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REVIEW

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# Systematic review of the nature of nursing care described by using the Caring Behaviours Inventory

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## Abstract

**Aim:** To describe the nature of care received by patients measured through the Caring Behaviours Inventory.

**Background:** Professional nursing practice combines two dimensions of caring: instrumental care and expressive care. Instrumental care focuses on physical health needs, in terms of efficiency and employs interventions based on evidence. Expressive care is patient-centred and based on the interpersonal relationship. It requires caring attitudes that include respect, kindness, sensitivity and patience. The Caring Behaviours Inventory is a tool designed to assess the care expressed through the behaviours nurses perform, contextualised within the Jean Watson's Theory of Human Caring.

**Methods:** A systematic review following PRISMA recommendations. Scopus, PubMed and CINAHL databases were consulted using the keywords "Caring Behaviours Inventory" AND "Nursing". The Joanna Briggs Institute tool was used for the quality appraisal. A conceptual analysis and a thematic synthesis were performed for data extraction.

**Results:** 11 articles were selected. Three categories were identified: nature of caring, congruence between perceived care by patients and nurses, and factors associated with the expression of care.

**Discussion:** An emphasis on care of an instrumental nature was identified. The perception of patients differs from that of nurses, patients perceive a lower level of expressive caring than the one nurses believe to deliver. Caring behaviours are affected by the working environment, nurses' emotional intelligence and coping skills, and socio-demographic characteristics.

**Conclusion:** This paper described the findings of previous research regarding the nature of care that is transmitted and received in clinical practice. Results highlight an emphasis on the instrumental aspect of the nursing care according to the patients' perception.

  

**Relevance to clinical practice:** Findings summarised in this review could contribute to a better understanding of the nursing care. Results reported in this paper could also help to improve the quality of care delivered by nurses as well as patient-centeredness.

**KEYWORDS**
Caring Behaviours Inventory, nurse–patient relations, nursing care, systematic review

## 1 | INTRODUCTION AND BACKGROUND

For decades, caring has played a crucial role in nursing, being considered as its essence and its epicentre. Thus, caring is considered the foundation of nursing and this is evident in the nursing practice, nursing theories, the academic curriculum and in the ethical perspective of the nurse–patient relationship (Watson, 2009). As the foundation of the nursing discipline, caring has been widely studied and there are myriad works devoted to this concept. Despite this, its multiple interpretations prevent an agreement in terms of conceptualisation (Urra, Jana, & García, 2011).

Care is described as a complex phenomenon that is culturally constructed from the experience of each individual. Its complexity lies in the multitude of meanings attributed to this experience (Sargent, 2012). Recent conceptual reviews on the activity of caring have contributed to the development of this concept. Söderlund describes caring as a significant experience of communion in which dignity and well-being prevail, following the relief of suffering (Söderlund, 2013). According to Finfgeld-Connett, this caring bond requires professional maturity and moral commitment on the part of the nurses, and on the part of the patients, a need for care and a willingness to be cared for are required (Finfgeld-Connett, 2008). Other authors propose new interpretations of the concept of caring, considering it a fluid and circumstantial discourse of nursing practice rather than a stable central concept that guides it (Sargent, 2012), or an "umbrella" concept that collects a variety of ideas, attitudes and actions, thus being more convenient to focus the study on its attributes (Cook & Peden, 2017). Caring has also been described as a set of displayed behaviours showed in the nurse–patient relationship which include knowledge, skills and specific attitudes (Leyva, Peralta, Tejero, & Santos, 2015). Caring behaviours can be described as specific, recognisable and observable actions performed by nursing professionals, which cause an impression on patients and on which they rely to judge whether they feel cared for or not (Clark, 2016).

**Summary box**

- The perception of care within the nurse–patient relationship is high.
- The perceived care in the nurse–patient relationship is primarily of an instrumental nature against expressive care.
- Nurses rated their caring behaviours higher than patients did.

**What does this paper contribute to the wider global clinical community?**

- This work represents a descriptive contribution to the concept of nursing caring.
- Knowing the patients' perception of care can facilitate the development of individualised care plans aimed at what patients expect from nurses rather than their own assumptions.
- Identifying the areas of improvement in nursing behaviours that transmit care can help in improving quality of care and patient-centeredness.

### 1.1 | The Caring Behaviours Inventory assessment tool

The Caring Behaviours Inventory (CBI) is a tool designed to assess the care expressed through the behaviours that nurses perform, contextualised within Jean Watson's Theory of Human Caring. For Watson, caring is a moral imperative and the ethical foundation of the nursing discipline, which involves a system of values such as altruism, sensibility, empathy, love, trust, faith and hope (Watson, 2008). According to Watson, caring develops in the spiritual and phenomenological field of people through a transpersonal relationship in which the subjective realities of the patient and the nurse interact and transform to broaden their vision of the world in search of body–soul–spirit harmony. The Jean Watson's Theory of Human Caring prioritises the emotional aspects of caring. Nursing is not only "doing", simply performing instrumental tasks, but a conscious and intentional form of "being". Nursing practice is about meeting patients' needs and creating healing environments while establishing caring relationships, to meet patients' expectations of wholeness and spiritual connections for their health and well-being (Watson, 2009).

Wolf used Watson's Theory of Human Caring as the theoretical framework for developing the CBI. The definition of care which underlies the CBI tool is an interactive and intersubjective process that occurs during moments of shared vulnerability between nurse and patient, and that is both self- and other-directed (Wolf, 1986). This tool was developed for the first time by Wolf in 1986. Taking the nursing literature as a starting point, Wolf drew up a list of actions and attitudes associated with care, which was subjected to a psychometric

validation study involving both nurses and patients (Wolf, 1986). These behaviours were grouped into four dimensions: *assurance of human presence* (availability to answer to the needs of patients while maintaining their safety), *professional knowledge and skill* (demonstration of nursing knowledge and skills competence), *respectful deference to others* (respect for the dignity of the person) and *positive connectedness* (provide prompt ongoing support; Wu, Larrabee, & Putman, 2006). Caring Behaviours Inventory consists of a list of 42 nursing behaviours, and participants assess care associated with a series of statements through a Likert-type scale of six points.

In order to reduce response burden and research costs, psychometric researches including factor analyses have been conducted to obtain a reduced version of the scale of 24 items (Wu et al., 2006) and six items (Coulombe, Yeakel, Maljanian, & Bohannon, 2002), and it has also been adapted for the elderly population (Wolf, Zuzelo, Goldberg, Crothers, & Jacobson, 2005). The CBI, in all its versions, is a solid tool for the measurement of the nursing care transmitted through behaviours since it has shown content and construct validity, internal consistency and reliability (Coulombe et al., 2002; Wolf, 1986; Wolf et al., 2005; Wu et al., 2006). It is a suitable instrument for the assessment of care by professionals and patients, so it can be used to compare the care nursing professionals believe to transmit in a self-assessment exercise and the one perceived by patients (Wu et al., 2006).

Watson argues that as it is the nuclear element of the nursing profession, caring should permeate all nursing interventions (Watson, 2009). Nursing practice includes two key elements: the provision of quality care while safeguarding the safety of the patient, and the passionate care which includes the necessary psychological and emotional support (Scott, Matthews, & Kirwan, 2014). Thus, professional practice combines two dimensions of caring: instrumental caring and expressive caring. The two dimensions are equally necessary for a holistic care. Patients demand both technical attention to their needs as well as attention to the expression of their feelings and respect for their values (Scott et al., 2014). Therefore, nurses must balance instrumental and expressive care for a comprehensive approach towards patients.

Instrumental caring is action orientated and aims to meet physical health needs. It focuses on what nurses do in terms of efficiency and evidence-based interventions. Expressive care is patient-centred and based on the interpersonal relationship development between nurse and patient. It requires caring attitudes that show respect, kindness, sensitivity and patience (Sherwood, 1995). Instrumental care focuses on activities that promote physical well-being, and expressive care on addressing the psychosocial needs, inspiring hope and trust in the healing process (Loke, Lee, Lee, & Noor, 2015). The nursing practice needs to combine both elements for quality care adapted to the needs and expectations of patients.

Taking into account the CBI dimensions, it could be considered that *assurance of human presence* and *professional knowledge and skill* are related to instrumental care, as well as *respectful deference to others* and *positive connectedness* are linked to expressive care. The CBI could be used to assess the perception of caring when aiming to identify a focus on the instrumental or expressive care.

Lapum et al. (2012) noticed that the current health care reality is complex, with a high instrumental care orientation and technological presence, which may affect the relationships established with patients (Lapum et al., 2012). Papastavrou et al. (2012a) claimed that low nurse–patient ratio, work overload and work pressure might force nurses to prioritise the implementation of delegated tasks and instrumental procedures, leaving aside the psychosocial and emotional needs of the patient. According to Leyva et al. (2015), nurses' expressions of care perceived by patients are related to patient satisfaction, so the more care they perceive, the more satisfied they are with the nursing care. For Scott et al. (2014), the type of care that patients expect demands both psycho-emotional competences of humanised care and technical and procedural skills. In the light of this scenario, nurses might ask themselves if the nursing care patients receive meets this double instrumental and expressive expectation or if, on the other hand, one of these dimensions is being prioritised. Patient-centred caring makes it necessary to consider the patients' perspective as a starting point and to know how they are living the caring experience.

Caring behaviours have been studied with the use of the CBI before. The results indicate an emphasis on the physical and technical dimension of caring against its emotional and spiritual dimension (Papastavrou et al., 2012a). In addition, a lack of congruence between the perceptions of the agents involved has been identified: nurses consider the level of care their patients perceive is higher than what patients believe they receive (Hajinezhad, Azodi, Rafii, Ramezanian, & Tarighat, 2011).

In summary, caring is the core concept of the nursing profession, its contribution to the multidisciplinary team. It is desirable to know whether nursing behaviours and activities are transmitting the main goal of the profession or if, on the other hand, caring is diluted in the tasks. In terms of efficiency, the more and better cared for the recipients of our interventions feel, the better we will perform our work. The discrepancy between the perception of care by professionals and by patients compels nurses to dig deeper into this dispute, to detect behaviours in nursing practice that need to be changed in order to meet the patients' expectations.

## 2 | AIM

This review aims to analyse the recent literature regarding the nature of care that nurses' behaviours convey to their patients. This paper aims to identify an emphasis on instrumental or expressive care, according to the patients' perception as described in previous researches that were conducted using the CBI.

## 3 | METHODS

A systematic review was undertaken in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) recommendations (Shamseer et al., 2015; see

Appendix S1). The databases consulted were PubMed, Scopus and CINAHL. The search was conducted during May and June 2017. The descriptors used in the databases search were the key words "Caring Behaviours Inventory" and "Nursing", creating the search strategy "Caring Behaviours Inventory" AND "Nursing". The eligibility of works was established with the inclusion and exclusion criteria listed in Table 1.

The reference lists provided by the search engines were compared with the Mendeley reference manager software and the duplicates were excluded. The initial results obtained were subjected to an analytical reading of the title and abstract to select those that met the eligibility criteria. Additionally, the reference lists of the selected articles were manually reviewed, and those that met the established inclusion criteria were included. The screening process was carried out by one of the researchers and verified by a second person, the academic PhD senior lecturer.

Following the PRISMA recommendations (Shamseer et al., 2015), the risk of bias of the included studies was assessed, by evaluating the methods followed in the articles. Quality appraisal was performed to select only the highest quality papers, in order to obtain the most reliable results and to identify the strengths and weaknesses of the selected articles, that could compromise the validity of the present review results (Porritt, Gomersall, & Lockwood, 2014). For the evaluation of the methodological quality of the articles, the assessment tool for analytical, cross-sectional studies by the Joanna Briggs Institute was used (Moola et al., 2017). The purpose of this appraisal tool is to assess the methodological quality of a study and to determine the extent to which a study has addressed the possibility of bias in its design, development and analysis. It consists on six items that can be assessed as "yes", "no", "unclear" or "not applicable". The results of this appraisal were used to inform synthesis and interpretation of the results of the studies reviewed. The research team agreed to include articles that obtained one item scoring "no" and one item scoring "unclear" at most. Two studies out of the 13 papers included in the methodological quality appraisal were excluded because they obtained a negative assessment in two items or more.

Two researchers assessed the papers independently and agreed the conclusions by consensus. For the data extraction process, a data extraction form was developed a priori including the variables to be collected. These variables were stated by the research team to answer the research question and meet the aim of this review. The variables were authorship, year of publication, country, aim of the study, study population, study methods, results (values of the dimensions), outcomes and conclusions. Data were extracted simultaneously from primary research selected papers by two researchers. The two data extraction forms obtained were compared, and they completed each other. The information obtained was analysed, and a narrative synthesis was carried out describing the results (Tricco, Tetzlaff, & Moher, 2011). Three categories emerged from this analysis: nature of caring, congruence with the care perceived and factors associated with the expression of care.

**TABLE 1** Inclusion and exclusion criteria

| Inclusion criteria | Exclusion criteria | Reasons |
|---|---|---|
| Primary research study | Not being an original work (grey literature) | Data from primary peer reviewed research reports published in scientific journals are to be provided |
| Use of CBI for the measurement of care | Use of nonvalidated CBI adaptations | CBI has proven to be a valid and reliable tool for the measurement of caring behaviours, it has been validated in the populations of interest and data derived from a single tool can be more readily compared across studies than data collected by a variety of tools |
| Study population: nursing professionals working at any ward or speciality, in hospital settings or primary care, and patients | Study population: nursing students or other health professionals | The care transmitted in the nurse–patient relationship was the object of the study |
| Published between 2012 and 2017 | Published before 2012 | The most recent evidence is sought, as the nursing profession scenario has rapidly evolved in recent years (new training programmes, hard working conditions, new management policies…) |
| English language | Other languages | English is the language chosen for scientific publications |
| | Nonfull-text articles | Data accessibility |

These categories were established with the intention of aggregating similar data and presenting the results in an understandable and useful way for the reader, to meet the aim of this review.

The original CBI is a 42-items tool which aims to measure caring behaviours through a Likert-type scale of six points. This is to say, 1 corresponds to "never", 2 to "almost never", 3 to "sometimes", 4 to "usually", 5 to "often" and 6 to "always", so values range from 1 to 6. Participants assess each item depending on the frequency they perceived the caring behaviour. A high score for an item means that the caring behaviour is highly present in the nurse–patient relationship and vice versa. As the list of behaviours included in the CBI is known to convey care, the higher the score results, the more caring the relationship is. Ethical considerations were identified in the reviewed articles, and no ethical issues were raised.

## 4 | RESULTS

A total of 11 articles met the search criteria and were selected in this review, following the strategy described in Figure 1. All of them were descriptive, cross-sectional, correlational clinical studies that used the CBI tool for data collection. They described the caring behaviours perceived by patients and nursing professionals in different fields, although all of them in a hospital environment, and related

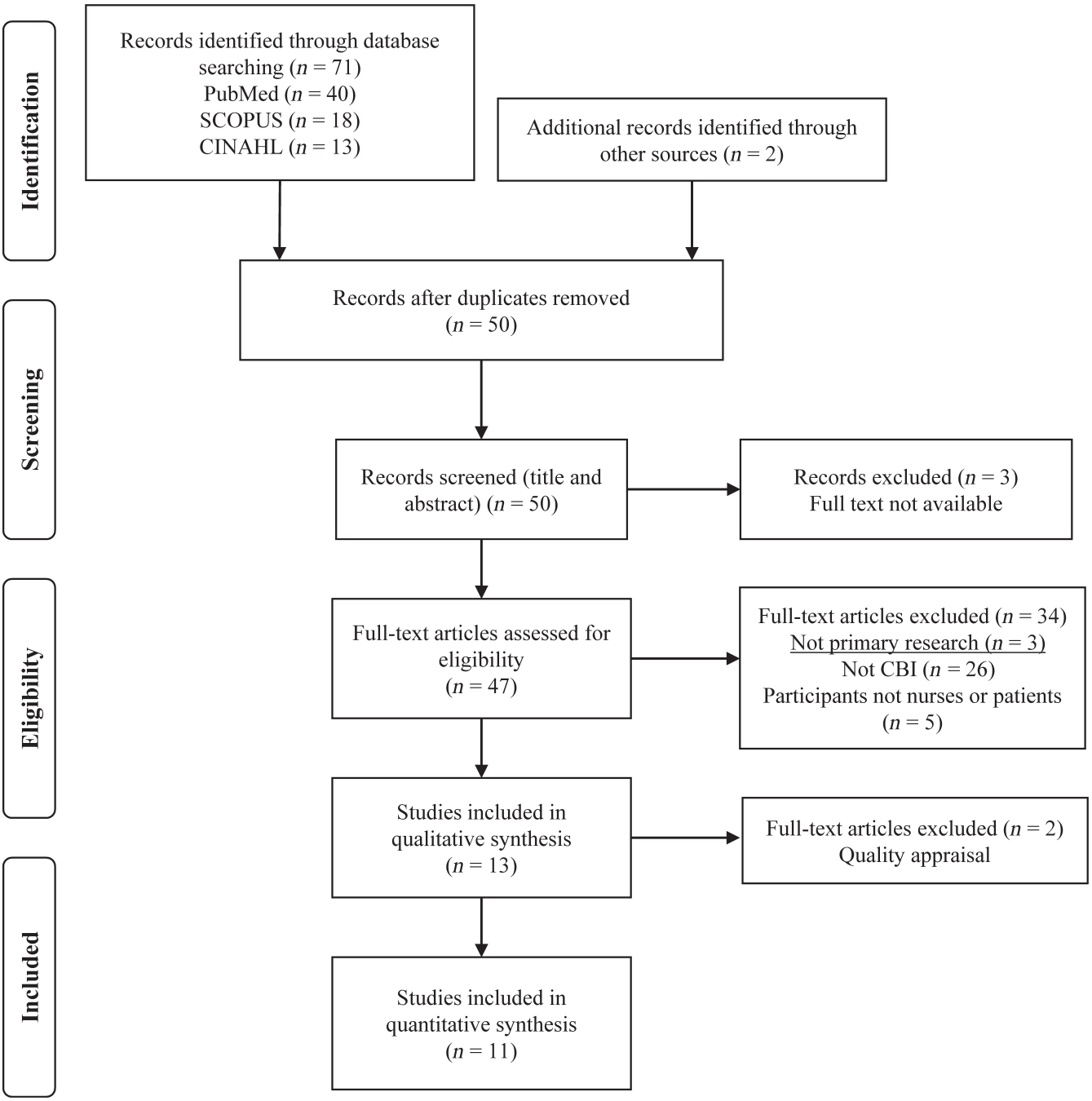


**FIGURE 1** Flow chart selection process

**TABLE 2** Descriptive caring behaviours results

| Authorship, Year, Country | Sample | CBI dimensions Mean values (*SD*) Patients | Nurses | Congruence patients'-Nurses' perception |
|---|---|---|---|---|
| Flynn (2016). United Kingdom | 22 patients<br>37 health professionals<br>12 nurses | Global 187.5 (*SD* 38.9) | Global 221.3 (*SD* 15.5) | The care patients perceive they receive is lower than what professionals believe to transmit ($p = .02$, $p < .05$); the latter perceive in a more positive way the care they provide.<br>Nurses assess their caring behaviours in a more positive way than the rest of the professionals ($p = .01$, $p < .05$).<br>The level of studies acts as a positive factor in the perception of care ($p = .04$, $p < .05$) |
| He et al. (2013). China | 595 patients<br>445 nurses | Knowledge–skill 4.7 (*SD* 0.8)<br>Assurance 4.4 (*SD* 0.9)<br>Respect 4.1 (*SD* 0.8)<br>Connectedness 4.0 (*SD* 0.8)<br>Total 4.3 (*SD* 0.7) | Knowledge–skill 5.2 (*SD* 0.6)<br>Assurance 5.2 (*SD* 0.6)<br>Respect 4.8 (*SD* 0.6)<br>Connectedness 4.5 (*SD* 0.7)<br>Total 5.0 (*SD* 0.6) | Nurses perceive they transmit more care than what patients receive in a significant way ($p < .001$) |
| Karlou et al. (2015). Greece | 138 patients<br>72 nurses | Knowledge–skill 5.2 (*SD* 0.7)<br>Assurance 5.0 (*SD* 0.7)<br>Respect 4.8 (*SD* 0.9)<br>Connectedness 4.7 (*SD* 1) | Knowledge–skill 5.0 (*SD* 0.7)<br>Assurance 4.8 (*SD* 0.7)<br>Respect 4.5 (*SD* 0.8)<br>Connectedness 4.3 (*SD* 0.9) | There are significant differences ($p < .01$) between the patients' and nurses' perception of care in the dimensions "knowledge–skill" ($p = .010$), "respectful deference to others" ($p = .011$) and "positive connectedness" ($p = .004$) |
| Papastavrou et al. (2012b). Finland, Hungary, Czech Republic, Cyprus, Greece, Italy | 1,537 patients<br>1,148 nurses | Knowledge–skill 5.3 (*SD* 0.8)<br>Assurance 5.0 (*SD* 0.8)<br>Respect 4.7 (*SD* 1.0)<br>Connectedness 4.6 (*SD* 1.0) | Knowledge–skill 5.3 (*SD* 0.6)<br>Assurance 5.1 (*SD* 0.7)<br>Respect 4.9 (*SD* 0.8)<br>Connectedness 4.6 (*SD* 0.8) | Significant differences are found between the nurses' and the patients' perception in the dimensions "assurance of human presence" ($t = 4.81$, $p < .001$) and "respectful deference to others" ($t = 4.11$, $p < .001$), being higher assessed by nurses.<br>There are significant differences in the perception of care between patients and nurses from the participating countries ($p < .001$) |
| Sarafis et al. (2016). Greece | 246 nurses | | Knowledge–skill 5.1 (*SD* 0.7)<br>Assurance 4.9 (*SD* 0.8)<br>Respect 4.6 (*SD* 0.8)<br>Connectedness 4.4 (*SD* 0.9) | Not described |
| Sossong and Poirier (2013). USA | 228 patients 216 nurses | Total 2.8 | Total 2.9 | There are no statistically significant differences between the global perception of the caring behaviours by patients and nurses ($Z = -1.907$, $p = .056$)<br>Nurses assess in a significantly higher level their caring behaviours, especially in the rehabilitation, oncology and respiratory units ($p < .01$) |

these behaviours to other variables. The studies were conducted in a range of countries, including the United Kingdom (Chana, Kennedy, & Chessell, 2015; Flynn, 2016), USA (Merrill, Hayes, Clukey, & Curtis, 2012; Sossong & Poirier, 2013), Greece (Karlou, Papathanassoglou, & Patiraki, 2015; Sarafis et al., 2016), Australia (Edvardsson, Watt, & Pearce, 2017), China (He et al., 2013), Malaysia (Kaur, Sambasivan, & Kumar, 2013). Joint studies were completed in Finland, Hungary, Czech Republic, Cyprus, Greece and Italy (Papastavrou et al., 2012a; Patiraki et al., 2014).

Studies reported their results either by indicating the total CBI mean score (mean of every item score), by indicating the mean score obtained for each dimension (mean of items included in one

dimension) or both ways (Table 2). With regard to the overall perception of care, the total CBI mean scores ranged from 5.4 (Merrill et al., 2012) to 4.3 (He et al., 2013) in the case of patients and from 5.0 (*SD* 0.6) (He et al., 2013) to 4.2 (Kaur et al., 2013) in the case of nursing professionals. The reliability of the tool was shown in the reviewed articles, Cronbach $\alpha$ values ranged from $\alpha$ = .90 (Sossong & Poirier, 2013) to $\alpha$ = .96 (Papastavrou et al., 2012a).

Regarding the CBI dimensions, patients' and nurses' perception resulted similar in priority, although the values obtained for each dimension differ, as shown in Figure 2. *Professional knowledge and skill* dimension was the highest valued by both groups, patients and nurses, in 36% (*n* = 4) of the articles reviewed, and *positive connectedness* was the least valued dimension in 36% (*n* = 4) of the studies included in this review. The main results of the descriptive analysis reported in the included studies are summarised in Table 2.

With regard to the first category that emerged from the narrative synthesis, *nature of caring*, caring described in the reviewed articles responded to an instrumental nature. According to the definition of each dimension given by the authors of the CBI, two of them, *assurance of human presence* and *professional knowledge and skill*, could be considered representative of instrumental care as they refer to the availability to answer the patients' needs and safety demonstrating nursing knowledge and skills competence. On the contrary, the dimensions *respectful deference to others* and *positive connectedness* could relate to expressive care as they refer to emotional aspects such as respect for the dignity of the person or ongoing support (Wolf, 1986).

Regarding the second category that emerged from the narrative synthesis, *congruence between nurses' and patients' perception of care*, a lack of agreement was identified. According to the results summarised in this review, nurses believe to transmit more care than the patients claim to receive. Although the patient and professional assessment of care was high, significant differences were identified between the perceptions of both groups, being higher than that of the nurses (Flynn, 2016; He et al., 2013; Papastavrou et al., 2012a).

With regard to the third category that emerged from the narrative synthesis, *factors associated with the expression of care*, this review identified barriers and facilitators. As shown in Table 3, nursing caring behaviours were related to nursing stress (Sarafis et al., 2016), coping strategies, emotional burnout, depersonalisation, depression (Chana et al., 2015), emotional intelligence and feeling of belonging (Kaur et al., 2013), as well as socio-demographic characteristics such as marital status (Karlou et al., 2015), age, experience (Patiraki et al., 2014) and country (Papastavrou et al., 2012a). As for patients, their perception of caring behaviours was related to the quality of care received (Edvardsson et al., 2017), marital status (Karlou et al., 2015), prior hospitalisation (Karlou et al., 2015; Patiraki et al., 2014), level of studies (Flynn, 2016), age, scheduled hospitalisation, perceived health status (Patiraki et al., 2014) and sex (Merrill et al., 2012). The methodological quality of the reviewed articles is reported in Table 4.

## 5 | DISCUSSION

Although caring is highly valued within the nurse–patient relationship, significant differences between the perception of care by nurses and by patients were identified in the reviewed literature reviewed, so nurses believe to transmit more care than patients express to receive. Results reported in the reviewed articles describe a trend towards the instrumental aspect in the perception of nursing care, as they show a greater perception by nurses and patients of the dimensions *professional knowledge and skill* and *assurance of human presence*.

### 5.1 | Nature of caring

According to the reviewed studies, patients' perception of care in the nurse–patient relationship is high in every dimension of the CBI. This result highlights the central role this concept plays in the professional practice. It is in line with the historical consideration of caring as the core concept and the essence of nursing, as conceptualised by the academic work of theorist nurses (Drahošová & Jarošová, 2016), and as a value for nursing practice and a principle for nursing actions (Bailey, 2009). The positive outcomes obtained through the demonstrations of caring behaviours reinforce the idea of placing caring at the pivotal place of the nursing practice and encourage integrating caring from theoretical knowledge to actual daily practice (Leyva et al., 2015).

The results of the reviewed articles revealed a focus on instrumental care (*professional knowledge and skill* and *assurance of human presence* dimensions). These findings are congruent with similar studies in which the CBI has been used with nursing students (Labrague

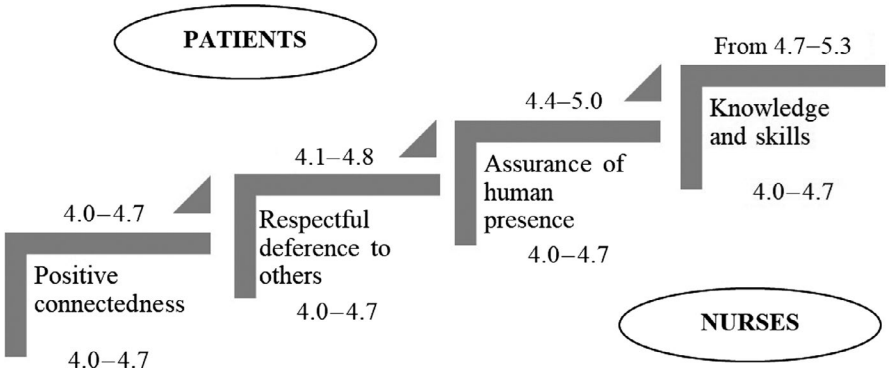


**FIGURE 2** Diagram of patients' and nurses' perception priorities. Mean values range for each dimension

et al., 2015). The emphasis on instrumental care identified in this review could be explained in a task-oriented model. Task-oriented care is organised in routines performed by nurses at certain times of the day. It increases the chances for the work to be completed and make the task clearer for the person responsible to perform it. This way of working may be safer for the patient in terms of reducing errors as it may avoid forgetting to do tasks. According to Fallon et al., it can be efficient as it gets the workload done, but it may provide fragmented and not person-centred care. Task allocation around the ward schedule rather than the patient needs promotes a generalised approach rather than individualised care. When tasks are considered as isolated duties, nurses focus on them and they could be perceived as a priority. (Fallon et al., 2018). This could explain the high values related to instrumental care reported in the reviewed studies. The nursing practice based on the mere execution of tasks could derive in the depersonalisation of caring, as nurses may be less inclined to

**TABLE 3** External variables influencing Caring Behaviours

| Authors<br>Year<br>Country | Data collection | Sample<br>Statistical analysis | Results |
|---|---|---|---|
| Chana et al. (2015)<br>United Kingdom | Caring Behaviours Inventory<br>Nursing Stress Scale<br>Social Support Questionnaire<br>Connor and Davidson Resilience Scale-2<br>Occupational Coping Self-Efficacy Scale for Nurses<br>PsychNurse Scale<br>Maslach Burnout Inventory<br>Hospital Anxiety and Depression Scale | 102 nurses<br>Shapiro–Wilk test<br>Spearman's rho<br>Kruskal–Wallis | Positive correlation between caring behaviours and coping strategies: "diverting attention away from work" ($r$ = .32, $p$ < .01), "self-regulation and self-attitude" ($r$ = .40, $p$ < .001), "social support at work" ($r$ = .36, $p$ < .001), "positive attitude to one's role at work" ($r$ = .37, $p$ < .001) and "emotional comfort" ($r$ = .33, $p$ < .01).<br>Positive correlation in self-efficiency in coping with occupational burden ($r$ = .33, $p$ < .01).<br>Caring behaviours are negatively related with emotional exhaustion ($r$ = −.31, $p$ < .01), depersonalisation ($r$ = −.36, $p$ < .001), depression ($r$ = −.34, $p$ < .01) and psychological distress professionals suffer ($r$ = −.30, $p$ < .01). |
| Edvardsson et al. (2017).<br>Australia | Caring Behaviours Inventory<br>Person-centred Climate Questionnaire<br>SF-36 Health Survey<br>Distress thermometer | 210 patients<br>Pearson coefficient<br>Linear regression analysis | Caring behaviours are significantly related with quality from the patient's perspective: "being hopeful for you" ($r$ = .46 $p$ < .05), "being empathetic or identifying with you" ($r$ = .53, $p$ < .05), "being sensitive to you" ($r$ = .53, $p$ < .05), "treating your information confidentially" ($r$ = .33, $p$ < .05), "meeting your stated and unstated needs" ($r$ = .61, $p$ < .05) and "putting you first" ($r$ = .60, $p$ < .05). |
| Karlou et al. (2015). Greece | Caring Behaviours Inventory<br>Socio-demographic questionnaire | 138 patients<br>72 nurses<br>Student' $t$ test<br>Mann-Whitney $U$<br>Wilcoxon test<br>Multiple linear regression<br>Spearman's rho | Married patients receive significantly higher values in the dimension "respectful deference to others" ($p$ = .04, $p$ < .01).<br>Patients with prior hospitalisation lower assess the dimension "knowledge–skill" in a significant way ($p$ = .018, $p$ < .01).<br>Married marital status in nurses is associated with higher scores in the dimensions "knowledge–skill" ($p$ = .012), "assurance of human presence" ($p$ = .007) and "positive connectedness" ($p$ = .026).<br>The multiple regression analysis did not show any significant associations. |
| Kaur et al. (2013).<br>Malasia | Caring Behaviours Inventory<br>Schutte Self-Report Emotional Intelligence Test<br>Spiritual Intelligence Self-Report Inventory<br>Maslach Burnout Inventory<br>Psychological Ownership Scale | 550 nurses<br>Confirmatory Factor Analysis | Nurses with a higher emotional intelligence show more caring behaviours ($r$ = .19, $p$ < .001).<br>Nurses who suffer a higher level of burnout show less caring behaviours ($r$ = .22, $p$ < .001).<br>Nurses who have a high sense of belonging show better caring behaviours ($r$ = .24, $p$ < .001).<br>The sense of belonging acts as a mediator in the relationship between emotional intelligence and caring behaviours ($p$ < .001).<br>Burnout acts as a mediator between emotional intelligence and caring behaviours ($p$ < .001). |
| Merrill et al. (2012).<br>USA | Caring Behaviours Inventory<br>Socio-demographic questionnaire | 103 patients<br>Exploratory Factor Analysis<br>Chi-square analysis | The group of behaviours that explains the 51.8% of variance corresponds to the dimensions "assurance of human presence" and "positive connectedness".<br>Sex is related with the interpretation of care ($p$ < .001).<br>Men higher assess the items "attentively listening to the patient" and "putting the patient first" ($p$ < .05).<br>Significant cultural differences were found in the perceptions of care ($p$ < .001). |

(Continues)

**TABLE 3** (Continued)

| Authors<br>Year<br>Country | Data collection | Sample<br>Statistical analysis | Results |
|---|---|---|---|
| Patiraki et al. (2014).<br>Finland, Hungary, Czech Republic, Cyprus, Greece, Italy | Caring Behaviours Inventory<br>Socio-demographic questionnaire | 1,659 patients<br>1,567 nurses<br>Student' *t* test<br>ANOVA<br>Pearson coefficient<br>Multiple linear regression | There is a positive correlation between the age of the patient and the total CBI scores ($r = .12$ $p = .01$).<br>Significant differences between patients with the experience of prior hospitalisation and those who do not have this experience, with higher scores in the dimension "presence" ($F = 3.13$, $p = .044$, $p < .05$).<br>Significant higher assessment of the dimension "knowledge–skill" in patients who have undergone surgery ($p = .024$, $p < .05$).<br>There are significant differences between the perception of patients with planned and emergency surgeries, showing the latter lower scores for the caring behaviours ($t = 5.05$, $p < .001$).<br>Significant differences between the perception of caring behaviours and the patient's state of health ($F = 4.612$, $p < .001$).<br>The characteristics "type of admission", "age" and "state of health" of patients explain the 52% of CBI variance ($p < .005$).<br>Significant relationship between the nurses' age and their caring behaviours ($p = .089$, $p < .01$).<br>There is a positive correlation between the nurses' experience ($r = .11$, $p = .001$) and the units' experience ($r = .13$, $p < .001$) and the total CBI scores. |
| Sarafis et al. (2016).<br>Greece | Caring Behaviours Inventory<br>Expanded Nursing Stress Scale<br>SF-12 Health Survey | 246 nurses<br>Pearson coefficient<br>Multiple linear regression | A significant correlation ($p < .05$) between the items in the nursing stressors scale and the CBI dimensions except for stressor "discrimination" and the dimensions "assurance of human presence" ($r = .12$, $p > .05$) and "connectedness" ($r = .11$, $p > .05$), and between the stressor "patient and relatives" and the dimension "knowledge–skill" ($r = .04$, $p > .05$).<br>Stress in nursing is a negative predictive factor for the caring dimensions "knowledge–skill" ($p = .006$), "assurance of human presence" ($p < .001$), "respect" ($p < .001$) and "connectedness" ($p < .001$). |

meet the emotional needs of the patients (Locsin & Purnell, 2015). For Papastavrou et al., some organizational measures adopted by health institutions, such as shortage in nurses and work overload, have forced nurses to focus on tasks with no time left for communication with the patients or emotional care (Papastavrou et al., 2012b). This could decrease the perception of emotional care in the nurse–patient relationship. On the other hand, Dahlke and Stahlke Wall (2017) believe that the emphasis on emotional care links nursing with stereotypes inherited from sacrifice and delivery that impede professional development. Instead, they propose to focus on knowledge and techniques to vindicate the relevant role of nursing in the health system.

Results from the present review showed that the CBI dimensions related to expressive caring were less reported by patients. The practice of expressive care requires competences in an emotional type of work, understood as the effort to manage emotions in favour of a therapeutic relationship and of effective care (Edward, Hercelinskyj, & Giandinoto, 2017). This work is hard and requires skills and experience at the same level as physical work. Excessive emotional work can lead to emotional and job burnout, with the consequent negative effect on the care of the patient, the nursing professional, the institutions and the reputation of the profession (Edward et al., 2017). The lower perception of the emotional aspects of care found in this review could act as a protective agent for these effects.

## 5.2 | Congruence between the perception of care by patients and by nurses

Reviewed works reveal a significant difference between the perception of care by nurses and by patients, so nurses believe to transmit more care than patients express they receive. This discrepancy has been previously identified (Hajinezhad et al., 2011).

The higher perception of caring actions on the part of the nurses could be explained by the training received. It has been argued that nursing training puts so much emphasis on caring as the centre of the discipline that professionals have idealised and overvalued this concept (Dahlke & Stahlke Wall, 2017). Caring, as the centre of the nursing practice, is considered as a myth inherited from the historical trajectory of the profession that lecturers perpetuate through the training of future nurses (Murphy, Jones, Edwards, James, & Mayer, 2009). This deep assimilation of the concept as a nuclear element could lead nurses to consider their behaviours to be transmitting more care.

Caring develops in an interpersonal relationship that nurses establish with patients and through value–laden interactions and is based on trust and protection. The intensity of the relationship and its intimate nature lead to strong feelings and shared emotional experiences (Finfgeld-Connett, 2008). From this perspective, the perceptions of both sides are expected to be consistent with one another.

**TABLE 4** Joanna Briggs Institute methodological quality appraisal results

| Authors, Year | Were the criteria for inclusion in the sample clearly defined? | Were the study subjects and the setting described in detail? | Was the exposure measured in a valid and reliable way? | Were objective, standard criteria used for measurement of the condition? | Were confounding factors identified? | Were strategies to deal with confounding factors stated? | Were the outcomes measured in a valid and reliable way? | Was appropriate statistical analysis used? |
|---|---|---|---|---|---|---|---|---|
| Chana et al. (2015) | Yes | Yes | Yes | Yes | Yes | Unclear | Yes | Yes |
| Edvardsson et al. (2017) | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes |
| Flynn (2016) | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes |
| He et al. (2013) | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes |
| Karlou et al. (2015) | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes |
| Kaur et al. (2013) | Yes | Yes | Yes | Unclear | Yes | No | Yes | Yes |
| Merrill et al. (2012) | Yes | Yes | Yes | Yes | No | No | Yes | Yes |
| Papastavrou et al. (2012b) | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes |
| Patiraki et al. (2014) | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes |
| Sarafis et al. (2016) | Yes | Yes | Yes | Unclear | Yes | Unclear | Yes | Yes |
| Sossong and Poirier (2013) | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes |

However, the results of this review highlight that patients perceive less caring behaviours from nurses than these believe to transmit. (Flynn, 2016; He et al., 2013; Karlou et al., 2015; Papastavrou et al., 2012a; Sossong & Poirier, 2013).

### 5.3 | Factors affecting the expression of care

In the literature review, an association between nurses' caring behaviours and the working environment (nursing stressors, emotional burnout, depersonalisation, general burnout and feeling of belonging) has been identified. Authors pointed out that the economic constraints of institutional environments can restrain nurses' opportunities in establishing caring relationships with patients and their families. In the light of the economic crisis, measures of budget and staff cuts have been taken that have reduced the nursing staff in many hospitals. The shortage of nurses reduces availability to be with the patient and has forced nurses to ensure basic technical tasks, leaving aside behaviours of humanised care (Papastavrou et al., 2012b). Regarding professionals, low staff levels result in care overload and greater work pressure. To deal with this pressure, nurses prioritise procedures and delegated tasks, leaving aside the psychosocial or spiritual needs (Papastavrou et al., 2012a).

These findings are congruent with previous studies about working environments within the health system. Stab, Hacker, & Weigl identified an association between the internal organisation of hospital units and the emotional burnout of nurses. A good internal organisation with realistic objectives and a climate of support generates a working environment that reduces stressors and strengthens the resources nurses have, something that affects their well-being, their work performance and the quality of care (Stab, Hacker, & Weigl, 2016). According to Eliott, the obligation to fulfil unrealistic objectives and the feeling of undervaluing nursing work on the part of other professionals and society contribute to emotional burnout (Elliott, 2017). There is evidence that nurses who feel emotionally supported by their fellow veterans and by their supervisors better alleviate emotional burnout. This could be a protective measure for nurses and a supportive measure to expressive care, although some supervisors have now focused on management efforts, detaching themselves from the nursing team. Despite the difficult working conditions, internal organisation could favour the expression of care.

The results reported in the studies included in this review describe an association between caring behaviours and coping strategies (Chana et al., 2015) and emotional intelligence (Kaur et al., 2013). The review conducted by Lewis, Neville, & Ashkanasy shows that higher levels of emotional intelligence in staff reduce stress and anxiety, promote communication and improve professional performance (Lewis, Neville, & Ashkanasy, 2017). Although emotional intelligence has an intrinsic component of personality, it can be acquired and trained through several learning strategies such as reflective activities, self-assessment, behaviour modelling or experiential learning among others (Foster, McCloughen, Delgado, Kefalas, & Harkness,

2015). Experiences have been described in which a training intervention has significantly increased the emotional intelligence of the participants in the short and long term (Alconero-Camarero et al., 2018). The literature suggests the incorporation of coping mechanisms in the nursing training is equally pertinent and necessary, and it would help both the students during their training period as well as the future professionals. Recent initiatives of training programmes in coping strategies successfully incorporate simulation as a learning methodology (Roh, Kim, & Kim, 2014). These strategies would be in line with the suggestions proposed by other authors to increase the care conveyed in nursing behaviours by broadening the training of professionals regarding the emotional and spiritual dimensions (He et al., 2013; Kaur et al., 2013).

### 5.4 | Limitations of the review

It should be noted that the review has only included those studies that have used the CBI for the measurement of care; there are other tools for the quantitative assessment of care whose results could provide nuances in interpretation. The assessment of the methodological quality of the reviewed articles revealed that most studies did not take steps to correct certain factors, such as establishing strategies to deal with identified confounding factors identified or using objective standard criteria for measuring the conditions, but these were regarded as constraints instead. Caution was recommended in the interpretation and generalisation of the results; by extension, prudence is also recommended in the interpretation of the results of this review. The selection bias must also be considered, which was sought to be minimised using a search strategy with very specific terms, capable of identifying the expected works.

## 6 | CONCLUSIONS

The aim of this review is to describe whether the caring transmitted in the nurse–patient relationship as reported in the literature, balances its instrumental and emotional elements. The results of the reviewed works show a greater perception of the dimensions *professional knowledge and skill* and *assurance of human presence*, which highlights an emphasis on the instrumental aspect in the perception of nursing care, by patients and nurses. The nurses' assessment of care is greater than that of patients, that is nurses believe to transmit more care than patients manifest to receive. Since caring develops in an interpersonal relationship that affects both parties, it is expected to find harmony between the two perceptions. However, the perception of nurses may be affected by an over-emphasis on caring during the training received. The expression of care is affected by the working environment in which the professional practice develops. Working environments within the health system should promote meaningful personal relationships with patients and their relatives by improving working conditions and training staff in emotional skills.

## 7 | RELEVANCE TO CLINICAL PRACTICE

This work represents a descriptive contribution to the concept of nursing caring for a better understanding of the same and to the type of care that is transmitted and perceived in the clinical practice. Caring is a subjective, ambiguous concept with cultural determinants that make it difficult to be defined and studied. The way in which it is expressed through professional behaviours permit to intuit an estimation of the concept, from a practical and observable perspective, and facilitates its assessment. Knowing the patients' perception of care allows developing individualised caring plans aimed at what patients expect from nurses rather than their own assumptions. Caring behaviours have been related to patient satisfaction and their physical and mental well-being, so their study and improvement will increase these health outcomes indicators. Identifying the areas of improvement in nursing behaviours that transmit care will allow developing effective training strategies for a more complete nursing training and in line with the demands of the patient.

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