Hygiene: basic care that promotes comfort in critically ill patients
Higiene: cuidado básico que promueve la comodidad en pacientes críticos

*Carvajal Carrascal, Gloria **Montenegro Ramírez, Juan David

*Doctor of Nursing (DNS), Assistant Professor, School of Nursing and Rehabilitation, University of La Sabana. Chía, Colombia. E-mail: gloria.carvajal@unisabana.edu.co **Nurse (BSN), MS student, University of La Sabana. Assistant Instructor, University Foundation of Health Sciences. Colombia.

Keywords: Hygiene; comfort; critical care; nursing
Palabras clave: Higiene; comodidad; cuidado crítico; enfermería

ABSTRACT

Patients who are hospitalized in critical care settings require nursing care to meet their basic needs. These interventions are integrated as indicators of patient outcomes and quality of care in critical care units.

Objective: To analyze the social relevance and disciplinary nature of hygiene, as basic nursing care required for critically ill patients.

Method: A literature review and article selection from the ISI-Web of Knowledge, Scopus, Science Direct, Proquest, Ebsco, Medline, Ovid, and SciELO databases and other sources, such as unpublished documents and web pages. This review included 3 qualitative studies, 27 quantitative studies, 1 mixed study, 40 documentary works, and 4 editorials that were published by nursing professionals and health professionals in other areas.

Results: The results were divided into the following 4 categories: basic nursing care in critical care settings, hygiene as basic care for critically ill patients, hygiene and comfort, and research recommendations.

Clinical Relevance: It is essential that nursing professionals satisfy patients' hygiene needs and thus provide for their safety, comfort, and welfare. There is an opportunity during the delivery of nursing care for nursing professionals to communicate with patients, assess physical and psychological states, identify potential anxieties and fears, plan patient care, and provide individual attention.

RESUMEN

Los pacientes hospitalizados en entornos críticos requieren la provisión de cuidados de enfermería para satisfacer sus necesidades básicas. Las intervenciones encaminadas a satisfacer las necesidades de higiene son cuidados de enfermería, inherentes al rol profesional y que actualmente se omiten o delegan por considerarlas de poco valor, sin tener en cuenta que constituyen indicadores de resultado en los pacientes y de la calidad de atención en las unidades de cuidado crítico.
Objetivo: Analizar la importancia social, disciplinar y teórica de la higiene como un cuidado básico de enfermería requerido por los pacientes críticos y su relación con la comodidad a la luz de la teoría propuesta por Kolcaba.

Método: Revisión de la literatura y selección de artículos en las bases de datos ISI -Web of Knowledge, Scopus, Science Direct, Proquest, Ebsco, Medline, Ovid, Scielo y de otras fuentes como documentos no publicados y páginas web. La revisión incluyó 3 estudios cualitativos, 27 cuantitativos, 1 estudio mixto, 40 piezas documentales y 4 editoriales publicados por profesionales de enfermería y otras áreas de la salud.

Resultados: Los resultados se organizaron en 4 categorías así, cuidados básicos de enfermería en entornos críticos, higiene como cuidado básico para los pacientes críticos, higie ne y comodidad y necesidades de investigación.

Importancia clínica: Es indispensable que el profesional de enfermería asegure la satisfacción de las necesidades de higiene de los pacientes, así se proporciona seguridad, comodidad y bienestar. Durante la provisión de los cuidados de enfermería se presenta una oportunidad para que el profesional de enfermería se comunique con el paciente, valore el estado físico y psicológico, identifique posibles ansiedades y temores, planifique los cuidados y brinde una atención individualizada.

INTRODUCTION

Patients who are hospitalized in critical care settings require the provision of nursing care to meet their basic needs. These interventions are integrated as indicators of patient outcomes and quality of care in critical care units.

In critical care units, the severity of the patient’s condition, polypharmacy, the execution of different diagnostic procedures and invasive treatments, and patient transport or transfer are all factors that contribute to a greater risk of complications, adverse events, or unexpected situations that may endanger life and patient satisfaction(1).

Given the complexity of care demanded by the patients admitted to these units, there are challenges for nursing professionals with regard to the type of care that should be provided to meet all of the patients’ needs and those of their families. Management of these routine care tasks without a proper and thorough patient assessment may affect the care of individual needs and patient integrity, safety, and satisfaction(2, 3).

Nursing care for critically ill patients includes the implementation of basic care tasks intended to enable patients to perform daily life activities as well as advanced care tasks that support health recovery or the maintenance of clinical conditions. Nursing care includes, among other elements, providing an atmosphere of comfort and physical and mental ease by promoting factors such as rest, sleep, nutrition, hygiene, and dignity(4-7). Curtis and Wiseman indicate that the maintenance of these elements through care is a fundamental responsibility of nursing professionals because they have a significant impact on the clinical outcomes and satisfaction of critically ill patients.

Thus, nursing professionals who care for patients in critical care settings requires deep scientific knowledge to support their actions and great clinical expertise to provide individualized, competent, and appropriate nursing care(3). They should understand that the unique physiological, psychological, and emotional problems that arise in critically ill patients require a delicate balance between the scientific, technical, and humane components of nursing care. Coyer, Wheeler, Wetzig, and Couchman state...
that professionals should use all of their abilities to observe, protect, and provide safe care and thus promote comfort and well-being\(^8\).

It should be noted that the expertise and specific qualifications of nursing professionals in areas such as the emergency room or intensive care as well as the modernization of care has caused many nurses to spend much of their time managing the latest technologies or tasks that are indirectly related to care. For example, time is spent on administrative activities, such as obtaining supplies and equipment or coordinating interdisciplinary teams, thus reducing the direct care time and favoring the omission or delegation of care, especially basic care\(^4, 9\).

**REVIEW METHODOLOGY**

A search, selection and critical review of scientific articles and other source documents related to the topic was conducted based on hygiene, comfort, critical care and nursing descriptors. The information-gathering inclusion criteria considered for the present review were as follows: 1. original published articles indexed in the ISI-Web of Knowledge, Scopus, Science Direct, Proquest, Ebsco, Medline, Ovid, and SciELO databases as well as other sources, such as unpublished documents and web pages; 2. documents published in English and Spanish between 1990 and 2014; 3. sources that made reference to hygiene as a basic nursing care; and 4. sources that made reference to the relationship between hygiene and comfort.

Seventy-five articles that met the inclusion criteria were selected: 3 qualitative studies, 27 quantitative studies, 1 mixed study, 40 documentary works (e.g., theoretical descriptions, books, subject reviews, literature reviews, care guides), and 4 editorials published by nursing professionals and health professionals in other areas.

Critical reading of each article was performed after selection. The information for each document was entered on an index card that included information related to the problem description, objective, methodology, results, conclusions, recommendations and limitations of the discussed study. The results of the review were organized into 4 categories: basic nursing care in critical care settings, hygiene, and comfort and research recommendations.

**RESULTS**

**Basic nursing care in critical care settings**

In any area of acute or medical-surgical care, the performance of basic care is essential for nursing professionals; these functions are a part of their role, and failing to perform or delegating these tasks may cause harm to patients (6, 7). Burns mentions this while quoting Nightingale, who claimed that good basic nursing care is at the heart of care practices, which is why it is essential to resume the implementation of these practices\(^10\). Sung-Hyun (2009) state that more and better involvement in care activities is expected with a greater number of nursing professionals and show the importance of basic nursing care, the need to prevent its delegation, and the urgent need to reclaim these tasks as core activities of this professional role\(^11\).

Given its continued omission or delegation, some basic care is considered lost, including the encouragement of walking, feeding, teaching, discharge planning,
emotional support, hygiene, surveillance, mobilization, oral cavity care, and catheter care, among others. The timely completion of these care tasks by professionals decreases the occurrence of negative results, such as acquired infections or skin lesions, both of which are significantly associated with morbidity, mortality, and health system costs.

A study by McGuckin, Shubin, and Hujcs demonstrated the relationship between the implementation of basic care by nursing professionals and positive patient outcomes. The study showed that nursing professionals possess extensive knowledge regarding the implementation of measures, such as hand hygiene, oral hygiene, preoperative skin preparation, bed baths, and incontinence-related care, and less knowledge related to documentation or the impact of the results of these actions. Similarly, Vollman, Vollman, and Kalish indicated the necessity that nursing professionals resume basic care tasks and measure their impact on patients, as well as the results derived from the delegation or non-performance of these tasks.

Nursing professionals report that to reclaim basic care, they would require adequate supplies, equipment, time, protocols, monitoring, and documentation. Increased numbers of nursing professionals in intensive care units are associated with lower hospital-associated mortality rates and better patient outcomes (Cho & Yun; Clarke, Kane, Shawliyan, Mueller, Duval, & Wilt. However, Kalish indicates that, in addition to these issues, a positive and clear attitude is required on the part of the professional with regard to the concept that this job area pertains to his role as a nursing caregiver to provide basic care.

Hygiene and basic care for critically ill patient

Hygiene-related care tasks are fundamental activities characteristic of the role performed by nursing professionals, are highly valued by intensive care unit patients, and are indicators that influence families’ perceptions of the quality of attention.

Patient hygiene care is an intervention that aims to provide comfort and well-being while serving as a preventative measure against infections. While providing this care, nursing professionals must preserve patient independence, ensure patient privacy, show respect, promote the expression of needs, involve patients in their own care, and promote comfort. Helping patients to maintain their personal hygiene needs contributes to the comfort, safety, well-being, and dignity of the individual. The maintenance of dignity also contributes to emotional comfort and, in turn, to recovery.

Moreover, interventions aimed at addressing hygiene must provide a suitable context for nursing professionals to assess patients in areas such as the stability of the clinical condition, changes in the skin condition and the oral cavity, airway patency, independence/dependence, mobility, self-care, nutritional status, sleep patterns, and pain experience, among others (e.g., perception of the patient condition or mood, psychosocial needs). Based on such assessments, measures can be established to protect patients from risks and threats.

Patients should receive the level of assistance that they require to meet their individual personal hygiene needs; this issue may vary between individuals and cultures because the maintenance of hygiene habits depends on cultural and
socioeconomic factors, as well as on health and hygiene knowledge, age, and the physical and psychological \cite{15,21-23}. In this regard, it is worth noting that, for example, a bath can be a pleasant or stressful experience depending on the values, beliefs, culture, mental state, and past experiences of the patient; for some, a bath is a source of pleasure, rejuvenation, and luxury, while for others, it may be interpreted as an aggressive behavior that causes distress or fear. Many patients experience anxiety, fear, and frustration related to the techniques used in hygiene procedures, which are chosen according to professional judgment and not to patient needs and preferences \cite{8,24-27}. Nursing professionals should recognize patient preferences and not try to impose their own standards of hygiene or even assume that these standards will be the same as those of the patient \cite{27}.

The literature indicates that there is little precision or evidence regarding how nursing professionals prioritize or make decisions related to hygiene needs and the techniques used to meet these needs. The literature shows that nursing professionals perform hygiene care in a sanitary and mechanical manner, without understanding the conditions and contexts of their patients. In many cases, nursing interventions respond to their professional routines and services but have no appreciation of the patients’ needs \cite{4,5}.

These tasks are often delegated to assistants or to young or newly qualified staff. In this regard, Castledine suggests that some aspects of nursing care are seen as unattractive because they are distasteful, repetitive, and physically demanding tasks \cite{21}. Delegating the task of bed bathing, an activity supporting hygiene and comfort, to an auxiliary team member can lead to a situation in which the nursing professional in charge of patient care does not obtain information that is relevant for patient care and thus misses an opportunity to improve the nurse-patient relationship. Additionally, Fawcett indicates that this task is now considered a delegated activity of little value, although it was once considered a “sacred” activity that encouraged intimacy between the nurse and patient by permitting a comprehensive and complete evaluation of the patient, thus guiding a patient-focused plan of care and providing the needed space to begin educational and other nursing interventions \cite{4,15,28}.

The prioritization of hygiene measures for a critical and unstable patient is challenging to nursing professionals. In some cases, sleep disruption, hemodynamic stability, lability of movement, and temperature regulation might be more relevant to the patient’s clinical condition, which is why professional assessment and judgment is vitally important in these situations \cite{4,8,24,29}.

For example, some studies reported that the time allotted for bed baths varies among nursing professionals and institutions, and thus, there is no consensus regarding the time and duration of the bath or documentation of the negative impact of this practice on patients. In some institutions, nursing professionals bathe patients at night or early in the morning for reasons that include the workload and organizational factors that support this practice, such as medical rounds, interventions by interdisciplinary team professionals, the movement of patients to treatments and procedures, and personnel restrictions that do not allow professionals to attend to bathing at other times of the day. These reasons are contrary to patient needs and preferences, making it necessary to review care management in critical care services to favor patient needs, well-being, safety, and comfort \cite{8,24,30-32}.
Another element to consider is that although bathing is a common technique and a routine practice, its implementation is not necessarily free from risk regarding the patient’s condition \(^{(33, 34)}\). The maintenance of patient personal hygiene is an intervention that must be performed with strict monitoring and control, particularly in cases of critically ill patients, for whom it is necessary to avoid adverse events, such as hemodynamic instability and ventilator disconnection, among others \(^{(29)}\).

The bath has been identified as one of the times at which more adverse events occur in patients, mainly during bathing or an hour later, which is why it is important that nursing professionals prevent and report incidents and make improvements to decrease the morbidity and mortality of critically ill patients resulting from this procedure (Robles et al., 2002). Adverse events have been reported in the literature, including changes in blood pressure, desaturation and mechanical ventilation disconnection, intracranial hypertension, abnormal heart rate, peripheral oxygen saturation, venous oxygen saturation, pulmonary wedge pressure, ventricular fibrillation, and cardiac arrest \(^{(3, 25, 29, 33-36)}\).

**Hygiene and comfort**

If hygiene-related care tasks are performed to promote patient comfort and well-being, it is essential to go beyond descriptions of the techniques or procedures and their benefits and instead focus on developing a theoretical framework for these tasks \(^{(15, 17, 19, 33)}\). In this regard, the comfort theory proposed by Kolcaba indicates that nursing professionals must demonstrate the results of simple or basic care techniques in relation to patient comfort \(^{(37)}\).

Among the theoretical approaches addressing the concept of comfort is the position proposed by Kolcaba who defined comfort as a “meeting (active, passive or cooperative) of the basic human needs for relief, ease or transcendence arising from situations of health care that are stressful.” Comfort is further defined as the state in which the body releases unpleasant sensory or environmental stimuli. It is described as a 2-dimensional construct: the first dimension is defined as the experience of having had a specific need and consists of 3 states: relief, ease, and transcendence; the second dimension is the context in which the need occurs and corresponds to the physical, psychospiritual, sociocultural, and environmental situations \(^{(37, 38)}\).

Figure 1 was prepared based on the review findings and in an attempt to relate the empirical aspects of this theory that underlie the concept of comfort; this figure shows a problem tree that relates the theoretical and practical elements that link interventions to meet the need for hygiene with the comfort dimensions proposed by Kolcaba. The problem that integrates the 2 concepts is in the center, the causes or reasons for not promoting comfort from hygiene are at the bottom, and the consequences of this situation are at the top.
RESEARCH RECOMMENDATIONS

Despite the importance of performing hygiene procedures in terms of clinical effects and the promotion of well-being and comfort, the literature on the management of these techniques and their effects is limited. Most studies on hygiene practices focus on health personnel rather than on patients and are limited to descriptions of the instrumental elements of the procedures. In this regard, indicate that the most developed hygiene-related care tasks are oral hygiene, perianal hygiene, and hand washing; however, there is poor documentation of the results and impact and little information about individualized nursing care (15, 39).

There are research papers and diverse documents related to the use of cleaning agents and to oral hygiene and its impact on and association with ventilator-associated pneumonia morbidity and mortality (40-56).

There are also numerous papers related to hand hygiene and infection control (57-64) and infection control programs (65-67).

Some research needs are reported to be related to the effects of basic care delegation and the establishment of care practices as standards of care in evidence-based nursing (6, 57). Further studies are required to determine the appropriate time and duration of hygiene activities, the impact of bed baths on a patient's condition, the organizational characteristics that define this practice, decision-making with regard to bathing, and documenting the effects of these measures (8, 24).

There is limited evidence documenting the physiological results of bathing at different times in relation to mechanical ventilation in critically ill patients or the impact of the bath on the duration of mechanical ventilation disconnection (5, 33).
Finally, it is also necessary to test the effects of hygiene interventions on patient comfort (8, 68, 69).

CONCLUSION

The promotion of patient comfort through nursing interventions is a critical component of the care provided by professionals in critical care settings. Because one of the main objectives of implementing hygiene procedures is the achievement of results related to comfort and well-being, it is important to note that patient comfort is a therapeutic target of the nursing practice and a primary function of nursing. Patients who are hospitalized in intensive care units have many needs for physical, psychospiritual, sociocultural, and environmental comfort. These needs should be met by nursing professionals who act as the primary patient caregivers in the hospital setting. The procedures performed to meet hygiene needs are basic care tasks that promote comfort and are part of the daily basic nursing care routine. If performed correctly, these procedures transmit a feeling of individual attention and presence through the interaction (70).

Therefore, nursing professionals should ensure that patients' essential hygiene needs are met not only at the expense of the correct implementation of a technique but also by taking into account those nursing procedures that are supported by nursing knowledge, are in accordance with the policies, and promote dignity and respect for all patients (15).

REFERENCES

11. Cho SH, Yun SC. Bed-to-nurse ratios, provision of basic nursing care, and in-hospital and 30-day mortality among acute stroke patients admitted to an intensive

Received: July 6, 2015; Accepted: September 7, 2015