Good experiences of care [22]
	Nurse personal character [21]	Caring, respectful, emphatic, responsibility [16]
		Therapeutic care, attitude sensitivity [23]
		Human-oriented activities [24]
Nurse-patient relationship	Communication [25]	Monitoring and informing, efficiency and thoroughness [23]
		Ethic-oriented activity [26]
		Cooperation with relatives [22,27]
	Interpersonal factor [21]	Interaction, vigilance [28]
		Intentionally [16]
Patient needs	Met nursing care needs [24,27]	Elimination, feeding, drinking, washing, bathing, dress-undressing, exercising [25]
		Advocacy [16]
	Nurse professional perspective and practice [21-23]	Physical environment, nurse task requirement [26]
		Enough time to complete assignment [29]
		Enough time to give treatment [29]

3) Patient needs

Patient needs are slightly complex and comprehensive. They include physical care, psychosocial support, emotional care, and spiritual needs. Meeting patient needs in the context of QNC involves providing basic nursing care treatment and having enough time to provide treatment and complete the assignment as well. Patient needs are attended to, in order to meet nursing care needs and to achieve QNC.

3. Quality nursing care model case

A model case based on the hospital nurse's experience was developed to define the concept [11]. The case is presented below.

1) Model case

In the intensive care unit of a tertiary hospital, the ratio of nurses to patients is 1:2 for the morning shift and 1:3 for the afternoon and night shifts. Nurses meet the patients during the handover. They greet the patient and call his or her name even when the patient is in a comatose state. Then the nurse talks to the patient as if he or she were in compos mentis to report on handover. During a patient's treatment, nurses always ask the patient's permission to perform an intervention. The nurses try to adhere to standard operational procedures, and provide patients with adequate care. They always maintain good communication with the patient and family, educate the patient about his or her problem, and provide positive encouragement. Nurses carry out actions and interventions based on their patient's condition. They will call other healthcare workers if collaboration is required.

For this case, the nurses provided QNC. They expressed adequate care for all patients in any condition and followed standard procedures during treatment. They consistently maintained a good relationship with the patient and family and encouraged them to deal with the patient's health problem. Nursing actions to satisfy the patient needs that had an essential role included observing the patient's condition, patient mobilization, providing information to the patient and family, and advocating for collaboration in the treatment of the patient.

4. Additional cases

Contrary, borderline, and related cases that can support researchers in understanding the vital attributes of QNC were also identified. They can also prevent overlap of the attributes of the concept with the analyzed concept.

1) Contrary case

A contrary case is an example of a contradiction or opposite of the concept. One case is described below:

One hospital had severe problems during the pandemic. There was a nursing shortage and a bed occupancy rate of 100%, which caused fatigue and increased nursing care burden. Nurses did not have enough time to talk in person with the patient and felt distant from the patient. In addition, the patient complained because of the nurse's attitude. They did not feel safe and felt that they were being ignored by the nurse. Patients were also unsatisfied because they did not feel that they had a good relationship with the nurse during nurse implementation. Thus, nurses could not meet patient needs.

In the case described above, the high workload prevented the nurses from providing QNC. The nurse could not express care for the patient. They could not meet the patient's needs due to the work situation. The nurse–patient relationship suffered because of the treatment situation. Thus, in this contrary case, all of the attributes were absent.

2) Borderline case

A similar case, a borderline case (or boundary case), is a case that cannot be regarded as an illustration of the concept because it only includes some of the important attributes of the concept. An example is presented below:

Nurses in the emergency unit need to save the life of a patient. Nurse C gives enough treatment to patient A. Then the family and patient A must wait for the doctor's diagnosis. However, the family cannot accept the situation because they are required to wait for a long time. Nurse C tries to explain the situation many times, but the family ignores Nurse C's explanations. Nurse C is unable to build a trusting nurse–patient relationship because of the family situation. Thus, in

 https://doi.org/10.4040/jkan.21075

this borderline case, one of the attributes is absent.

3) Related case

A related model case that could aid researchers in understanding the vital attributes of the concept was also identified. The concept is quite similar to nursing care. An example is given below:

Nurse A usually provides good care to patients. However, she needs to finish the patient's documentation, and it takes considerable time. Patient and family can tolerate the condition because the nurse-patient relationship is well-constructed. However, nurse have not enough time for the patient, that would miss or delay of the nursing intervention. Thus, the nurse provided good nursing care.

5. Identifying the antecedents and consequences of quality nursing care

According to Walker and Avant [11], antecedents are certain occurrences that have to occur before the concept does. The articles related to the predictors of QNC were reviewed and the antecedents of QNC were considered (Figure 2). The antecedents were grouped into four categories, which included the patient, individual (nurse) characteristics, job characteristics, and job environment variables. The first implied antecedents were patient demographic factors [30], including patient characteristics and severity of the disease [6]. These were followed by nurse characteristics [30,31], such as age [32], education [33], experience [34], knowledge [35], and competence [1,36,37], and all of these are related to personal situations. The third category was job variables. The aspects are typical of nursing work, such as task assignments [30,36], nurse staffing [22,33,34,36-38], role tension [39], job autonomy [39,40] and workload [1,4,18]. The last antecedent was environmental factors, which is a measurement of whether the nurses are employed in a supportive atmosphere. These factors include, but are not limited to, nurses' work environments [30,34,40-43], empowerment [44], and engagement [3,4].

The consequences are the events that occur as a result or effects of the concept's occurrence [11]. After a comprehensive analysis, it was determined that the consequences of QNC impact nurses' outcomes (Figure 2). Prior studies have shown that nursing care quality has an impact on nurse satisfaction [18,33,43], burnout [18,33,43,45], turnover intention [46], and adverse event [47]. In terms of patient outcomes, it impacts patient satisfaction [48] and health outcomes [40].

6. Defining the empirical referents of quality nursing care

Empirical referents are the phenomena that explicitly prove the concept's occurrence [11]. The empirical referents required to make the concept measurable given the concept's attributes are abstract. The empirical referents of QNC were as follows.

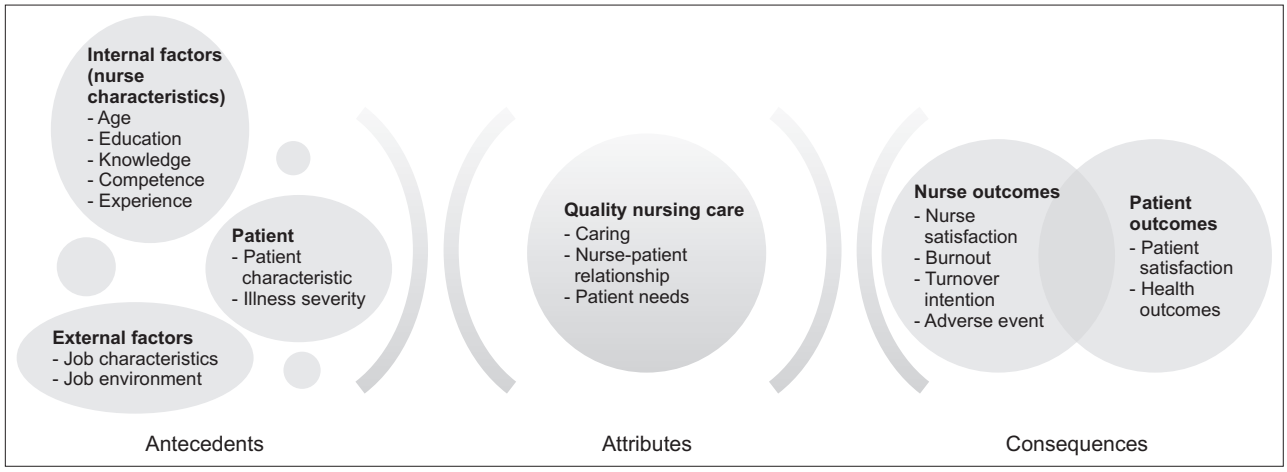

Figure 2. Antecedents, attributes, and consequences of quality nursing care.

1) Caring

This attribute can be assessed by statements consisting of loving, respect, empathy, and responsibility such as "encouraging the patient to call if there are problems; or allowing the patient to express feelings about his or her disease and treatment; or being empathetic or identifying with the patient, or showing concern for the patient" [49].

2) Nurse-patient relationship

Statements which can measure this attribute consist of presence, trust, and interaction such as "returning to the patient voluntarily; or spending time with the patient" [49].

3) Patient needs

Statements, which can be used to evaluate this attribute, consist of physical, psychosocial, and extra needs like "including the patient in planning his or her care; or giving the patient's treatments and medications on time; or helping to reduce the patient's pain" [49].

However, in several cultures, circumstances, and environments, QNC may have other empirical references. For this purpose, researchers may establish additional empirical sources based on the characteristics of this study by interviewing the experts in their contexts.

DISCUSSION

This concept analysis of QNC offers a clearer understanding of the nature of nursing care quality. There are two other important terms besides QNC that should be mentioned: quality of nursing care and nursing care quality. All of the terms are similar in meaning. While it does not appear as a dictionary term, the detailed research findings show more consistency in the sense of QNC by nurses. In the extensive review of the dictionary definitions and published articles, two essential phrases were found: "degree of excellence or standard" and "meet the patient's needs." Thus, it was defined as the degree of excellence of caring conducted by the nurse to meet patients' needs. The study confirmed that the concept does not have any distinction from the general definition even if Walker and Avant's analysis method was not used.

Despite its slightly similar definitions, the attributes were constructed from nine of sixteen studies. The sixteen studies used different terms. Then the authors performed a comprehensive review and analyzed several redundant attributes among the literature. This study found three main attributes with two sub-attributes in each part and explained with particular indicators. Caring, nurse-patient relationship, and patient needs were identified as the defining attributes.

In terms of the consequences of QNC, it was confirmed in a prior study that nurses who provide QNC, have more job satisfaction and their level of burnout is reduced. Additionally, this analysis revealed that QNC impacts patient satisfaction and health outcomes as shown in Figure 2. Thus, by developing programs that promote QNC, stakeholders can improve the health of clinical nurses and patients receiving nursing care.

Future studies could construct the instrument based on the indicators of this study that explicitly show the QNC process and measure its validity and reliability in registered nurses. Likewise, an evaluation of the psychometric properties is needed to generate an authentic and precise instrument. Moreover, additional research is required to elucidate the attributes of QNC in relation to antecedents and their potential effect on outcomes.

In this analysis, the authors reviewed documents published in English after 1990. For 19 studies, the article was written in another language and the study was not included. As a result, the insights and views generated may be limited. The methodological issues are perhaps another limitation of the study. The findings can be subjective, as various researchers may have varying perspectives on the literature and hence report inconsistent conclusions.

CONCLUSION

This study explicitly described the attributes, antecedents, consequences, model case, contrary case and relative, and empirical referents of QNC through an extensive review using Walker and Avant's eight-step process of concept analysis approach. The results of this study will help advance nursing knowledge and practice. They can also improve the

nursing student's understanding of the concept and how it is different from others.

Furthermore, the antecedents of QNC provided overall evidence of the patient, internal (nurse characteristics), and external (job characteristics and environmental) factors, which substantially affect QNC, as illustrated in Figure 2. Therefore, it is recommended for health policymakers, nurse managers, and registered nurses to conscientiously reflect on modifiable factors, particularly external factors that can improve the quality of nursing care.

CONFLICTS OF INTEREST

The authors declared no conflict of interest.

ACKNOWLEDGEMENTS

None.

FUNDING

This study was supported by Second Century Fund (C2F), Chulalongkorn University, Bangkok, Thailand.

DATA SHARING STATEMENT

Please contact the corresponding author for data availability.

AUTHOR CONTRIBUTIONS

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Data curation or/and Analysis: Juanamasta IG & Aungsuroch Y & Gunawan J.
Funding acquisition: Juanamasta IG.
Investigation: None.
Project administration or/and Supervision: None.
Resources or/and Software: Juanamasta IG.
Validation: Juanamasta IG & Aungsuroch Y & Gunawan J.
Visualization: None.
Writing original draft or/and Review & Editing: Juanamasta IG & Aungsuroch Y & Gunawan J.

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Appendix 1. Overview Quality Nursing Care Attributes

Studies	Attributes
Kitson [1]	Elimination, feeding, drinking, washing, bathing, dress-undressing, exercising, and communication
Attree [2]	Care function, interpersonal processes, method of organizing work, nurse professional perspective and practice, and nurse personal character
Redfern [3]	Being patient orientated, being friendly towards patients and relatives, finding out exactly what patients want, using personal experience lo understand patients' problems, empathy, dignity and privacy
Redfern and Norman [4]	Therapeutic context for care, attitudes and sensitivity, teaching and leadership, motivation to nurse, monitoring and informing, high-dependency care, efficiency and thoroughness, reflection and anticipation
Mrayyan [5]	Enough time to complete assignment, availability of nurses to assist physicians, enough time to carry out orders for medications and treatment on time, having time to keep supplies and equipment readily available, and having time to keep supplies and equipment in good condition, having time to make proper planning for continued care after discharge
Lynn et al. [6]	Interaction, vigilance, individualization, advocate, work environment, unit collaboration, personal characteristics, and mood
Burhans and Alligood [7]	Caring, empathetic, respectful interactions within which responsibility, intentionality and advocacy form an essential, and integral foundation
Koy et al. [8]	Nurse competency & performance, met nursing care needs, precondition, good experiences of care, good leadership, staff characteristics, preconditions for care, physical environment, progress of nursing process, and cooperation with relatives.
Elayan and Ahmad [9]	Nurse competency, serve with caring, professionalism, and administrative factors
Koy et al. [10]	Patient outcomes, physical environment, ethic-oriented activity, nurse's characteristics, nurse task requirement, and progress of nursing process
Gaalan et al. [11]	Staff characteristics, care related-activities, preconditions for care, physical environment, progress of nursing process and cooperation with relatives
Stolt et al. [12]	Characteristics of actors, nursing action, precondition of care, environment, proceedings of the process, patient management strategies, and collaboration with family or healthcare
Weldetsadik et al. [13]	Physical care, emotional care, administration, teaching and preparation for home care, and nurse-physician relationship
Koy et al. [14]	Moral commitment, professional commitment, environmental management, quality-safe conscious care, total care, emotional supportive care, informative supportive care, and patient satisfaction
Tsogbadrakh et al. [15]	Symptom management, activities of daily living, encouragement, emotional support, nurturing relationship, respect for religious beliefs and concern for cultural differences
Liu et al. [16]	Task-care oriented, staff characteristics, physical environment, human-oriented activities, precondition, and patient outcomes

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