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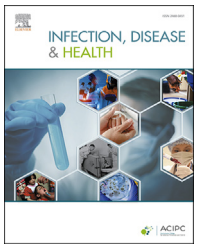

Review

Nursing interventions that humanise care for patients affected by COVID-19 in isolation units: An integrative review

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Abstract *Background:* During the global pandemic, the increasing number of hospitalised patients affected by COVID-19 led to a shortage of nurses. This situation can cause nurses to focus their care on managing the acute aspects of the disease, neglecting interventions that can humanise their practices and improve quality of care. This review aims to identify nurses' interventions that can humanise care for patients affected by COVID-19 in isolation units.
Methods: Whittemore and Knafl's integrative review methodology was used to structure and conduct the review. The literature search was conducted using CINAHL, MEDLINE, Nursing & Allied Health, MedicLatina, Sciencedirect, LILACS, and PubMed databases. Researchers performed the final search in January 2021.
Results: A total of seven articles were included in this review. Interventions by nursing staff that may humanise care for patients affected by COVID-19 in isolation units fall within two themes: "expressive dimension interventions", related to the establishment of communication with patients and their families, providing psychological comfort, shared decision-making and patient education; and "instrumental dimension interventions", associated with providing patients physical comfort, and symptom management.
Conclusion: This review provides insight into both "expressive dimension" and "instrumental dimension" of nursing interventions that may humanise care to patients affected by COVID-

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19 in isolation units. This knowledge will allow nurses to improve their care practices, providing more holistic, humanised care for these patients.

Highlights

- Providing nursing care for patients affected by the coronavirus is challenging.
- Nurses bundle their care interventions avoiding multiple entries in patients' rooms.
- There is the risk of providing care to cure the disease, neglecting humanised care.
- To provide humanised care, nurses use instrumental and expressive interventions.

Introduction

In late 2019, a novel coronavirus was identified in Wuhan, China, and quickly spread globally, affecting millions of people, overwhelming many healthcare systems internationally. The virus, named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), often leads to severe respiratory disease (COVID-19) with concomitant sequela [1].

In order to treat hospitalised patients diagnosed with or suspected of COVID-19, policies were developed that relied upon strict isolation due to the high infection rates and the risk of contamination [2,3]. However, there were a lack of recommendations for hospital nurses for interventions that enable them to humanise the care they provide for patients affected by COVID-19.

According to Watson [4], humanized care is influenced by human life experiences, human response to health and disease, the interaction between environment and person, the interaction between those involved in care, and nurse's knowledge about the care process, through self-knowledge and understanding of the limitations of power in the relationship. This relationship depends on an interactive process, an encounter between those who care and are cared for, transcending the concrete objectives in order to interface with the emotional and subjective world of the patient [4].

Considering the contextual framework in which the care relationship for patients with COVID-19 occurs, many obstacles may jeopardize humanization.

This review attempts to contribute to the development of an evidence base to improve nursing interventions that may humanise care for patients affected by COVID-19 in isolation units.

Background

Hospitals worldwide adopted strict measures to isolate patients diagnosed with or suspected of COVID-19. However, due to the high infection rates and the risk of contamination, patients hospitalised in isolation units were not typically allowed to have visitors, a policy that continues in many locations particularly during surges of infections [2,3].

Since the COVID-19 outbreak, nurses have ably responded to the care needs of people affected by this coronavirus and helped prevent the spread of the disease. The management of resources and nursing care for this population is essential for people to receive quality care and achieve better health outcomes [5,6].

Due to the increasing number of patients affected by COVID-19, there is a shortage of nurses [7]. Consequently, nurses often "bundle" their care interventions to optimise routines and avoid multiple entries in patients' rooms. However, this change in nurses' behaviour exacerbates isolation and the patients' sense of disconnection with others, leading to feelings of loneliness and boredom. This is compounded by challenges in communication between patients and healthcare professionals as well as between patients and their loved ones [2]. Furthermore, during this isolation, the person cannot have personal objects or carry out their usual routines, which leads to frustration, anxiety, and depression. In addition, uncertainties due to possible long-term consequences of a COVID-19 diagnosis, including anxiety related to financial concerns, uncertainty about the length of stay, and fear of stigmatization are also problematic for patients in isolation [2]. These aspects are further complicated as nurses, in the face of rising numbers and dwindling staff, must redirect focus on care management and mitigation of morbidity due to COVID 19, often while neglecting care interventions that may humanise their practice [8].

Even before the COVID-19 pandemic, despite efforts to provide humanised nursing care in their daily practice, several studies have identified significant deficits, including frequent patient complaints due to gaps in communication, flaws in care, and dehumanising care practices [9—12].

The review

Aim

To identify the nurses' interventions that humanise care for patients affected by COVID-19 in isolation units.

Design

The present integrative review follows the methodological approach proposed by Whittemore and Knafl [13], which consists of five stages: (1) problem identification, (2)

literature search, (3) data evaluation, (4) data analysis, and (5) presentation.

The question that guided this review was generated in accordance with PCC (Population, Intervention, and Context) questions. What are nursing Interventions (I) that humanise care for Patients (P) affected by COVID-19 receiving care within the Context (C) of isolation units in hospitals?

Search methods

The literature search was conducted using CINAHL, MEDLINE, Nursing & Allied Health, MedicLatina, Sciencedirect, LILACS, and PubMed databases. The final search was done on January 14 2021.

Both Medical Subject Headings and free-text search terms were combined with Boolean operators and adapted for each database, using the following search string:

("SARS-CoV-2″ OR "COVID-19″ OR "coronavirus" OR "2019-NCOV" OR "COV-19″) AND ("Nursing care" OR "Nursing interventions" OR "Nursing assessment" OR "Nurses" OR "Nursing management") AND ("Inpatients" OR "Hospitalisation" OR "hospitalised patients").

Inclusion criteria included quantitative and qualitative studies focusing on nursing interventions for hospitalised patients diagnosed with, or suspected of, COVID-19, receiving care in isolation units; Approved studies must have been published in peer-reviewed nursing and academic journals.

Exclusion criteria included any studies that focused on the phenomenon of COVID-19 beyond the scope of nursing care provided to patients receiving care in isolation units.

Study selection

After duplicate elimination, two researchers retrieved and independently screened the titles and abstracts of each identified study and obtained the full text of relevant studies. Then the studies were assessed separately and independently by three researchers to ensure complete consensus on whether the studies met the inclusion/exclusion criteria. Disagreements over eligibility were determined through discussion and consensus with the additional researchers.

Quality appraisal

The quality of research studies followed The Joanna Briggs Institute levels of evidence and grading, ranging from 4b to 5b. The Joanna Briggs Institute Critical Appraisal Checklist was used to appraise each study. The checklists contain a series of appraisal questions (possible answers were "yes", "no", "unclear", or "not applicable") that aim to assess the study's research design and the validity of its results. The bias risk percentage calculation was performed according to the following: (i) scores below 49% were considered a high risk of bias; (ii) between 50% and 69% moderate risk of bias; and (iii) more than 70% low risk of bias.

The methodological rigor of the studies ranged from 83% to 100% that was considered a low risk of bias.

Search outcomes

As there were two studies written in Mandarin, online translation tools were used in the first phase of translation, and in the second phase, an external translator was involved to ensure correct translation.

At the end of the screening process, seven studies were retained and included in the final review (Fig. 1).

Data extraction and synthesis

A form was produced to guide the data extraction. This form allowed the extraction of the following data: authors, publication year, study title, study design, aim, and findings. Each study was read and re-read to reveal the phrases representing the nurses' interventions to humanise care.

These interventions were highlighted and transferred into Table 1, which provides a summary of key findings.

A data-driven thematic analysis, adopted from Braun, Clarke, Hayfield, and Terry's guidelines [14] was undertaken. Data were reviewed independently by two researchers and manually coded using inductive analysis to identify common themes across the collected data.

From this analysis, the two dimensions of caring from the Theory of Human Caring [15] emerged as the themes for the nurses' interventions. This theory recognises that nurses' professional practice combines two dimensions of caring, instrumental and expressive, both of which are equally necessary to provide holistic humanising care. The instrumental dimension of caring is action-orientated and aims to provide nursing care that meets patients' physical health needs. The expressive dimension of caring is patient-centred and predicated on developing a therapeutic interpersonal relation between nurses and patients.

Results

Out of seven studies, there were four studies conducted in China [3,16—18], one in the United States [19], one in Singapore [2], and another in Italy [20]. Designs in the research studies were primary qualitative, ranging from case studies to expert consensus.

Data analysis revealed several nursing interventions that humanise care for patients affected by COVID-19 in isolation units, which we have grouped into categories (Table 2). Each category is detailed below.

Theme 1: the expressive dimension of caring

Expressive care is based on the interpersonal relationship development between nurse and patient. It is patient-centred and aims to address psychosocial needs, inspiring hope and trust in the healing process [21].

Communication strategies

All studies highlight that communication is an essential intervention for establishing an interpersonal relationship between nurse and patient. For example, in Chen et al. [16] study to reduce the difficulty in communicating with a patient with hearing loss, the nursing team used writing to

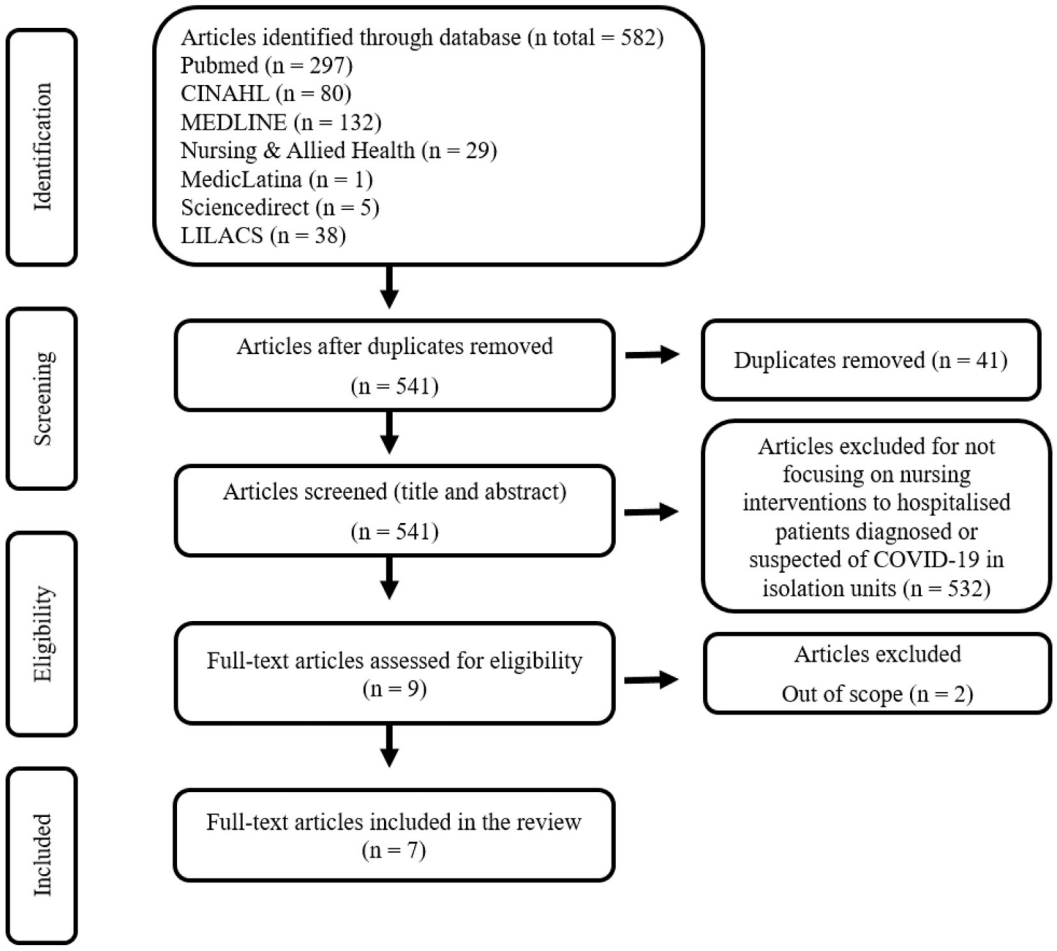

Fig. 1 PRISMA flowchart of study selection.

communicate with the patient, producing a repository of printed cards with common care-related words while integrating some simple signs to enable interaction. Nurses also used a mobile-phone-based social-networking application to communicate with the patient [16].

Other studies also reported that nurses' technological competencies were used in the expression of caring. In these studies, nurses resorted to the use of technology to establish communication and maintain trust through a virtual environment [2,17,19].

Furthermore, the Multidisciplinary Working Group ComuniCovid [20] study produced evidence and guidelines to help care teams communicate with families distanced from the patient, using a checklist to guide the telephone communications. Finally, Chovanec and Howard's [19] study reports that a dedicated family communication team addressed the risk of fragmented communication with family members. This team establishes telephonic communications with the family members to provide relevant clinical updates and ongoing support during the hospitalisation of their relative.

Psychological comfort

To provide psychological comfort to patients, nurses need to establish a therapeutic relationship. This relation starts by receiving patients warmly, with a polite manner and moderate voice, introducing themselves by name and title [3], showing empathy [20], actively collecting patient information, listening to their needs, and maintaining a safe environment [17]. Nurses also need to develop timely care practices that focus on patients' non-diagnosis-related issues as well as treatment needs [3,17]. Finally, nurses should provide appropriate emotional support through gestures such as eye contact, touch, nods, handshakes, and thumbs-up gestures [18].

Regarding psychological comfort, Fan et al. [2] described a scenario in which nurses made use of bedside tablets computers to enhance communication between healthcare providers and patients and to provide entertainment and information through preloaded eBooks and games for patients to enjoy. Yang et al. [17] also verified that providing entertainment and fitness activities were an intervention that allowed the development of a humanistic environment, and thus providing psychological comfort. It is also worth mentioning that psychological comfort was developed through encouraging and facilitating the patient's ability to communicate with their relatives [2,3,18]. Furthermore, Chovanec and Howard [19] verified that nurses also provide psychological comfort to patients' families by providing clinical information and continuing support.

Table 1 Summary of extracted data.

Author/year/country	Study design	Aim	Findings
Chen, Pan, & Liu (2020) China	Case study	This article focuses on a male patient with hearing loss who was diagnosed with COVID-19 after returning to Taiwan from overseas.	To reduce the difficulty with communication the nursing team: • Provide a pile of cards with common care-related words; • Provide pen and paper for the patient to write; • Used writing to communicate with the patient; • Learn some simple signs to enable interaction; • Use a mobile-phone-based social-networking application to communicate with the patient.
Yang, Xu, & Shao (2020) China	Cross-sectional study	To explore the effect of humanistic care on COVID-19 mild patients in square shelter hospital, providing a reference for the prevention and control of public health emergencies in the future.	• Provide warm medical care services and establish a trusting "medical, nurse-patient" relationship; • Use ward rounds, patrols and WeChat daily to provide health education to patients; • Develop psychological counseling (take different forms, such as "spirit oxygen bar", WeChat online psychological counseling, active communication, etc.); • Provide nursing care (pay attention to patients' non-diagnosis and treatment needs); • Supplies to meet the basic needs of patients; • Carry out mutual assistance for patients (actively collect patient information, actively listen to patients' needs, and maintain a safe environment); • Provide entertainment and fitness activities and create a humanistic environment.
Chovanec, & Howard, N. (2021) USA	Case study	To review the experiences of an integrated urban health system, exploring the strategic tactics to ensure effective communication between team members, patient and family engagement in discharge planning, establish and maintain trust, connect patients to appropriate next level of care services, and provide transitional care management support.	• The care management team used a telephonic approach to apply a motivational interviewing therapeutic communication technique to listen and engage patients actively; • The barriers and benefits of health-related behaviour change were assessed, identified, and discussed, and the care manager facilitated the risk mitigation through the promotion of shared decision-making to develop the individualized plan of care, including discharge goals; • The risk of fragmented communication with family members was addressed by developing a dedicated family communication team that reviewed medical records and performed telephonic outreach to the family member or caregiver to provide relevant clinical updates and ongoing support during the hospitalization.
Multidisciplinary Working Group ComuniCovid	Consensus Group Technique	To help the care team to communicate with families distanced from	• Professionals made a checklist for telephone communications with patients' families during isolation from different disciplines (doctors, nurses, psychologists, legal experts). It was then reviewed by experts comprising

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Table 1 (*continued*)

Author/year/country	Study design	Aim	Findings
(2020) Italy		the patient.	professionals, people who have experienced ICU hospitalization, and their families. • Clinical communication should be used to: 1. Provide understandable information about the disease and treatment options; 2. Obtain information about the expectations of family members and the patient's values and choices; 3. Show empathy and establish a care partnership; 4. Allow family members to express their emotions; 5. Avoid misunderstandings and conflicts.
Wang, Zeng, Wu, & Sun (2020) China	Comprehensive review Followed by Consensus Group Technique	To standardize holistic care for patients with severe coronavirus disease 2019 (COVID-19) in China.	The holistic care the initial assessment must include: • Medical history assessment; • Physical examination (vital signs, symptoms and signs, skin and mucosa, and nutritional status); • Psychological assessment; • Environmental assessment. Nursing goals should target: • The alleviation of signs and symptoms. • Ensure patients have a stable emotion and gain effective cooperation when implementing therapeutic nursing interventions and rehabilitation programs. • Maintain patient comfort during hospitalization and satisfy their needs timely. Nursing interventions should focus on patients' physical and psychological needs. Physical needs: • Provide optimal oxygen therapy and respiratory care; • Maintain a clear airway; • Assess vital signs; • Diet and nutrition • Basic nursing care (oral, skin, and elimination care) • Respiratory rehabilitation • Rest and activities (includes interventions to ensure adequate sleep and reduce the risk of fall and fall-related injuries) Psychological needs:

			• Orient patients regarding the ward environment and isolation regulations upon admission; • Regularly assess patients' psychological condition and consult with the psychiatry department if necessary; • During bedside operations, provide patients with appropriate emotional support through gestures such as eye contact, touch, nods, handshakes, and thumbs-up gestures; • Help to communicate information to external relatives; • Provide patients with continuous information support, and encourage them to actively collaborate in their treatment.
Fan et al. (2020) Singapore	Case study	To illustrate patients' and next-of-kin's needs and concerns during isolation and recommend key process improvement that could better support patients and their loved ones during this challenging time of the COVID-19 pandemic.	• Senior patient experience managers contact via telephone all patients admitted to the isolation wards on a daily basis. • If the patient is unable to answer the call, the patient's next of kin will be contacted instead. • The purpose of the call was to provide support to the patient or their family, detect possible signs of distress, and find out if there are any concerns about hospitalization that may be addressed promptly. • The use of bedside tablets was introduced into the isolation rooms to enhance communication between healthcare providers and patients. • The bedside tablet had some preloaded eBooks and games for the patients to enjoy to provide entertainment and information. • Patients were also given copies of local newspapers daily. • To allow communication between patients and their loved ones, a bedside telephone is available in each isolation room. • Concierge service was provided, allowing patients to order items from the convenience stall at the hospital (e.g., snacks that they prefer or a particular brand of toiletries).
Zhang et al. (2020) China	Comprehensive review Followed by Consensus Group Technique	s to develop the expert consensus on nurse's human caring for Corona Virus Disease 2019 (COVID-19) patients in different sites, and thus provide a guideline on providing whole process and systematic caring for COVID-19 patients	• Receive patients warmly with the polite manner and moderate voice, and introduce the name and duty to the patients; • Communicate daily with the patients appropriately at the bedside, and evaluate their psychological status; • Assess the needs of patients proactively and fulfill their reasonable needs. • Identify the patient's physical discomfort through monitoring, questioning, and observing. • Apply professional knowledge and skills to relieve patients' suffering and facilitate their comfort, and organize relevant specialist nursing consultation; • Timely comfort, accompany and encourage the patients with anxiety and fear; • Encourage and facilitate the caring and communication between the patients, and assist the patient in communicating with their families and friends; • Provide necessary knowledge of disease and health to the patients; • Assist the patients in daily life and medical treatment;

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Table 1 (*continued*)

Author/year/country	Study design	Aim	Findings
			• Pay attention to the nutrition of patients' diets, prepare delicious and warm meals, and try the best to provide personalized meals according to patients' needs; • Provide detailed guidance on medication, isolation, condition report, and follow-up for discharged patients. Provide channels for consultation such as telephone or message platforms.

Shared decision-making

Another category that emerged from the analysis was shared decision-making. To share the decision-making, nurses delivered warm nursing care, established a trusting nurse—patient relationship, and used ward rounds, patrols, and WeChat to provide health education to patients [17]. Wang et al. [18] and Zhang et al. [3] also mention that for sharing decision-making to happen, nurses must provide patients with ongoing information support and encourage them to collaborate in their treatment actively. In Chovanec and Howard's [19] study, the care manager applied a motivational interviewing therapeutic communication technique to listen actively and engage patients. This technique allows them to assess and discuss barriers and benefits of health-related behaviour, thus facilitating risk mitigation by promoting shared decision-making to develop the individualised care plan.

Patient education

Nurses play a crucial role in patient education. Several studies reveal that nurses provide patients with the necessary knowledge about their disease and treatment [3,17,18]. This information also includes detailed guidance on medication, isolation, and reporting of condition, as well as follow-up for discharged patients [3].

Besides patient education, nurses provide families with understandable information about the disease and treatment options [20].

Theme 2: the instrumental dimension of caring

Instrumental caring aims to meet physical health needs. It is action-orientated, based on efficiency and evidence-based interventions [21].

Physical comfort

To provide physical comfort, nurses proactively assess patients and fulfil their needs [3,17]. By identifying the patient's physical discomfort through monitoring, questioning, and observation [3], nurses can assist patients in performing their daily living activities and medical treatment [3,17].

To maintain physical comfort, Wang et al. [18] and Zhang et al. [3] focus nurses' attention on the nutrition of patients' diets and the importance of providing personalised meals according to their needs.

Fan et al. [2] and Yang et al. [17] noted that nurses help patients access a concierge service that allows them to order items of their preference from the hospital convenience stall as part of humanised care practices.

Table 2 Themes and categories.

Theme	Category
Expressive	Communication strategies
	Psychological comfort
	Shared decision-making
	Patient education
Instrumental	Physical comfort
	Symptoms management

Symptoms management

Nurses use a range of interventions to manage patients' symptoms. The first step should be an assessment that contemplates the patient's medical history and physical and psychological status [3,18]. After this assessment, the nursing goals should target the alleviation of signs and symptoms [18] by applying their professional knowledge and skills to relieve patients' suffering and facilitate their comfort. When necessary, nurses should refer to other health professionals [3].

Discussion

Providing humanised care is especially challenging in a context where there is a lack of healthcare professionals and an increase in hospitalised patients. These barriers may lead to the dehumanisation of care, reducing care to focus only on interventions to address acute aspects of illness, moving nursing care away from its holistic vision [6]. However, findings from this review show that nurses implemented a wide range of interventions to provide humanised care for patients affected by the COVID-19.

Overall we identified six categories of interventions (communication strategies, psychological comfort, shared decision-making, patient education, physical comfort, and symptoms management) that we grouped in two themes: the Expressive dimension of caring and the Instrumental dimensions of caring.

Nursing care includes instrumental and expressive dimensions. The extent to which care addresses both dimensions and the extent to which it can be located somewhere along the continuum of each intervention's humanising feature is unknown. Consequently, the instrumental and expressive interventions should be interpreted as two dimensions of care that cannot be separated but imply one another for the care to be humanising.

Overall, by executing their care practice through instrumental and expressive interventions, nurses moved from a practice focusing on treating the disease towards more humanised care. With humanised care, nurses provide holistic care to patients individually, aiming to contemplate their physical, emotional, social, and spiritual dimensions. Therefore to develop humanised nursing care, these dimensions must be considered inseparable, so care must be planned and carried out, contemplating the person as a holistic being.

The category of communication strategies focuses upon interventions that establish communication between nurses and patients. Nurses must truly understand patients' situations, perspectives, feelings, and meanings to offer humanised care. Nurses need to establish an interpersonal relationship based on effective communication [15,20,22]. To maintain effective communication, nurses should interact with patients to understand their experiences, concerns, and opinions [18,20]. In this interaction, nurses use verbal and nonverbal communication skills, and active listening [22,23].

Educational curricula for nursing during schooling provides a significant focus upon the development of emotional and communication skills. Despite this formal training, nurses should continue the development of these skills in the practice throughout their career [8,24]. Communication is a core component of the nurse—patient relationship and an essential aspect of professional practice. Communication skills for nurses are crucial but may be challenging to master, particularly in the face of increasing demands during a pandemic. Therefore nurses must continuously improve their communication skills throughout their professional life [24].

It is also important to consider additional barriers that affect the nurse—patient relationship resulting from COVID-19 isolation. Wearing personal protective equipment creates a considerable barrier to communication, requiring nurses to care for patients without using touch, making staff difficult to recognise, compromising hearing, lip-reading, and seeing facial expressions [22,25—27]. Barriers associated with the limited time to interact due to the high patient-nurse ratios and increased patient acuity/dependency affect the nurse—patient relationship and exacerbate the patients' feelings of isolation [7,25,27].

In this review, several studies show that nurses identified a need to embrace new communication methods to establish a relationship with patients in isolation. These methods may help nurses to overcome the barriers previously mentioned. For example, in Chen et al. study, nurses used a mobile-phone-based social-networking application to overcome difficulty communicating with a patient [16]. Other studies also reported that nurses used technology to establish communication and maintain patient trust through voice and video call approaches [2,17,19].

Ensuring the effectiveness of the nurse—patient relationship should be one of the core areas of focus in isolation units. Providing humanised nursing care is vital to instilling effective communication in care processes. This is crucial for establishing a nurse-patient interpersonal relationship [28].

It is also worth highlighting that the identified interventions to humanise care to patients affected by COVID-19 extends to their family members. This inclusion is essential and must be acknowledged as an excellent practice to provide more comprehensive, holistic, and humanised care. Previous studies revealed that family involvement influences patients' physical and emotional recovery [29,30].

Other categories of interventions identified in this review were psychological comfort and physical comfort. Comfort is contextual and unique for each person [31]. This concept is intrinsically related to the practice of nursing care [31]. It is characterised by the satisfaction of one's needs, and transcendence addressed in all contexts of holistic human experience (physical, psychospiritual, sociocultural, and environmental) [32]. By developing interventions to provide mental and physical comfort, nurses recognise their patients as biopsychosocial beings in constant interaction with the environment [15]. This is essential to humanise their care practices.

Regarding the category of symptom management, most adults hospitalised with COVID-19 not only have physical symptoms such as dyspnea, respiratory distress, fatigue,

secretions, and cough but psychological symptoms including anxiety or delirium, which may be associated with states of agitation or drowsiness [33,34]. In addition to the variability of symptoms, depending on the person's age and the severity of the disease, patients with COVID-19 also experience symptoms related to underlying health conditions or comorbidities [35]. Symptom management is an essential part of caring for those with life-threatening illnesses, and particularly so in patients with COVID-19, who are often medically complex with rapid functional decline and emotional stress [34,35]. Nurses in all settings are key to providing this vital care [36]. Nursing care includes not only the recognition of patients' symptoms but also the management of pharmacological and nonpharmacological interventions within their scope of practice and collaboration with other healthcare professionals to optimise patients' comfort and adaptation [36].

Recognition of patient education and sharing decision-making as categories of interventions that humanise nurses' care was a particularly interesting finding. For patients to be empowered, they need to receive the right information at the right time, delivered in the right way. Nurses need to engage with patients in new ways that involve them directly in decisions about their care. That is a way for patients to make genuinely informed decisions about their treatment and take a more active role in decision-making [37]. Access to information is a key driver of patient education. When nurses provide them with the necessary knowledge about the disease and treatment, they form a partnership that allows for shared decision-making [38].

A key strength of this review lies in the fact that several studies reported sufficient detail of its interventions to allow replication. This permits nurses to implement those interventions in their practice. Nevertheless, nurses face several challenges when caring for patients affected by COVID-19 in isolation units. The practice environment, adapting to changes in healthcare practice and policy, high patient acuity/dependency, staff shortages, high patient-nurse ratios, associated lack of nurse time, redeployment of inexperienced nurses into isolation care environments, among other factors, have a negative impact on nurses' capacity to provide humanised care for patients in isolation [7,26,27,39].

A key limitation for this study, and for this line of research in general, is the low number of studies included in this review. In addition, the studies were mainly carried out in Asia (China and Singapore), possibly because the pandemic started in this region. While there has been a growing body of evidence focusing on the treatment of COVID-19 disease, this review identifies a gap in evidence regarding the nursing interventions to humanise care as only seven studies were identified. The scarcity of literature suggests a need for further investigation regarding this subject.

Conclusion

The findings of this review highlight various nursing interventions that can humanise care for patients affected by COVID-19, the bulk of which can be grouped into one of two areas, the "expressive dimension" and "instrumental dimension". The successful integration of humanised nursing care for patients affected by the coronavirus is a major challenge that concerns nurses. This knowledge will allow nurses to improve their care practices, providing holistic humanised care for these patients.

In conclusion, we consistently found in all studies that establishing efficient communication between nurses, patients, and their families is central for the humanisation of care, providing valuable insight into patients' situations, perspectives, feelings, and meanings. This is essential for establishing a therapeutic nurse—patient relationship, which nurtures shared decision-making and the development of tailored interventions aiming at the humanisation of care.

Author contributions

Júlio Fernandes: Conceptualization, Methodology, Formal analysis, Investigation, Writing - Original Draft, Writing - Review & Editing, Visualization, Supervision. **Diana Vareta:** Conceptualization, Formal analysis, Investigation, Writing - Review & Editing, Visualization. **Sónia Fernandes:** Conceptualization, Validation, Formal analysis, Investigation, Writing - Review & Editing, Visualization. **Cidália Castro:** Conceptualization, Validation, Investigation, Writing - Review & Editing. **Aida Simões:** Conceptualization, Investigation, Data Curation, Writing - Review & Editing. **Dina Peças:** Conceptualization, Investigation, Data Curation, Writing - Review & Editing. **Ana Almeida:** Conceptualization, Validation, Investigation, Writing - Review & Editing.

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Ethics approval not required as the research is a literature review.

Provenance and peer review

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Declaration of competing interest

The authors declare that they have no conflict of interests.

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References

[1] Al Hasan SM, Saulam J, Kanda K, Hirao T. The novel coronavirus disease (COVID-19) outbreak trends in mainland China: a joinpoint regression analysis of the outbreak data from January 10 to February 11, 2020. Bull World Health Organ 2020:1—20. https://doi.org/10.2471/BLT.20.253153.

[2] Fan P, Aloweni F, Lim SH, Ang SY, Perera K, Quek AH, et al. Needs and concerns of patients in isolation care units - learnings from COVID-19: a reflection. World J Clin Case 2020;8(10):1763—6. https://doi.org/10.12998/wjcc.v8.i10.1763.

[3] Zhang F, Hu D, Liu Y, Li H, Zhu X, Pan S. Expert consensus on nurses' human caring for COVID-19 patients in different sites. Curr Med Sci 2020;40(4):602—7. https://doi.org/10.1007/s11596-020-2222-0.

[4] Watson J. (2015). Jean watson's theory of human caring. In: Smith M, Parker M, editors. Nursing theories and nursing practice. Philadelphia: F. A. Davis Company; 2015.

[5] Oliveira AC. Challenges faced by nursing professionals in the covid 19 pandemic. Nurs J Minas Gerais 2020;24:e-1302. https://doi.org/10.5935/1415-2762.20200032.

[6] Thobaitya AA, Alshammarib F. Nurses on the frontline against the COVID-19 pandemic: an integrative review. Dubai Med J 2020;3:87—92. https://doi.org/10.1159/000509361.

[7] Al Thobaity A, Alshammari F. Nurses on the frontline against the COVID-19 pandemic: an integrative review. Dubai Med J 2020;3(3):87—92. https://doi.org/10.1159/000509361.

[8] Díaz-Rodríguez M, Rubio L, García D, Cristóbal E, Valera M. Training guidelines for humanised nursing care: an integrative literature review. Enfermería Glob 2020;19(2):657—72. https://doi.org/10.6018/eglobal.392321.

[9] Abad C, Fearday A, Safdar N. Adverse effects of isolation in hospitalised patients: a systematic review. J Hosp Infect 2010;76(2):97—102. https://doi.org/10.1016/j.jhin.2010.04.027.

[10] Kwame A, Petrucka PM. Communication in nurse-patient interaction in healthcare settings in sub-Saharan Africa: a scoping review. Int J Afr Nurs Sci 2020;12:100198. https://doi.org/10.1016/j.ijans.2020.100198.

[11] Norouzinia R, Aghabarari M, Shiri M, Karimi M, Samami E. Communication barriers perceived by nurses and patients. Global J Health Sci 2015;8(6):65—74. https://doi.org/10.5539/gjhs.v8n6p65.

[12] Vermeir P, Vandijck D, Degroote S, Peleman R, Verhaeghe R, Mortier E, et al. Communication in healthcare: a narrative review of the literature and practical recommendations. Int J Clin Pract 2015;69(11):1257—67. https://doi.org/10.1111/ijcp.12686.

[13] Wittemore R, Knafl K. The integrative review: updated methodology. J Adv Nurs 2005;52:546—53. https://doi.org/10.1111/j.1365-2648.2005.03621.x.

[14] Braun V, Clarke V, Hayfield N, Terry G. Thematic analysis. In: Liamputtong P, editor. Handbook of research methods in health social sciences. Singapore: Springer; 2019. p. 843—60.

[15] Watson J. Human caring science: a theory of nursing. 2nd ed. Sudbury, Massachusetts: Jones & Bartlett Learning; 2011.

[16] Chen CH, Pan MY, Liu HY. Nursing experience caring for a COVID-19 patient with hearing loss. Hu li za zhi J Nurs 2020;67(6):97—103. https://doi.org/10.6224/JN.202012_67(6).13.

[17] Yang H, Xu Y, Shao J. A survey on the mental health status of mild COVID-19 patients and their satisfaction with humanistic care in a square shelter hospital. Macau J Nurs 2020;19(1):1—6. https://doi.org/10.6729/MJN.202009_19(1).003.

[18] Wang H, Zeng T, Wu X, Sun H. Holistic care for patients with severe coronavirus disease 2019: an expert consensus. Int J Nurs Sci 2020;7(2):128—34. https://doi.org/10.1016/j.ijnss.2020.03.010.

[19] Chovanec K, Howard N. Acute care management during a pandemic. Prof Case Manag 2021;26(1):11—8. https://doi.org/10.1097/NCM.0000000000000487.

[20] Multidisciplinary Working Group "ComuniCovid" [Italian Society of Anesthesia and Intensive Care (SIAARTI), Italian Association of Critical Care Nurses (Aniarti), ItalianSociety of Emergency Medicine (SIMEU), and Italian SocietyPalliative Care (SICP)]. Come comunicare con i familiari dei pazienti in completo isolamento durante la pandemia da SARS-CoV-2. Recenti Prog Med 2020;111(6):357—67. https://doi.org/10.1701/3394.33757.

[21] Romero-Martín M, Gómez-Salgado J, Robles-Romero JM, Jiménez-Picón N, Gómez-Urquiza JL, Ponce-Blandón JA. Systematic review of the nature of nursing care described by using the Caring Behaviours Inventory. J Clin Nurs 2019;28(21—22):3734—46. https://doi.org/10.1111/jocn.15015.

[22] Vitale E, Giammarinaro MP, Lupo R, Archetta V, Fortunato RS, Caldararo C, et al. The quality of patient-nurse communication perceived before and during the COVID-19 pandemic: an Italian pilot study. Acta Biomed 2021;92(S2):e2021035. https://doi.org/10.23750/abm.v92iS2.11300.

[23] Ratna H. The importance of effective communication in healthcare practice. Harvard Public Health Review 2019;23:1—6.

[24] Gutiérrez-Puertas L, Márquez-Hernández VV, Gutiérrez-Puertas V, Granados-Gámez G, Aguilera-Manrique G. Educational interventions for nursing students to develop communication skills with patients: a systematic review. Int J Environ Res Publ Health 2020;17(7):2241. https://doi.org/10.3390/ijerph17072241.

[25] Kang HS, Son YD, Chae SM, Corte C. Working experiences of nurses during the Middle East respiratory syndrome outbreak. Int J Nurs Pract 2018;24(5):e12664. https://doi.org/10.1111/ijn.12664.

[26] Ness MM, Saylor J, Di Fusco LA, Evans K. Healthcare providers' challenges during the coronavirus disease (COVID-19) pandemic: a qualitative approach. Nurs Health Sci 2021;23(2):389—97. https://doi.org/10.1111/nhs.12820.

[27] Sugg H, Russell AM, Morgan LM, Iles-Smith H, Richards DA, Morley N, et al. Fundamental nursing care in patients with the SARS-CoV-2 virus: results from the 'COVID-NURSE' mixed methods survey into nurses' experiences of missed care and barriers to care. BMC Nurs 2021;20(1):215. https://doi.org/10.1186/s12912-021-00746-5.

[28] Bullington J, Söderlund M, Bos Sparén E, Kneck Å, Omérov P, Cronqvist A. Communication skills in nursing: a phenomenologically-based communication training approach. Nurse Educ Pract 2019;39:136—41. https://doi.org/10.1016/j.nepr.2019.08.011.

[29] Fang Y, Tao Q, Zhou X, Chen S, Huang J, Jiang Y, et al. Patient and family member factors influencing outcomes of poststroke inpatient rehabilitation. Arch Phys Med Rehabil 2017;98(2):249—55. https://doi.org/10.1016/j.apmr.2016.07.005. e2.

[30] Pérez MA, López CL, Vela ST, Sánchez CM, Martín MO, Iglesias MG, et al. Nursing perception of communication with intensive care unit patients family members. Enfermería Intensiva 2014;25(4):137—45. https://doi.org/10.1016/j.enfi.2014.09.001.

[31] Albright C. SARS-CoV-2 (COVID-19) hospitalization in light of kolcaba's theory of comfort in nursing: a literature review. J Nurs Pract 2021;4(2):345—50. https://doi.org/10.36959/545/404.

[32] Kolcaba K, Tilton C, Drouin C. Comfort Theory: a unifying framework to enhance the practice environment. J Nurs Adm 2006;36(11):538—44. https://doi.org/10.1097/00005110-200611000-00010.

[33] Asghari E, Archibald M, Roshangar F. Nursing interventions for patients with COVID-19: a medical record review and nursing interventions classification study. Int J Nurs Knowle 2022;33: 57—63. https://doi.org/10.1111/2047-3095.12332.

[34] Lovell N, Maddocks M, Etkind SN, Taylor K, Carey I, Vora V, et al. Characteristics, symptom management, and outcomes of 101 patients with COVID-19 referred for hospital palliative care. J Pain Symptom Manag 2020;60(1):E77—81. https://doi.org/10.1016/j.jpainsymman.2020.04.015.

[35] Sanyaolu A, Okorie C, Marinkovic A, Patidar R, Younis K, Desai P, et al. Comorbidity and its impact on patients with COVID-19. SN Compr Cl Med 2020;1—8. https://doi.org/10.1007/s42399-020-00363-4. Advance online publication.

[36] Paice JA, Battista V, Drick CA, Schreiner E. Palliative nursing summit: nurses leading change and transforming primary palliative care: nursing's role in providing pain and symptom management. J Hospice Palliat Nurs 2018;20(1):30—5. https://doi.org/10.1097/NJH.0000000000000405.

[37] Chen J, Mullins CD, Novak P, Thomas SB. Personalized strategies to activate and empower patients in health care and reduce health disparities. Health Educ Behav 2016;43(1): 25—34. https://doi.org/10.1177/1090198115579415.

[38] Truglio-Londrigan M, Slyer JT. Shared decision-making for nursing practice: an integrative review. Open Nurs J 2018;12: 1—14. https://doi.org/10.2174/1874434601812010001.

[39] Chau J, Lo S, Saran R, Leung C, Lam S, Thompson DR. Nurses' experiences of caring for people with COVID-19 in Hong Kong: a qualitative enquiry. BMJ Open 2021;11(8):e052683. https://doi.org/10.1136/bmjopen-2021-052683.