Barriers for Nurses Providing Cancer Pain Management: A Qualitative Systematic Review

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PROBLEM IDENTIFICATION: Improperly managed pain can negatively affect physical and mental health, quality of life, and functional status of individuals with cancer. To address nurses' experiences with and barriers to providing cancer pain management, a systematic review was conducted.

LITERATURE SEARCH: PubMed®, Embase®, Web of Science, CINAHL®, Cochrane Library, CNKI, VIP Chinese Science and Technology Periodicals Full-Text Database, Wanfang, and SINOMED databases were searched for articles published from database inception through August 2022.

DATA EVALUATION: Two researchers independently evaluated the studies' quality, and meta-integration was performed using thematic synthesis. Eighteen qualitative studies, including 277 nurses from 11 different countries, were included in the review.

SYNTHESIS: The following three themes regarding nurses' barriers to providing cancer pain management were identified: (a) healthcare professional–related barriers, (b) patient-related barriers, and (c) organizational-related barriers.

IMPLICATIONS FOR PRACTICE: This systematic review provides an evidence-based reference for nurses to manage pain among individuals with cancer and develop appropriate interventions.

By 2060, it is estimated that more than 16 million individuals per year will die from malignant neoplasms and experience health-related distress (Armoogum et al., 2020). Cancer pain is one of the leading causes of health-related distress among patients with cancer and is a significant symptom of the disease and its treatment (Money & Garber, 2018). A meta-analysis reported that the overall incidence of cancer pain during treatment could be as high as 40% (Evenepoel et al., 2022). In addition, cancer pain is most prevalent in low- and middle-income countries because as many as 88%–95% of patients are diagnosed with advanced-stage cancer (Onsongo, 2020). Despite an increased awareness of cancer-related pain reported in the literature (Russo & Sundaramurthi, 2019), one study revealed that more than one-third of patients do not receive adequate treatment, which can lead to suboptimal pain relief and poor outcomes for patients (Al-Masri et al., 2020). Untreated or improperly treated cancer pain can negatively affect patients' physical and mental health, functional status, and quality of life (Li, Aninditha, et al., 2018), as well as increase the burden on family members and limit social interactions (El-Aqoul et al., 2020). Over time, the evolution of many and varying sites and types of pain have added to the complexity and timeliness of cancer pain prevention, assessment, and management (Russo & Sundaramurthi, 2019). Therefore, improving cancer pain management (CPM) is particularly important.

CPM is widely recognized, and cancer pain–related guidelines and consensus are regularly updated. However, there are still barriers to CPM globally, and resources are unevenly distributed. Poor pain management has serious consequences for patients and their families, including decreased quality of life, diminished functionality, and greater emotional burden (Lara-Solares et al., 2017). Although nurses understand the harm and impact

cancer pain can have on patients, individuals with cancer often do not receive adequate pain control and management (Scarborough & Smith, 2018). The importance of relieving pain and the availability of effective therapies make it imperative for healthcare providers to be adept at cancer pain assessment and management (Swarm et al., 2019). CPM is an essential part of cancer care, and evidence-based research has shown that nurses play a crucial role in pain management (Liyuan et al., 2021). Nurses' attitudes and knowledge are integral to pain treatment outcomes and CPM success (Alnajar et al., 2019). However, knowledge and attitudes about cancer pain have been reported to be significantly lower among nurses compared to physicians (Darawad et al., 2019). Most oncology nurses have misconceptions about CPM and lack knowledge related to CPM, resulting in poor CPM for patients (Admass et al., 2020; Alnajar et al., 2019; Yu et al., 2021). Thus, factors related to nurses' barriers to providing CPM need to be further explored.

Qualitative studies about nurses providing CPM to patients are widely published. However, using a single qualitative research result to guide practice is not scientifically sound. To date, no qualitative study has comprehensively identified nurses' barriers to providing CPM, and there is a lack of empirical evidence on strategies to help individuals with cancer pain achieve a better quality of life. In addition, comparing barriers to CPM between countries is difficult because of cultural, geographic, and professional differences. The purpose of this study was to systematically review, evaluate, and synthesize nurses' experiences with providing CPM for patients, identify barriers related to providing CPM, and offer guidance for nurses to safely and effectively implement CPM to support patients with cancer-related pain.
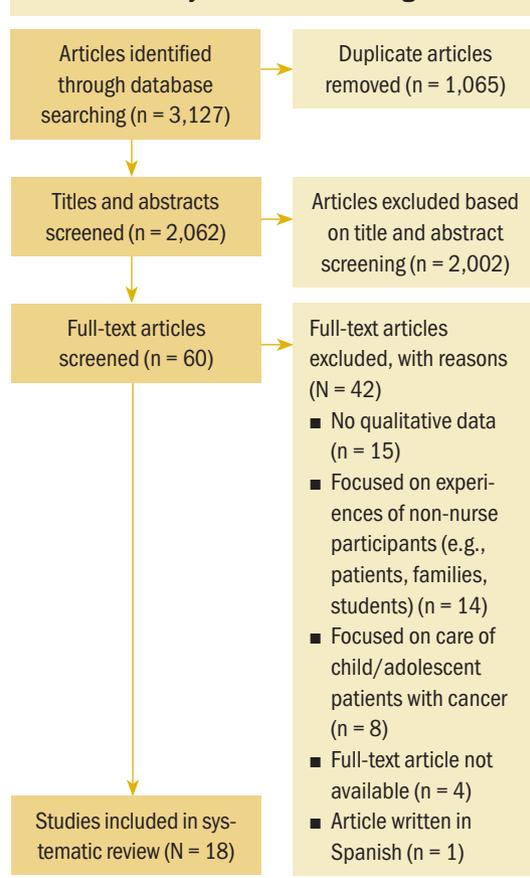
Methods

Design

This systematic review was designed as a qualitative meta-synthesis based on the Joanna Briggs Institute approach (Lockwood et al., 2020). PubMed®, Embase®, Web of Science, CINAHL®, Cochrane Library, CNKI, VIP Chinese Science and Technology Periodicals Full-Text Database, Wanfang, and SINOMED databases were searched to identify qualitative studies that explored nurses' experiences with and barriers to providing CPM. Google Scholar™ was also searched for relevant gray literature. All included studies were critically appraised using the Critical Appraisal Skills Programme qualitative checklist. Thematic

synthesis was used to synthesize the qualitative evidence extracted from the studies (Thomas & Harden, 2008). The Enhancing Transparency in Reporting the Synthesis of Qualitative Research statement was also used (Batten & Brackett, 2022; Tong et al., 2012).

Search Strategy

The search period was from database inception through August 2022. Search terms included the following: *pain*, *breakthrough pain*, *pain management*, and *pain control*, AND *cancer*, *tumor*, *neoplasm*, and *oncology*, AND *nurse*, *nursing*, AND *qualitative study*, *grounded theory*, *focus group*, *interview*, *phenomenology*, and *ethnography*. Boolean operators and various combinations were used to search the full extent of the literature. Two researchers independently screened the studies according to the inclusion and exclusion criteria, extracted data, and cross-checked findings. After removing duplicate studies, researchers read the titles and abstracts, excluded studies according to the exclusion criteria, and read full texts to determine

FIGURE 1. Study Selection Flow Diagram

Articles identified through database searching (n = 3,127) → Duplicate articles removed (n = 1,065)

Titles and abstracts screened (n = 2,062) → Articles excluded based on title and abstract screening (n = 2,002)

Full-text articles screened (n = 60) → Full-text articles excluded, with reasons (N = 42)
- No qualitative data (n = 15)
- Focused on experiences of non-nurse participants (e.g., patients, families, students) (n = 14)
- Focused on care of child/adolescent patients with cancer (n = 8)
- Full-text article not available (n = 4)
- Article written in Spanish (n = 1)

Studies included in systematic review (N = 18)

which studies to include in the final synthesis. Figure 1 details the study selection process. Additional details on the transparency of the study selection process and the search strategy are available from the authors upon request.

Inclusion and Exclusion Criteria

Studies were included in the review if they met the following criteria: (a) Participants were nurses holding professional certification and caring for individuals with cancer for more than one month; (b) the phenomenon of interest focused on nurses' experiences with or feelings, challenges, and obstacles encountered when providing CPM; and (c) the study type was qualitative or mixed methods, including phenomenologic, grounded theory, focus group, ethnographic, and narrative approaches. Mixed-methods studies were considered if qualitative findings were reported separately. Studies with participants who were practice nurses, nursing school students, nursing staff, and RNs were excluded. Reproduced literature and research for which the full text could not be obtained were also excluded.

Quality Appraisal of Selected Studies

Quality was assessed using the Critical Appraisal Skills Programme qualitative checklist. Included studies were independently evaluated and cross-checked by two reviewers who had completed evidence-based nursing training. If the two reviewers' evaluations were inconsistent, a third-party individual was consulted, and a consensus was reached through discussion.

Data Extraction

The Joanna Briggs Institute qualitative checklist was used to extract information from the studies. Study characteristics were extracted independently by two reviewers into a Microsoft Excel spreadsheet for mutual verification. Disagreements were resolved by discussion. Data on authors, qualitative research methods, research objects, contextual factors, sample size, and main results were extracted. The two independent reviewers read all studies several times to obtain a clear overall understanding of each study.

Data Synthesis

Findings were pooled using the Joanna Briggs Institute System for the Unified Management, Assessment, and Review of Information. Thematic synthesis was used to integrate findings. This was done by two independent reviewers and consisted of the following four stages: (a) meta-summarization of qualitative findings from all 18 studies by organizing and abstracting the data in a table format, (b) free line-by-line coding employing an inductive analysis of findings from primary studies, (c) organization of free codes into areas related to the construction of descriptive themes, and (d) construction of analytical themes. With an understanding of the philosophical and methodologic underpinnings of the various qualitative studies, the researchers repeatedly read the qualitative findings, frequently analyzed and interpreted each original finding, and discussed findings with the broader review team until all researchers agreed on the newly constructed themes.

Findings

Characteristics of Included Studies

In total, 18 studies were included in the systematic review. Studies were published between 2000 and 2020 and comprised a total sample of 277 nurses. Study designs were qualitative (n = 16) and mixed methods (n = 2). Only qualitative findings were included. The studies were conducted in 11 different countries, with 4 conducted in the United States, 3 in the United Kingdom, 3 in China, and 1 each in Saudi Arabia, Qatar, Sri Lanka, India, Indonesia, Kenya, Italy, and Iran. Nine studies took place in Asia, four in North America, four in Europe, and one in Africa. The majority of studies focused on low- and middle-income countries. All studies included barriers for nurses providing CPM. Most studies used semistructured interviews or focus groups, and only one study used unstructured interviews. Table 1 presents a summary of the characteristics and findings of each study.

Quality Appraisal of Included Studies

According to the criteria described in the Critical Appraisal Skills Programme checklist, the included studies were appraised as good based on their design, conduct, and clear descriptions of study aims. The relationship between researchers and participants was described in only four studies, and only three studies considered ethical issues. Four studies were unclear as to whether there were clear findings described. No studies were excluded based on quality. The critical appraisal results of the selected studies are presented in Table 2.

Study Themes and Subthemes

The results of the included studies were aggregated into 3 themes and 12 subthemes. The three themes

TABLE 1. Characteristics of Studies Included in Thematic Synthesis

Study (Country)	Methodologic Approach, Participants, Aims, Data Collection, and Analysis	Key Findings
Al-Masri et al., 2020 (Qatar)	A qualitative study of 12 nurses to explore views of, experiences with, and perceptions of patients' narcotic use related to cancer pain using 3 focus groups and thematic analysis	Overcontrolled use of drugs; patients' fear of addiction; patients' propensity to misuse drugs
Alqahtani et al., 2016 (Saudi Arabia)	An exploratory, descriptive, mixed-methods study of 35 oncology nurses to explore organizational barriers to providing effective CPM using a focus group interview and qualitative analysis	Communication barriers; cultural differences; heavy workloads; lack of knowledge; absence of health team collaboration
Bhatia et al., 2014 (United Kingdom)	A qualitative grounded theory study of 6 nonprescribing specialist palliative care nurses to explore healthcare professionals' views and experiences to elicit what they are aiming to achieve in managing pain for patients with advanced cancer using face-to-face interviews	Lack of consensus on the definition of CPM; discrepancies between CPM aspirations and patient expectations; judgmental responses to treatment challenges; failure to form a positive nurse–patient relationship
Cui et al., 2008 (China)	A qualitative study of 10 oncology unit nurses to explore their perspectives of, views about, and experiences with CPM using a semistructured interview and content analysis	Insufficient attention to cancer pain control among healthcare providers, patients, and families; lack of knowledge and skills, uniform norms for cancer pain care, and training and education; poor nurse–patient communication; strict state regulation of pain medication; socioeconomic limitations; community medical institutions not fully functional; limited awareness of nonpharmacologic interventions
De Silva & Rolls, 2011 (Sri Lanka)	A qualitative ethnographic study of 8 general RNs to explore nurses' experiences with and practices of CPM using a semistructured interview and research diaries	Poor cooperation between doctors and nurses; lack of control; knowledge deficits; poor professional nursing attitudes; pain management not perpetuated; patients' spiritual and cultural needs not being met; poor coordination between the unit and pain clinic doctors; lack of evaluation of the effectiveness of pain management programs
Eaton et al., 2015 (United States)	A descriptive, cross-sectional, mixed-methods study of 12 nurses to explore their views of and experiences with barriers and facilitators to evidence-based pain management in the inpatient oncology setting using a semistructured interview	Lack of evidence-based pain management decision-making; limited identification of evidence-based pain management practices
Ehrlich et al., 2019 (United States)	A constructivist grounded theory study of 3 full-time hospice agency nurses to scrutinize and identify problematic processes among nurses involved in the management of poorly controlled pain using an observational visit, semistructured, in-depth individual interviews, a focus group, and a survey	Difficulties with pain management because of patient dysphoria; poorly controlled pain; nurse–patient relationship discordance
Irvin, 2000 (United Kingdom)	A qualitative case study of 5 RNs to identify and describe difficulties in managing patients' pain using unstructured, in-depth interviews	Lack of knowledge about pain, pain assessment, teamwork, and specialized pain management nurses; communication barriers
LeBaron et al., 2014 (India)	A qualitative ethnographic study of 37 oncology nurses to examine barriers to opioid availability and CPM in India using in-depth, semistructured interviews	Limited nursing role in symptom management; opioid and pain management misperceptions; bureaucratic hurdles; sociocultural and infrastructural challenges

TABLE 1. Characteristics of Studies Included in Thematic Synthesis *(Continued)*

Study (Country)	Methodologic Approach, Participants, Aims, Data Collection, and Analysis	Key Findings
Onsongo, 2020 (Kenya)	A qualitative, focused, ethnographic study of 25 nurses to explore perceptions of barriers to CPM using semistructured interviews	Limited accessibility to pain management guidelines, restrictive opioid-dispensing procedures, training inconsistencies, staffing and workload, lack of a specialized oncology unit, and unavailable supplies; difficulty managing pain, fear of opioid-related side effects, and burnout; lack of formal recognition and professional collaboration; delayed treatment and patients' beliefs
Prandi et al., 2015 (Italy)	A qualitative study of 31 nurses to explore barriers to and strategies for CPM using 5 focus groups and content analysis	Importance of and difficulties in communication; the need for education on pain management; ethnic, cultural, and/or religious differences; reciprocal trust and support within the working group; burnout
Rachmawati & Afiyanti, 2018 (Indonesia)	A descriptive qualitative study of 16 oncology nurses to obtain an overview of opinions and perceptions related to pain assessment using semistructured interviews	Inconsistent pain assessment; the absence of the nursing role in pain management; lack of understanding of the problems experienced during pain assessment; failure to consider the practical and user-friendliness of pain assessment tools
Randall-David et al., 2003 (United States)	A qualitative study of 22 hospice and home healthcare nurses to elucidate factors contributing to inadequate pain management using 2 focus groups	Risk of addiction to pain medication, side effects, and misuse or withholding of medication among patients; stigma of using or prescribing pain medications, stoicism about dealing with pain, communications issues, and the belief that terminal illness means failure for patients; cost of medication; lack of education; providers not using resources; nurses and providers not willing to be educated or educate patients; patients withholding information about their pain; patients' lack of willingness to try alternative pain management techniques; nurses or providers not providing individualized care
Seyedfatemi et al., 2014 (Iran)	A qualitative study of 15 nurses to explore their views about, experiences with, and perceptions of palliative care for patients with cancer pain using a face-to-face semistructured interview and content analysis	Importance of communication; inadequate supply of drugs in special cases; importance of psychological intervention
Soden et al., 2010 (United Kingdom)	A qualitative study of 15 nurses from 5 specialist palliative care units to explore views and experiences of assessing and managing patients' breakthrough pain using a semistructured interview	Limited awareness of different categories of cancer pain; lack of systematic assessments of breakthrough pain as a specific entity; lack of a clear pathway/structure for decision-making; concerns about dosage; lack of confidence in pain control; teamwork and communication recognized as essential
Vallerand et al., 2005 (United States)	A qualitative study of 11 homecare nurses to explore perceptions of control over patients' cancer pain using a semistructured interview	The neglected role of nurses in CPM; lack of cooperation from physicians; lack of preparation and knowledge of nurses about effective pain management; lack of confidence; poor nurse–patient communication
Yu, 2012 (China)	A qualitative phenomenologic analysis of 12 oncology nurses to explore their views of and experiences with CPM using a semistructured interview	Insufficient attention to controlling cancer pain among healthcare providers, patients, and families; lack of knowledge and skills and uniform norms for cancer pain care; irregular administration of drugs; poor adherence among patients and families; economic restrictions

TABLE 1. Characteristics of Studies Included in Thematic Synthesis *(Continued)*

Study (Country)	Methodologic Approach, Participants, Aims, Data Collection, and Analysis	Key Findings
Zhao & Qiang, 2018 (China)	A qualitative phenomenologic analysis of 12 senior oncology nurses to explore their experiences in the care of patients with advanced cancer and breakthrough pain using a semi-structured interview	Enhanced psychological care; improved nurse–patient relationship; documented analysis of breakthrough pain effects; increased compassion load
CPM—cancer pain management		

describing barriers for nurses providing CPM were (a) healthcare professional–related barriers, (b) patient-related barriers, and (c) organizational-related barriers (see Figure 2).

Theme 1: Healthcare Professional–Related Barriers to Providing CPM

The first theme analyzed healthcare professional–related barriers to providing CPM, including role barriers, knowledge and skill barriers, assessment barriers, communication barriers, teamwork barriers, attitude barriers, and physical and mental barriers. These barriers can be manifested as the restricted role of nurses, inadequate pain assessment by nurses, inadequate communication between nurses and physicians and between nurses and patients, inadequate teamwork, negative attitude of nurses, and burnout.

Role barriers: Four studies reported on the restricted role of nurses providing CPM (LeBaron et al., 2014; Onsongo, 2020; Rachmawati & Afiyanti, 2018; Vallerand et al., 2005). Nurses reported that they felt like invisible participants when attempting to manage patients' pain. One nurse said, "If the doctor would just listen to my opinion" (Vallerand et al., 2005, p. 649). The nurse's role in pain management is more likely to be that of a physician collaborator rather than an independent caregiver of cancer pain (Onsongo, 2020; Rachmawati & Afiyanti, 2018). One study mentioned a lack of formal recognition of pain specialist nurses (Onsongo, 2020). Most nurses had a very limited role in symptom management:

> If a patient tells me at 8:30 in the night that [they] have pain, what am I going to do about it? It's not much that the nurse can do. If she calls a physician, and there's only one physician for the 350 patients in the hospital, then for him it's not a priority. (LeBaron et al., 2014, p. 517)

Knowledge and skill barriers: Eight studies described nurses' lack of knowledge and skill in providing CPM (Alqahtani et al., 2016; Cui et al., 2008; De Silva & Rolls, 2011; Irvin, 2000; LeBaron et al., 2014; Soden et al., 2010; Vallerand et al., 2005; Yu, 2012). For example, some nurses have misconceptions about opioids and limited awareness of different types of cancer pain: "'Are you aware of any other terms that might be used?' 'No, I think I've just sort of known it as breakthrough'" (Soden et al., 2010, p. 296). Nurses rarely pay attention to psychological issues for individuals with cancer pain: "Many patients tell me that although it doesn't hurt anymore, they are still afraid because it is too painful when they are in pain" (Zhao & Qiang, 2018, p. 739).

Assessment barriers: Five studies reported that improvements in nurses' pain assessment are needed (De Silva & Rolls, 2011; Irvin, 2000; Rachmawati & Afiyanti, 2018; Soden et al., 2010; Zhao & Qiang, 2018). In one study, drug therapy effectiveness was not evaluated, and action was taken only after the nurse received complaints from the patient about pain (De Silva & Rolls, 2011). Most nurses lack understanding of the problems reported by patients during pain assessment, cannot perform a continuous assessment, and lack user-friendly and useful assessment tools: "It is reasonable that we are still performing the assessment only on superficial ground" (Rachmawati & Afiyanti, 2018, p. 517). Sometimes, nurses assessed pain based only on a single scale and patients' subjective feelings, not objectively or quantitatively. Pain also may not be documented effectively (De Silva & Rolls, 2011; Irvin, 2000; Onsongo, 2020; Rachmawati & Afiyanti, 2018; Zhao & Qiang, 2018).

Communication barriers: Nine studies mentioned communication barriers (Bhatia et al., 2014; Cui et al., 2008; Ehrlich et al., 2019; Irvin, 2000; Prandi et al., 2015; Randall-David et al., 2003; Seyedfatemi et al., 2014; Vallerand et al., 2005; Zhao & Qiang, 2018). A disharmonious nurse–patient relationship was a main

factor contributing to communication barriers. Some nurses reported discordant communication with patients, with some even choosing not to communicate: "There's quite a tension between her and her daughter, which I was not aware of. She's never really shared about that with me, and I've been her nurse for months and months" (Ehrlich et al., 2019, p. 5). Some nurses also emphasized a lack of time and appropriate places to talk to patients and families: "If the patients are alone in the room, they talk. If there are three or four others in the room, they refuse to do it" (Prandi et al., 2015, p. 73).

Teamwork barriers: Some included studies reported a lack of healthcare team collaboration in addressing patients' cancer-related pain (De Silva & Rolls, 2011; Onsongo, 2020; Vallerand et al., 2005). Despite updated guidelines and policies, barriers to collaboration between nurses and physicians can make consistently following guidelines a challenge (Alqahtani et al., 2016). Almost all nurses in the included studies indicated that they needed a physician's advice to administer medications to patients, but sometimes physicians were reluctant to prescribe medications, and physicians rarely followed nurses' advice (De Silva & Rolls, 2011; Irvin, 2000; Onsongo, 2020). Some nurses also expressed that they disagreed on CPM with physicians: "Some of the physicians do not want to order pain medicine; they say if we give individuals with cancer morphine and their condition worsens, you are not able to assess the patient" (Onsongo, 2020, p. 5). One study reported that poor coordination between the unit and pain clinic doctors limited effective CPM (De Silva & Rolls, 2011).

TABLE 2. Quality Appraisal of Selected Qualitative Studies (N = 18)											
Study	1	2	3	4	5	6	7	8	9	10	Total
Al-Masri et al., 2020	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	8
Alqahtani et al., 2016	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	8
Bhatia et al., 2014	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	9
Cui et al., 2008	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Unclear	Yes	7.5
De Silva & Rolls, 2011	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	9
Eaton et al., 2015	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	8
Ehrlich et al., 2019	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Irvin, 2000	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	8
LeBaron et al., 2014	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	8
Onsongo, 2020	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Prandi et al., 2015	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Unclear	Yes	8.5
Rachmawati & Afiyanti, 2018	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	8
Randall-David et al., 2003	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	9
Seyedfatemi et al., 2014	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	8
Soden et al., 2010	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	8
Vallerand et al., 2005	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	8
Yu, 2012	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Unclear	Yes	7.5
Zhao & Qiang, 2018	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Unclear	Yes	7.5

Note. For each question on the Critical Appraisal Skills Programme qualitative studies checklist, studies receive 0 points (findings not supported by the data), 0.5 points (findings lack a clear association with the data), or 1 point (findings are beyond a reasonable doubt), with a total higher score indicating a lower risk of bias.

Attitude barriers: Some included studies found that nurses paid insufficient attention to pain management for individuals with cancer (Cui et al., 2008; Yu, 2012). Other studies found that nurses were not proactive about CPM and were unwilling to update their knowledge and skills, be educated, or educate their patients (De Silva & Rolls, 2011; Randall-David et al., 2003). Some nurses reported that pain management was difficult and that they had low confidence in their ability to provide pain management (Onsongo, 2020; Soden et al., 2010; Vallerand et al., 2005). One nurse said: "This myth . . . that these days palliative care is wonderful, and patients don't die in pain. It's not true" (Soden et al., 2010, p. 297).

Physical and mental barriers: Some nurses in the included studies mentioned their increased compassion burden: "I was impressed by some patients who cried to me when they were in pain and said, 'What should I do?' When I hear this, I feel very sad, too" (Zhao & Qiang, 2018, p. 739). Nurses indicated that continued exposure to death and pain might increase the risk of burnout, and this can further affect nurses' ability to provide CPM, leading to negative attitudes and reduced professionalism (Onsongo, 2020; Prandi et al., 2015): "I would like a stop for some time. I would like to be free from worrying about others for six months . . . not to manage anyone's pain . . . a bit of healthy selfishness . . . six months to breathe" (Prandi et al., 2015, p. 75).

Theme 2: Patient-Related Barriers to Providing CPM

The second theme analyzed patient-related barriers to providing CPM, including sociocultural and belief barriers—specifically sociocultural differences, patient addiction, and poor patient adherence.

Sociocultural barriers: In the studies reviewed, nurses reported that patients are reluctant to purchase pain medication if they have financial barriers (Cui et al., 2008; Randall-David et al., 2003; Yu, 2012). In addition, some patients living in remote areas had to travel between urban hospitals and their homes to obtain pain control because effective pain management was not available to them locally (LeBaron et al., 2014). One study suggested that patients' unmet spiritual and cultural needs affected nurses' management of cancer pain (De Silva & Rolls, 2011). One nurse recounted how differences in country, language, religious beliefs, cultural background, gender, and living conditions increase pain management difficulties: "A Muslim patient believed that the only therapy would be praying, praying . . . kneeling on the ground facing Mecca. They have been difficult moments to manage,

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FIGURE 2. Themes and Subthemes Developed From Selected Qualitative Studies

Healthcare Professional–Related Barriers to Providing Cancer Pain Management
- Role barriers
  □ Restricted role for nurses
  □ Lack of formal recognition of pain specialist nurses
- Knowledge and skill barriers
  □ Inadequate knowledge about cancer pain management and related nursing skills
- Assessment barriers
  □ Ineffective and inconsistent pain assessment
- Communication barriers
  □ Uncoordinated nurse–patient communication
- Teamwork barriers
  □ Lack of teamwork
- Attitude barriers
  □ Negative management attitudes
  □ Lack of confidence
  □ Inadequate psychological intervention
- Physical and mental barriers
  □ Burnout
  □ Compassion burden

Patient-Related Barriers to Providing Cancer Pain Management
- Sociocultural barriers
  □ Patients with financial difficulties
  □ Unmet spiritual and cultural beliefs
  □ Differences in country, language, religious beliefs, cultural background, gender, and living conditions
- Belief barriers
  □ Patient drug addiction, misuse, or pain tolerance
  □ Fear of opioid-related side effects
  □ Delayed treatment
  □ Low patient and family adherence

Organizational-Related Barriers to Providing Cancer Pain Management
- Resource barriers
  □ Lack of pain management knowledge and educational training
  □ Limited access to guidelines on cancer pain management
  □ Lack of evidence-based pain management decisions
  □ Insufficient supply of drugs
- Management barriers
  □ Overregulation of drugs
  □ Limited access to guidelines on cancer pain management
- Staffing structure barriers
  □ Heavy workload
  □ Lack of nurses specialized in pain management

and it was embarrassing for the other patients" (Prandi et al., 2015, p. 74).

Belief barriers: Patient dysphoria, including patients' reluctance to take pain medication for fear of addiction or side effects, can make pain management difficult (Al-Masri et al., 2020; Ehrlich et al., 2019; Onsongo, 2020; Randall-David et al., 2003; Soden et al., 2010). Low patient and family adherence are also barriers for nurses providing effective CPM (Yu, 2012). One study reported that the tendency of some patients to misuse narcotics affects the use of optimal pain medication (Al-Masri et al., 2020). Nurses have also reported that some patients are reluctant to report pain or delay treatment, which creates challenges for nurses providing CPM (Onsongo, 2020): "Individuals with cancer expect to have pain, and they're, like you said, stoic in that way that this is expected of my disease process" (Randall-David et al., 2003, p. 663). In clinical practice, patients' psychological and spiritual needs are often not met (De Silva & Rolls, 2011; Zhao & Qiang, 2018).

Theme 3: Organizational-Related Barriers to Providing CPM

The third theme analyzed organizational-related barriers, including resource barriers, management barriers, and staffing structure barriers. Specific barriers were insufficient resources, inadequate education and training, excessive drug control, and an overload of nurses.

Resource barriers: In the included studies, many nurses reported inaccurate information about managing pain, which was related to a lack of knowledge and educational training. Nurses may have limited access to pain knowledge and a lack of formal training, education, and clinical practice (Cui et al., 2008; Onsongo, 2020; Prandi et al., 2015; Randall-David et al., 2003). Some nurses reported that access to CPM guidelines was limited and untimely, and that training on pain management was offered irregularly (Onsongo, 2020). Nurses reported that they lack evidence-based practice related to pain management (Soden et al., 2010): "I don't really individually seek out evidence-based practices to try to implement on my own" (Eaton et al., 2015, p. 8). Inadequate resource barriers were also reflected in an insufficient supply of drugs in special cases reported by some studies (Onsongo, 2020; Seyedfatemi et al., 2014).

Management barriers: Nurses in the reviewed studies claimed that opioid prescriptions are highly regulated in many countries. As a result, patients who had been discharged needed to frequently revisit the hospital to renew their prescriptions, which can compromise pain control (Al-Masri et al., 2020; Cui et al., 2008; LeBaron et al., 2014; Onsongo, 2020). One study reported that pain management is perpetuated, and there is limited validation of evidence-based pain management practices (De Silva & Rolls, 2011). In addition, the lack of specialized oncology departments in some private hospitals was not conducive to standardized CPM by nurses: "If the private wing developed an oncology ward, trained more palliative care nurses, and equipped the unit with enough personnel, then our work will be easier" (Onsongo, 2020, p. 4).

Staffing structure barriers: Oncology nurses carry a heavy workload, juggle many other clinical care tasks, and need to deal with a variety of nursing emergencies, all of which can affect their ability to provide high-quality CPM to patients. Staffing structure barriers included a lack of sufficient time for nurses to assess and document pain, limited time to provide health education, and an inability to administer timely pain medications to patients as prescribed by their doctors (Alqahtani et al., 2016; Onsongo, 2020). A heavy workload can cause negative emotions among nurses, affect management attitudes toward patients (Onsongo, 2020), and lead to decreased use of nonpharmacologic interventions for pain, as well as cause nurses to fail to manage patients' pain needs accordingly: "If we have many tasks to do in one day at the oncology unit, nurses will not deliver the quality of nursing care to individuals with cancer in pain" (Alqahtani et al., 2016, p. 83). Some studies mentioned a lack of pain management specialist nurses (Irvin, 2000; Randall-David et al., 2003). Specialized oncology pain specialists are not established in underdeveloped countries and regions (Onsongo, 2020).

Discussion

Eighteen studies were included in this systematic review, which provides a comprehensive analysis of different perspectives on nurses' barriers to CPM. The findings show that there are still many barriers to providing CPM. Nurses struggle to meet evolving pain care goals with limited resources and time, as well as lack confidence in CPM processes. Despite the ongoing policies and guidelines promoting CPM, the role of nurses in CPM is often limited. Cultural beliefs and misperceptions of patients and families also create uncertainty and challenges for nurses providing pain management.

All included studies focused on nurses' ability to provide care for cancer pain. Some nurses in the included studies were from low- and middle-income countries (Al-Masri et al., 2020; Alqahtani et al., 2016; Cui et al., 2008; De Silva & Rolls, 2011; LeBaron et al., 2014; Onsongo, 2020; Rachmawati & Aifanti, 2018; Seyedfatemi et al., 2014; Yu, 2012; Zhao & Qiang, 2018) and had fewer resources available and accessible to them compared to nurses in high-income countries. Optimal treatment of cancer pain should be emphasized as a priority for low- and middle-income countries (Li, Aninditha, et al., 2018), and there should be a concerted effort to strengthen global interprofessional collaboration to remove barriers to effective cancer care and treatment. In addition, CPM challenges faced by nurses are likely to manifest in other healthcare practitioners, patients, and families, so collaboration among the healthcare system can facilitate improved CPM.

Although many quantitative and qualitative studies have been conducted, this is the only qualitative systematic review exploring nurses' barriers to providing CPM. A systematic review by Makhlouf et al. (2020) of populations of healthcare professionals, patients, caregivers, and the public explored attitude and knowledge barriers to CPM. The current study's authors recognized that a deeper understanding of these barriers was needed so that CPM can be incorporated into routine care. Therefore, based on the findings of this systematic review, interventions need to be developed to address existing barriers in CPM practices.

Limitations

Because the studies included in this review were conducted in hospitals in 11 different countries, study participants came from different medical backgrounds, cultural perspectives, and beliefs, all of which may have influenced the integration of the study findings. Although the overall quality of the 18 studies was relatively high, most of the studies were conducted in Asian countries and may not fully summarize the barriers for nurses providing cancer pain care globally. In addition, because the authors of this review are mainly from China, awareness bias may have influenced the identified themes. The aggregated findings need to be further explored. This systematic review describes factors that are barriers for nurses providing CPM. Therefore, these results may tend to report negative findings from the studies reviewed. In the future, further refinement and integration of qualitative studies of different

KNOWLEDGE TRANSLATION

- Nurse managers and healthcare leaders can address nurses' barriers to providing cancer pain management (CPM) to ensure adequate support for patients.
- Developing appropriate CPM interventions can bridge the gap between practice and theoretical knowledge.
- Strengthening interprofessional cooperation and building good relationships with patients can help nurses optimize CPM and improve outcomes for patients.

methodologies can enhance the sources and quality of evidence.

Implications for Nursing and Research

Nurses play a key role in controlling and managing patients' pain and symptoms, which requires the skills and clinical judgment to assess and anticipate patients' pain needs, identify the source of the symptoms, create and administer the care plan, and evaluate treatment outcomes (Remy et al., 2020). However, there are still misconceptions about CPM among nurses, insufficient mastery of relevant knowledge and skills, and poor education and training on CPM (Admass et al., 2020; Alnajar et al., 2019; Yu et al., 2021). Although pain was once considered the fifth vital sign, resource and education disparities in different countries and regions of the world have resulted in global inequities in the skills needed to effectively assess pain in individuals with cancer, with nurses in resource-poor healthcare settings not having access to specialized cancer pain care education and training (Beck et al., 2016). Therefore, it is necessary to take advantage of the range of resources from global regional medical centers, use technology to take advantage of remote education, build an information platform for specialized oncology care, and extend standardized pain assessment methods and management skills globally.

Developing an electronic cancer pain assessment system can improve symptom assessment (Liu et al., 2021). Nurses need to observe not only pain-related behaviors and discomfort to assess the presence of pain but also consider and evaluate all components of assessing pain, such as psychosocial pain (Fallon et al., 2018). Hospital administrators can strengthen training for pain specialist nurses to improve nurses' cancer pain care assessment and management skills so that CPM will be consistent across different countries. Establishing a standardized

pain management program can also improve quality of care. Strengthening global, multicenter, and interprofessional collaboration can promote standardized CPM.

The findings of this systematic review suggest that communication and collaboration among healthcare professionals within oncology units are suboptimal and that there are barriers to nurse–patient communication. The complex and changing hospital environment poses challenges for teamwork and communication. Hospital administrators can promote a collaborative healthcare environment by developing innovative models of interprofessional teamwork that allow healthcare professionals, patients, and caregivers to share healthcare information (Li, Talari, et al., 2018). In addition, teamwork training can enhance healthcare professionals' communication skills. Oncology nurses are central to patient–clinician communication, which is necessary to effectively describe pain as experienced by patients with cancer (Kurtin & Fuoto, 2019). It is necessary for oncology nurses to master communication skills with patients. Nurses also need to encourage patients to express themselves, listen to themselves, and make shared decisions with caregivers about treatment options. Patient dysphoria and cognitive differences affect nurses' ability to provide CPM, so it is recommended that nurses proactively understand patients' cultural beliefs, identify patients' mental health status, and optimize the nurse–patient relationship. The findings also suggest that pain-related health education for patients is lacking among oncology nurses. One approach to address this issue is therapeutic patient education, which allows patients to develop skills to better manage their pain (Prevost et al., 2019).

The heavy workload of nurses was a common problem reported in the included studies. If nursing managers struggle with assigning work appropriately, it may affect nurses' attitudes toward CPM and cause negative emotions (Onsongo, 2020). Therefore, more nurses specialized in CPM are needed. Existing interventions may be effective in improving knowledge but not attitudes (Bartoszczyk & Gilbertson-White, 2015). Improvements are needed in nurses' awareness and action in managing care for cancer pain. Nurses' attitudes toward and self-confidence in managing cancer pain can also be improved by having expert, practicing pain specialist nurses serve as role models (Bartoszczyk & Gilbertson-White, 2015). Psychological interventions can also be provided to help relieve nurses' compassion burden and work stressors.

Conclusion

This systematic review of 18 qualitative studies from 11 different countries used a pooled and integrated approach to summarize nurses' perspectives of and experiences with barriers to providing CPM. The review also identified potential factors affecting nurses' ability to provide adequate CPM. Barriers for nurses providing CPM stemmed from factors such as inadequate social support, communication barriers, poor teamwork, role limitations, negative management attitudes, and cognitive differences. Nursing managers and other healthcare leaders can intervene to address these barriers, encourage nurses to take an active role in CPM for patients, and provide better support and training for pain specialist nurses.

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