

# Factors influencing individualized nursing care in acute medical and perioperative settings: A scoping review

## ABSTRACT

Individualized nursing care addresses the needs, experiences, behaviors, feelings, and perceptions of patients and families, but its implementation in clinical practice contexts remains challenging. This review aims to map the factors that interfere with the individualization of nursing care, in acute medical and perioperative settings. Scoping review was conducted according to the Joanna Briggs Institute guidelines. The MEDLINE, CINAHL, Cochrane, SciELO, Scientific Repository of Open Access, and LILACS databases were searched for publications from January 2017 up to March 2023. Of the 124 articles selected, 17 met the inclusion criteria. The individualization of nursing care is complex and shaped by multiple variables in the care environment, nursing, and patient characteristics. The institutional organization, the nurses' expertise, and the patient's attributes were identified as variables that interfere with the individualization of nursing care. Individualized nursing care is responsible for better quality of care and health outcomes. The identification of the variables that affect individualized care contributes to planning programs to improve individualization, during hospitalization and the discharge.

**Keywords:** Acute care, nursing care, patient individualization, perioperative care

## INTRODUCTION

Providing safe and individualized care increasingly guides the orientation of health policies, which is based on the recognition of the importance of an integrative approach to patient care, where the physical, emotional, social, and spiritual needs of patients are addressed.<sup>[1-3]</sup> This aligns with the principles of integrative nursing, which seeks to treat the whole person rather than just the symptoms, present in the different theories of nursing that guide clinic nursing practices.<sup>[1]</sup>

The individualization of nursing care is based on the principle that people should be cared considering their uniqueness and diversity. Knowing more deeply about people's needs makes it possible to increase the quality of care and reduce adverse events.<sup>[2,4]</sup> Nurses are present in people's health trajectories, with a key role in planning, coordinating, and providing individualized care.<sup>[5,6]</sup> In this sense, it is important to clarify the concept of individualization of nursing care. This concept refers to nursing actions performed according to each person's

needs, experiences, behaviors, feelings, and perceptions. This means to consider and integrate aspects related to gender, religion, ethnicity, and ideology into care,

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as well as extensive to the physical, psychoemotional, and socioeconomic status.<sup>[4,7,8]</sup> These requirements oblige the construction of an interpersonal, ethical, and understanding relationship, as the key to the success of finding and defining the most appropriate, effective, and efficient nursing intervention,<sup>[3]</sup> which contributes to autonomy, informed decision-making, for self-care and management of individuals' chronic illness.

Previous studies suggest that individualized care increases satisfaction with healthcare, contributes to a more positive hospitalization experience, improves adherence to prevention programs, and decreases the number of hospitalizations and length of stay, mortality, morbidity, and health expenses. Providing individualized care increases job satisfaction, teamwork, new skills development, and the reduction of burnout.<sup>[6,9]</sup>

The hospitalization of a person in a critical situation or with an acute illness represents a moment of increased vulnerability and fragility, where the person is exposed to an environment that induces stress and anxiety, due to its high complexity, its own and unknown procedures, and the uncertainty of the diagnosis/prognosis.<sup>[10]</sup> The relevance of individualized care is recognized, especially in the elderly, in a situation of dependence on self-care, and with the frailty syndrome, which is characterized by a decrease in the individual homeostatic process reserve to respond to endogenous and/or exogenous stimulus.<sup>[11,12]</sup> The importance of individualizing nursing care is accepted among health professionals around the world,<sup>[13]</sup> especially by nurses, but it is not easy to operationalize in a practice environment.<sup>[14]</sup> Therefore, the present scoping review intends to map the factors that affect the individualization of nursing care in acute medical and perioperative settings.

## MATERIALS AND METHODS

The scoping review was conducted based on the guidelines of the Joanna Briggs Institute (JBI) methodology,<sup>[15,16]</sup> and the reports were prepared according to the guidance of systematic reviews and extension of meta-analyses (PRISMA-ScR).<sup>[17]</sup>

### Inclusion criteria

The mnemonic PCC for scoping reviews constructed on JBI recommendations was used:

- Participants – Hospitalized people aged 19 or over, their relatives, and nurses
- Concept – influencing factors in individualized nursing care
- Context – acute medical and perioperative settings.

The review question formulated was: *What are the influencing factors for individualized nursing care (C) in acute medical and perioperative settings (C), considering nurses, patients, and families (P)?* Patients hospitalized with cognitive decline or pregnancy were excluded. This scoping review will consider all designs of studies, such as qualitative, quantitative, mixed studies, and systematic reviews. All papers without correspondence with the objective defined for this review or carried out in primary healthcare, home care or long-term care will be excluded. The opinion articles or editorials were rejected.

This review is part of Study I of the Research Project titled “Individualization of Care: The Nursing Partnership Intervention in Hospital Settings” (INbyCARE). By better understanding of the factors that interfere with individualization, will enable the subsequent implementation of a Partnership Intervention Program (3) designed to enhance the implementation of individualized care in acute medical and perioperative environments.

### Search strategy

Scoping reviews can be conducted as a project starting point for larger research efforts. They synthesize research by mapping existing literature in a field based on its characteristics and volume. Initial exploration research was carried out in a selection of relevant databases (MEDLINE and CINAHL), to detect and select the main terms used (indexed and in natural language) in the titles and abstracts of articles related to individualized nursing care in the hospital environment.

The second step was to validate the originality of the topic under study, a search was conducted across various databases, such as the PubMed database, JBI Evidence Synthesis, and PROSPERO, and no similar review, either completed or with a registered protocol was found. Considering the Peer Review of the Electronic Search Strategies checklist,<sup>[18]</sup> five reviewers developed the search strategy (A.R, F.G., H.M., H.L., and E.S.), which was peer reviewed by a sixth expert (I.G.). The electronic database used was MEDLINE (via PubMed), CINAHL Complete (EBSCOhost), and Cochrane Central Register of Controlled Trials (EBSCOhost), retrospectively from January 2017 to March 2023. The descriptors were validated in the Medical Subject Headings, and the reports analyzed were in English, Portuguese, and Spanish to ensure a good quality selection procedure and data extraction. The search strategy used is presented in Table 1. The following searched databases also included SciELO, LILACS, and Scientific Repository of Open Access in Portugal, by one author (E.S.) and revised by a second (I.G.). In the SciELO, LILACS the

research was guided by the same temporal delimitation, and the descriptors were validated in Health Sciences (DeSC). In the Scientific Repository of Open Access in Portugal, which contained the thesis, reports, and chapters, free-text terms were used (e.g. individualization nursing care, patient individualization, hospitalization, acute care, perioperative care, and medical care). Finally, a third author (A.R.) verified the possible publications' validation. The bibliographic references of all identified articles and studies were reviewed to determine the possibility of including additional studies.

### Study selection and screening process

All reports were extracted according to the title and abstract, which were related to the aims of the outlined scoping review. The articles that were repeated in the search were eliminated with the support of the tool Mendeley® 19.4 (Mendeley Ltd., Elsevier, Amsterdam, The Netherlands). Two reviewers (A.R. and E.S.) independently and blindly carried out the four phases of data selection: identification, selection, eligibility, and inclusion, into a data. A calibration exercise was conducted with 30 articles before carrying out the entire

**Table 1: Search strategies for MEDLINE (via PubMed), CINAHL Complete (EBSCOhost), and Cochrane Central Register of Controlled Trials (EBSCOhost), conducted on March 10, 2022**

Search	Query
#1	"Nurses" OR "Patients" OR "Family" OR "Relatives"
#2	"Patient-Centered Care" OR "Patient-Centered Nursing" OR "Individualized Care"
#3	"Hospitalization" OR "Acute care"
#4	[( "Nurses" OR "Patients" OR "Family" OR "Relatives" ) AND ( "Patient-Centered Care" OR "Patient-Centered Nursing" OR "Individualized Care" ) AND ( "Hospitalization" OR "Acute care" )]

screening process to ensure sufficient agreement (at least 80%) regarding the inclusion criteria of the selected articles, which were performed independently by each reviewer.

The data extracted included: The author(s), year and country of the study, aims/purpose, methodology, population/sample size, and context of the care; the nurses, persons hospitalized, and their relative's perceptions about the individualized nursing care; and extracted too the effects of individualized nursing care. All disagreements regarding the inclusion of reports were resolved through discussion or with a third reviewer.

## RESULTS

### Characteristics of included studies, settings, and population

A total of 738 articles were considered, after removing duplicates and the lecture of the title. After a more detailed analysis of the abstract, 614 were excluded and of the 124 considered eligible, 17 were selected, which will be discussed in this article, as shown in Figure 1.

The included studies took place in 17 different countries: Greece ( $n = 1$ ); Canada ( $n = 1$ ); China ( $n = 1$ ); Cyprus ( $n = 1$ ); Finland ( $n = 1$ ); Malaysia ( $n = 1$ ); Netherlands ( $n = 2$ ); Portugal ( $n = 1$ ); Saudi Arabia ( $n = 2$ ); Singapore ( $n = 1$ ); Spain ( $n = 1$ ); Switzerland ( $n = 1$ ); Turkey ( $n = 1$ ); United Kingdom ( $n = 1$ ); USA ( $n = 3$ ); Sweden ( $n = 6$ ); Australia ( $n = 3$ ); and no specification ( $n = 1$ ).

Regarding the methodology of the included studies, we emphasize that the most frequent were cross-sectional designs ( $n = 5$ ); mixed methods ( $n = 3$ ), ethnographic ( $n = 3$ ), and systematic reviews ( $n = 3$ ). A smaller number of articles

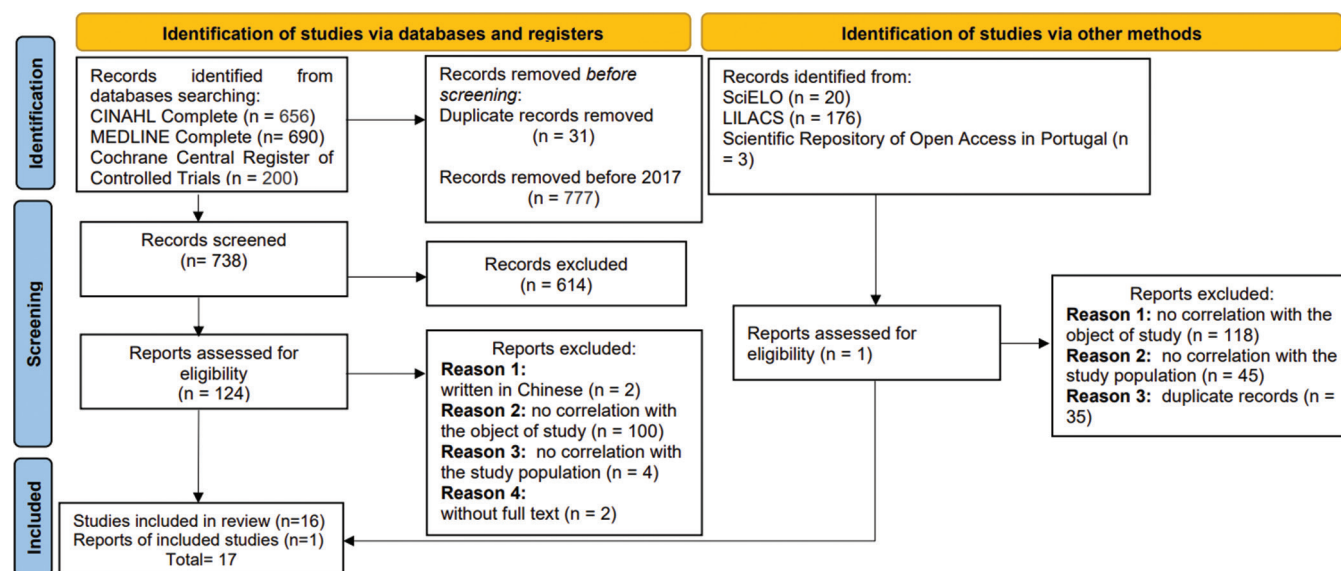


Figure 1: PRISMA flow diagram of study selection process

with RCT ( $n = 2$ ) and qualitative ( $n = 1$ ) designs were incorporated, as illustrated in Figure 2.

The settings of care in the acute medical and perioperative settings included general medical-surgical wards, emergency departments, intensive care units, and more specifically oncology, burn, geriatric, cardiology, and rehabilitation units.

### Data analysis and presentation

For a detailed understanding of the included studies,<sup>[14,19-34]</sup> a presentation and data analysis are performed in Table 2, which was conducted according to the author/year of publication; main aim; methodology design; sample size and setting, and factors influencing individualized care.

## DISCUSSION

The dimensions will guide the discussion of the main data observed that influence the individualization of nursing care: Organizational and care environment; characteristics of nursing care; patient characteristics and quality of care and health outcomes.

### Organizational and care environment

The organization of the physical structure of the institutions is identified as a variable that interferes with the individualization of nursing care. The existence of single rooms in hospitals also promotes the privacy and integrity of patients and facilitates the implementation of individualized care.<sup>[19]</sup> Nilsson, Edvardsson, and Rushton<sup>[25]</sup> also point out the relevance of separating men from women in the wards, avoiding bed changes during hospitalization, reducing environmental stimulation in the form of noise and light, especially at night, and removing objects that could be a potential source of damage.

The study by Castellà-Creus *et al.*<sup>[19]</sup> recognizes the importance of hospitals training nurses for the use of EHR (Electronic

Health Records) and offering ongoing support, it allows them to become more familiar with the technology and encourages a more efficient use. This will permit nurses to increase their skills in using the EHR and make them more confident in recording individualized care on the platforms. This research suggests the inclusion of more user-friendly computer recording tools, which allow the recording of notes at the patient's bedside, which would eliminate the need for nurses to make handwritten notes, which they usually keep in their pockets or leave on top of the treatment trolley, as a way of ensuring the transmission of information and continuity of care. Coats *et al.*<sup>[20]</sup> add that the inclusion of patients' narratives, where they express their feelings, fears, and concerns in care planning and the EHR improves the experience of individuals with the nursing care received.

The workload was also identified as an organizational factor with a relevant impact on nurses' ability to provide individualized care, given that being allocated to too many patients affects the quality and safety of care.<sup>[20,24]</sup> The research of Paiva-Santos *et al.*<sup>[34]</sup> emphasizes the consequences of workload and the relevance of the nursing practice environment that the most frequent missed care was comforting/talking to patients, developing, or updating nursing care plans, educating patients and their families, documenting nursing care adequately, providing oral hygiene, and adjusting patient surveillance. At the same time, an organizational environment more geared toward a philosophy of compassion, satisfaction, resource adequacy, and teamwork with structural empowerment that can break with routines acquired in the wards increases the provision of individualized care<sup>[26-28]</sup> and consequently reduces levels of work anxiety and burnout in nurses.<sup>[30]</sup>

Several studies report the relevance of leadership in individualizing care.<sup>[21,23,24,31]</sup> Health institutions with a philosophy of person-centered care contribute to nurses' professional satisfaction, reduce turnover, and provide a more positive perception of the care they provide.<sup>[14,20]</sup> Leadership focused on continuity of care, with bedside nursing handovers was important for establishing meaningful relationships, empowering, influencing, and helping reassure the person that the nurse was someone they could trust.<sup>[20,29,31]</sup>

### Characteristics of nursing care

The nurses' expertise was identified as a success factor in integrating individualization into clinical practice, due to their broader understanding of care organization and planning methodologies, which encourage changes in attitude, behavior, and ways of working.<sup>[24]</sup> The nurses' background and previous personal experiences with their own hospitalized family members seem to influence nurses'

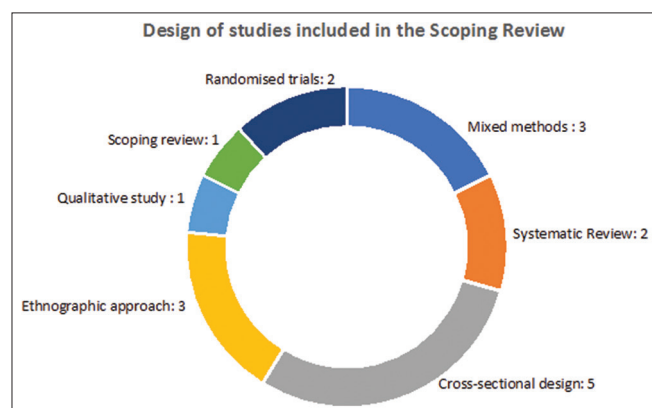


Figure 2: Distribution of studies in reports by the type of methodology design

**Table 2: Systematization of articles included in the scoping review**

Author(s)/year of publication/country	Aims	Methodology	Study population, sample size, context	Factors influencing individualized care
Mackie <i>et al.</i> <sup>[14]</sup> (2018), Australia	To understand the beliefs, attitudes, and perceptions of nurses regarding family participation in the care of their hospitalized adult relative	Mixed methods	14 nurses were interviewed 30 h of observational data in medical, surgical, obstetrics, and coronary care services	The analysis revealed two contrasting categories: Recognition of the importance of family participation (the family as key informants; advocates for quality care; respecting the family's concerns; personal experiences shape nurse's views) and obstacles to family participation (the nurse-centered view limits collaborations; patient comes first; health literacy affects participation; privacy issues constrain information sharing; championing patient autonomy)
Castellà-Creus <i>et al.</i> <sup>[19]</sup> (2019), Barcelona (Catalonia)	To identify the barriers and facilitators of the individualization process of standardized care	Mixed methods (Grounded theory, participant observation, and focus group discussion)	39 nurses from three hospitals General surgery, trauma, gynecology, vascular surgery, neurology and neurosurgery, cardiology and cardiac surgery, nephrology and urology, pneumology and internal medicine	Organizational barriers: Routines acquired in the wards; perception of excessive workload and nurse-patient ratios and low limited involvement of nurse managers; medium and high complexity care Professional barriers: Need to have more time; personal notes make nurses waste time; deficient care plan teaching and knowledge about electronic health records Individual barriers: Limited interest in individualization Facilitators of the individualization: Organization of clinical care sessions; support from supervisor; low patient turnover and fixed allocation of nurses and nurse's expertise
Coats <i>et al.</i> <sup>[20]</sup> (2020), USA	To assess the acceptability/usability of the patient's narrative	Mixed methods (quantitative survey and qualitative interviews)	20 patients 18 nurses Cardiac medical, dialysis units, and pulmonology units	Patients and nurses reported high levels of satisfaction with the narrative intervention, which facilitated the expression of emotions, and improved the connection between nurse and patient
Ferla <i>et al.</i> <sup>[21]</sup> (2022), Australia, Sweden, Saudi Arabia, Netherlands, Malaysia, USA, Switzerland, Canada	To analyze the effect of the patient-centered care model on the satisfaction of health professionals	Systematic review	9 reports No limitations to the context	The effect of patient-centered care on job satisfaction in nurses is related to interpersonal relationships, patient care, and work organization Nursing training programs should be able to provide tools to identify the specific needs of each patient and support shared decision-making
Avanecean <i>et al.</i> <sup>[22]</sup> (2017), USA, United Kingdom, Australia, Singapore	To evaluate the effectiveness of patient-centered interventions on falls in the acute care setting	Systematic review	5 reports Medical and/or surgical units and elderly wards	Patient-centered interventions reduce falls and injuries associated with acute care hospitals The selected interventions were tailored to address each specific risk factor and patient educational needs; and therefore, were multifactorial, and patient-centered
Duruk <i>et al.</i> <sup>[23]</sup> (2020), Turkey	To determine the percentage of patients who received individualized discharge training, from the nurses	Cross-sectional and descriptive	88 adults or older patients hospitalized in internal medicine and surgery	The results show that 68.2% of the patients did not undertake discharge training. Most patients also did not receive information about the contact telephone number for clarification after discharge (72.7%). They were also not informed about the adverse effects of the prescribed medications (78.4%), effects of comorbidities and treatments in their professional life (70.0%), hand hygiene and infection prevention (77.3%), and what problems they would encounter in the homecoming (78.4%). Almost all patients (94.4%) indicated that they did not receive training on the effects of the disease and its treatments on their sexual lives, and 92% stated that they did not receive any written source.
Jangland <i>et al.</i> <sup>[24]</sup> (2018), Sweden	To explore the delivery of care from the perspective of patients with acute abdominal pain focusing on the contextual factors using the fundamentals of care framework	Ethnographic approach	20 observations were performed on two surgical wards at a university hospital Patients with acute abdominal pain are admitted first to the emergency department and then to the surgical ward	The results show that an interpersonal relationship guided by a friendly environment favored well-being and motivated recovery. Hospitalized people expressed concern about the fast-paced culture experienced in the wards and reported its negative impact on their rest and sleep. They verbalized the need for information, access to planning, and the need for support to deal with existential thoughts The individualization of nursing care is possible through reconceptualizing the values of fundamental care in their wards to create a culture based on a holistic approach

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Table 2: Contd...

Author(s)/year of publication/country	Aims	Methodology	Study population, sample size, context	Factors influencing individualized care
Nilsson <i>et al.</i> <sup>[25]</sup> (2019), Sweden	To describe nurse's experiences of providing person-centered care for older people in acute medical ward	Qualitative study (semi-directive interview)	14 nurses 24-bed acute medical ward at a university hospital: Heart failure, chest pain, atrial fibrillation, or pneumonia	Individual level: Person-centered appreciation, in an immersive physical environment, with attentive listening, observation, and interpretation of the person's behavior to better understand the person Team level: Establishment of people-centered goals, sharing of responsibility and support among the team, favors a climate of support and collaboration Organizational level: Less workload and teamwork, with well-defined roles, making it possible to place the person at the center of the organization
Bachnick <i>et al.</i> <sup>[26]</sup> (2018), Switzerland	To describe patient-centered care in acute care hospitals and to explore the associations with nurse work environment factors and implicit rationing of nursing care	Cross-sectional multi-center	2073 patients 1810 registered nurses Medical/surgical wards	Better adequacy of staff and resources was associated with higher levels of patient-centered care, e.g., sufficient information ( $\beta=0.638$ , 95% CI=0.30–0.98). Strong leadership was associated with sufficient information ( $\beta=0.403$ , 95% CI=0.03–0.77) and adapted treatment and care ( $\beta=0.462$ , 95% CI=0.04–0.88). In addition, increased workload was associated with lower levels of patient-centered care, e.g., treatment and adapted care ( $\beta=-0.912$ , 95% CI=-1.50–0.33)
Avallin <i>et al.</i> <sup>[27]</sup> (2018), Sweden	To describe the impact of the organizational culture in pain management for patients with acute abdominal pain across the acute care pathway	Ethnographic approach	Data include 261 interactions between patients admitted to the emergency department and a surgical ward ( $n=31$ ) and healthcare practitioners ( $n=198$ )	Person-centered pain management requires an organization where patients and professionals share their knowledge of pain and pain management as effective partners in care The organizational culture was found to have a great impact on how well pain was managed for the patient by influencing the practitioners' behavior
Alhalal <i>et al.</i> <sup>[28]</sup> (2020), Saudi Arabia	To assess the predictors of patient-centered care provision among nurses working in an acute care setting	Cross-sectional predictive design	255 nurses Intensive care, pediatrics, oncology, burns and emergency care	Multiple linear regression revealed that compassion satisfaction ( $\beta=0.260$ , 95% CI=0.201–0.645), burnout ( $\beta=-0.266$ (95% CI= -0.998– -0.403), and structural empowerment ( $\beta=0.273$ , 95% CI=0.462–1.427) jointly explained significant variance (27.5%) in the provision of patient-centered care by nurses
Goodridge <i>et al.</i> <sup>[29]</sup> (2019), no specification	To describe aspects of care targeted that allow building patient capacity to participate in care during hospitalization	Scoping review	87 reports Acute care hospitals: Critically ill, geriatric, rehabilitation, and psychiatric patients	This scoping review has identified 7 aspects of care in which efforts to build the capacity of hospitalized patients to participate in care were reported: Patient safety; care coordination; effective treatment; bedside nursing handovers; communication between patients and providers; inpatient care planning; and the overall care environment
Fors <i>et al.</i> <sup>[30]</sup> (2018), Sweden	To evaluate the effects of person-centered support via telephone in two chronically ill patient groups, COPD and/or CHF	Randomized control trial	221 patients with 50 years or more with COPD and/or CHF in one hospital followed by 6 months	Patients in the control group experienced a clinically important decrease in self-efficacy (22.9%, $n=27$ vs. 9.7%, $n=10$ ; OR=2.8, 95% CI=1.3–6.0; $P=0.011$ ). There were 49 clinical events (14 deaths, 35 readmissions) in the control group and 41 in the intervention group (9 deaths, 32 readmissions). Per-protocol analysis ( $n=202$ ) of the composite assessment showed that more patients worsened in the control group than in the intervention group (57.6%, $n=68$ vs. 42.9%, $n=36$ ; OR=1.8, 95% CI=1.0–3.2; $P=0.039$ )
van Belle <i>et al.</i> <sup>[31]</sup> (2020), Netherlands	To explore how nurses in hospitals enact person-centered fundamental care delivery	Ethnographic approach	30 nurses 3 wards in two hospitals: a cardiology, geriatric, and surgical ward	The task-centered care organization model was an obstacle to the integration of patient's needs, experiences, and decision-making. However, some nurses successfully integrate the physical, psychosocial, and relational elements of care into their bedside interaction with the patient
Suhonen <i>et al.</i> <sup>[32]</sup> (2018), Cyprus, Finland, Greece, Sweden	To describe hospitalized cancer patient's perceptions of individualized care in four European countries and compare these perceptions	Cross-sectional, cross-cultural survey design	458 hospital inpatients with various cancer diagnoses Cyprus ( $n=150$ ), Finland ( $n=158$ ), Greece ( $n=150$ ) and Sweden	The level of support for individuality and receiving individualized care was reported as moderate and good, respectively. Globally, the highest values of individualization were present in Swedish patients and the lowest in Greece. The differences found between countries in the individualization of health care can be explained by conceptual, educational, and organizational variations, which require further research

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Author(s)/year of publication/country	Aims	Methodology	Study population, sample size, context	Factors influencing individualized care
Lan <i>et al.</i> <sup>[33]</sup> (2022), China	To analyze the effects of individualized nursing based on the zero-defect theory on perioperative patients undergoing laparoscopic cholecystectomy	Randomized trial	174 patients who underwent laparoscopic cholecystectomy	Depression and anxiety scores decreased more in the observation group. The time to return to normal intake, out-of-bed activity, and hospital stay in the observation group was shorter than in the control group. The incidence of postoperative complications in the observation group was lower than in the control group. The degree of satisfaction with nursing care in the observation group was significantly higher than in the control group
Paiva-Santos <i>et al.</i> <sup>[34]</sup> (2022), Portugal	To analyze the influence of the nursing practice environment on missed care and individualization of care	Cross-sectional and descriptive	66 nurses and 40 inpatients 3 inpatient wards of an oncology hospital in Portugal	A moderate correlation was observed between the perception that hospitalized people have about the concern of nurses with the individualization of care and the perception about the individualization of care received. The nursing practice environment was considered unfavorable due to human and material conditions

COPD: Chronic obstructive pulmonary disease, CHF: Chronic heart failure, OR: Odds ratio, CI: Confidence interval

attitudes and the way they communicate, engage, and cooperate with families.

For the individualization of nursing care, it is essential the valorization and inclusion of the fundamental needs of the person, such as sleep, rest, nutrition, pain control, hydration, and psychoemotional support, for a better response to the challenges of the experience of being hospitalized.<sup>[14,24,31]</sup>

In the study by Bachnick *et al.*,<sup>[26]</sup> the patients' perception of centered care was positive, in which the most valued dimensions were: the way the nurses spoke was easy to understand, feeling that the treatment and care were adapted to their situation, involvement in decision-making decision and receiving sufficient information about your diagnosis and latent concerns. Multicomponent programs aimed at promoting a patient and family-centered environment using instructional videos, introducing technologies such as tablets to share information, encouraging the adoption of new standards of care, and patients to participate in their care plan and communicate with care providers.<sup>[29]</sup>

In the telephone counseling, the nurses listened to patients' narratives and asked them to 252 identify their psychoeducational self-care needs, as well as the available resources. The 253 nurses talk about their problems to identify patients' desires and potentials and discuss 254 problem areas, such as dilemmas about taking prescription medications and sleep disorders. The patient and the nurses establish ensemble attainable goals during the 6-month 256 study period. After the phone calls, a summary of the conversation, as well as the agreed 257 objectives, were documented in a health plan which was sent by mail to the patients. The 258 plan also detailed how and when the patient and the nurses have the next contact during 259 for the remainder of the study, but it was possible for patients in

the intervention group to 260 contact a nurse during office hours.<sup>[30]</sup> The effectiveness of this type of 261 intervention is also highlighted in the study by Nilsson, Edvardsson, and Rushton.<sup>[25]</sup> The carrying out of continuous training and education about the individualization of care, 263 by leaders and the organization, is considered extremely important to encourage a more 264 solid knowledge of nurses, which leads to more personalized health promotion and integration of the patient into the care plan.<sup>[19,24]</sup>

Across countries, Swedish patients experienced the highest levels of individualization, in contrast to the lower levels reported in Greece. These variations can be attributed to differences in conceptual, educational, and organizational practices, highlighting the need for additional research.<sup>[32]</sup>

### Patient characteristics

The patient's complexity is another variable that influences individualized nursing care.<sup>[19]</sup> Many patients had complex care needs during the recovery process after surgery, some were in emotional distress after an acute and surgical illness, and some needed advanced nursing care at the end of life. Some of the studies focused more on patients aged 65 or over due to their increased vulnerability and highlighted the importance of individualized nursing care to understand their health situation and how they can act to improve their status, as well as allow them to receive psychoemotional support.<sup>[25]</sup> People in an oncological situation are also identified as patients with peculiar characteristics, given that they are subject to a wide variety of aggressive treatments, such as surgery, radiotherapy, and chemotherapy, with high support needs. Lan *et al.*<sup>[33]</sup> emphasizes in the study carried out the importance of appreciating the psychoemotional state of people and its effects on the recovery of patients. The individualization of nursing care can be enhanced by the inclusion of objects that are significant for the person who

is hospitalized, which can be brought by family members. As well, the involvement of relatives was considered a factor that increased the positive perception of the care received.<sup>[25,29]</sup> Legal issues regarding patient autonomy and confidentiality rights seem to restrict how nurses communicate and share information with families. However, valuing the knowledge of family members and recognizing that families play a key patient-advocate role in decision-making were evident in the nurses' perceptions.

### Quality of care and health outcomes

The various reports state that individualized care is responsible for better quality care, as it is characterized by sharing information, empathy, partnership, attention, solidarity, and respect.<sup>[19,21]</sup> van Belle *et al.*<sup>[31]</sup> alerted to the danger of nursing care centered on the task and only on physical care, as it neglects the bond with the patient and the collection of essential information for the initiation of clinical reasoning, which will affect the safety and quality of care. Individualized nursing care in a surgical context, more specifically for people undergoing cholecystectomy, was associated with a reduction in patients' perioperative psychological stress responses. It helped to reduce the negative emotions of depression and anxiety, promote recovery from the disease (early ingestion and getting out of bed), reduce postsurgical complications, and improve satisfaction with the nursing care received.<sup>[33]</sup> Avanecean *et al.*<sup>[22]</sup> studied the effect of individualized interventions for the prevention of falls in hospitalized people, compared to the usual care, and concluded that they are effective in reducing falls. People's participation in an individualized care plan was associated with gains in patient safety, which include aspects such as prevention of medication errors; falls; hand washing that contributed to hospital infection control measures, and correct surgical site identification.<sup>[29]</sup> Considering discharge planning, Duruk *et al.*<sup>[23]</sup> found that despite the extreme importance of adapting it to the individual characteristics of the person and their health needs, the rate of individualization performed by nurses is low. Its' impact translates into the reduced levels of literacy of people upon discharge about which contact telephone number they can use after discharge to clarify doubts, alarm signals, adverse effects of the prescribed medications, comorbidities and treatments in their professional life, physical activity, and sex life. The nurse's phone call after discharge was associated with an increase in people's satisfaction, where they could clarify doubts about medication and its management.<sup>[25]</sup> Individualized nursing care over the telephone improves self-efficacy without increasing the risk of clinical events in patients affected with chronic obstructive pulmonary disease and/or chronic heart failure, so a partnership with the healthcare professional can be established without the need

for face-to-face consultations.<sup>[30]</sup> Concerning pain control, it is crucial to provide fundamental care by nurses, who combine a relationship of trust, with communication that shares knowledge and values the individualized analgesics.<sup>[14]</sup> Hence, better pain management is possible to be offered by individualized care.

Every study identified barriers (e.g., high nurse-to-patient ratios, lack of time, and resource limitations) and facilitators (e.g., supportive leadership, team collaboration, and training) that impact the implementation of individualized nursing care but not all provided in-depth analysis or solutions for overcoming these challenges.<sup>[19,25,29,33]</sup> Other studies focused on short-term interventions or outcomes, considering the long-term integration of individualized care into usual clinical practice may be useful to understand better its effects.

### Limitations

As limitations of this scoping review, we highlight the exclusion of other studies, which were not written in Portuguese, Spanish, or English that could have brought new information and contributions. Investigations or reviews with mixed contexts were incorporated, which included the target population and other participants, who, despite being in the minority, did not belong to the inclusion criteria (children, pregnant women, and people with psychiatric illness) but were not excluded, due to their relevance to deepen the phenomenon under study. The variation in healthcare systems, organizational cultures, and available resources may have influenced the identified factors and their relevance to individualized care. This scoping review conducted a mapping of the literature, aimed at informing clinical care practice, but it does not have the range to provide guidelines for best practices. The execution of a critical appraisal of the methodological quality of the included records could have contributed to reducing bias in the findings of this scoping review.

### CONCLUSIONS

All included studies consider the individualization of nursing care to ensure human, integrative, and dignified interventions. For the promotion of individualized nursing care, this scoping review demonstrated the importance of the organizational dimension and the environment where care is provided, assuming as central variables: The ratio of nurses/patients; care organization; leadership; teamwork; electronic health records; continuity of care; and bedside nursing handovers. Implementing the philosophy of individualized care correlates with the nurses' clinical experience, their degree of sensitivity, expertise, and recognition of the

importance of communication for an effective therapeutic relationship. Carrying out interventions based on structured educational programs, preparation for hospital discharge, and telephone follow-up after discharge were associated with better outcomes in people's recovery. Hospitalized person's characteristics also interfere with the individualization process, as they require an adaptation of nursing care according to their age, disease severity, preferences, and psychoemotional state. The inclusion of the family in the care process was considered extremely important for a positive perception of the nursing care received. As a result of the individualization of nursing care, it was found a reduction in falls and associated injuries, pain control, increased health literacy, patient safety, and increased satisfaction with care. Identifying the determinants that influence the practice of individualized nursing care, contributes to a greater awareness of nurses of their relevance and their associated outcomes in improving the health condition of hospitalized people. We suggest the development of effectiveness studies, given that this methodology was seldom found and has the potential to describe its effects on people and health professionals.

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There are no conflicts of interest.

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