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The role of compassion, communication, and teamwork on missed nursing care in the oncology units: findings of a scoping review

Rola współczucia, komunikacji i pracy zespołowej, a brakująca opieka pielęgniarska na oddziałach onkologicznych: wyniki z zakresowego przeglądu piśmiennictwa

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STRESZCZENIE

ROLA WSPÓŁCZUCIA, KOMUNIKACJI I PRACY ZESPOŁOWEJ, A BRAKUJĄCA OPIEKA PIELĘGNIARSKA NA ODDZIAŁACH ONKOLOGICZNYCH: WYNIKI Z ZAKRESOWEGO PRZEGLĄDU PIŚMIENNICTWA

Wprowadzenie. Brakująca opieka pielęgniarska obejmuje często (missed nursing care – MNC) to pomijanie lub opóźnianie opieki, wynikające z problemów systemowych, szczególnie groźne w onkologii, obciążające pacjentów i pielęgniarki.
Cel pracy. Opracowanie mapy i podsumowanie badań empirycznych – jakościowych, ilościowych i mieszanych – dotyczących roli współczucia, pracy zespołowej i komunikacji w multidyscyplinarnej opiece pielęgniarskiej wśród pielęgniarek onkologicznych.
Materiał i metody. Przeprowadzono przegląd zakresu badań zgodnie z ramami metodologicznymi Arksey i O'Malley. Przeprowadzono systematyczne przeszukiwanie pięciu elektronicznych baz danych: PubMed, Scopus, Web of Science, CINAHL i ProQuest (Health and Medical Complete), a także ręcznie przeanalizowano listy referencyjne uwzględnionych artykułów w celu zidentyfikowania dodatkowych badań. Kwalifikujące się badania miały charakter empiryczny (metody jakościowe, ilościowe lub mieszane), zostały opublikowane w recenzowanych czasopismach i napisane w języku angielskim. Uwzględniono również tzw. grey literature, w tym rozprawy doktorskie. Dane zostały przedstawione w formie wykresów i przeanalizowane przy użyciu podejścia opartego na syntezie narracyjnej.
Wnioski. Niniejszy przegląd sugeruje, że praca zespołowa i komunikacja mają wpływ na występowanie zaniedbań w opiece pielęgniarskiej w onkologii, chociaż obecna baza dowodów pozostaje fragmentaryczna i ograniczona. Warto zauważyć, że kwestia współczucia nie została wystarczająco zbadana, a istniejące badania dotyczące komunikacji i pracy zespołowej często pomijają relacyjne i etyczne aspekty praktyki pielęgniarskiej, co podkreśla potrzebę przeprowadzenia bardziej kompleksowych badań.

Słowa kluczowe: onkologia, komunikacja, praca zespołowa, współczucie, brakująca opieka pielęgniarska

ABSTRACT

THE ROLE OF COMPASSION, COMMUNICATION, AND TEAMWORK ON MISSED NURSING CARE IN THE ONCOLOGY UNITS: FINDINGS OF A SCOPING REVIEW

Introduction. Missed nursing care (MNC) refers to the omission or delay of care resulting from systemic problems, which is particularly dangerous in oncology and places a burden on patients and nurses.
Aim. To map and summarize empirical studies–qualitative, quantitative, and mixed methods–examining the role of compassion, teamwork, and communication in multidisciplinary nursing care among oncology nurses.
Material and methods. A scoping review was conducted following Arksey and O'Malley's methodological framework. Five electronic databases: PubMed, Scopus, Web of Science, CINAHL, and ProQuest (Health and Medical Complete) were systematically searched, and the reference lists of included articles were manually screened to identify additional studies. Eligible studies were empirical (qualitative, quantitative or mixed methods), published in peer-reviewed journals and written in English. Grey literature, including dissertations, was also considered. Data were charted and analyzed using a narrative synthesis approach.

Conclusions. This scoping review suggests that teamwork and communication influence the occurrence of missed nursing care in oncology, although the current evidence base remains fragmented and limited. Notably, compassion is underexplored, and existing research on communication and teamwork often overlooks the relational and ethical dimensions of nursing practice, underscoring the need for more comprehensive investigation.

Key words: oncology, communication, teamwork, missed nursing care, commpassion

INTRODUCTION

Missed nursing care (MNC) refers to any aspect of required patient care that is either partially or completely omitted, delayed, or skipped [1]. MNC is often due to systemic problems such as staff shortages, excessive workload, poor work organization, inadequate team communication and lack of emotional support [2]. MNC is a major problem in healthcare as it negatively impacts patient outcomes, reduces nurses' job satisfaction and contributes to stress and negative emotional experiences [3,4]. This issue is particularly important in oncology departments due to the complexity of the patient's condition and the high demands placed on nursing care [5]. Oncology nurses are responsible for providing care that holistically addresses the diverse needs of patients and their families, needs that often exceed those encountered in other clinical settings. This includes not only physical care (e.g. pain management, medication administration, infection prevention, nutrition, hygiene and mobility), but also emotional support, psychosocial care, spiritual support and the provision of clear, compassionate information [6].

The prevalence of cancer patients, which is constantly increasing worldwide, has a negative impact on healthcare systems and especially on care services [7]. Patients with cancers require multidimensional and comprehensive care, ranging from preventive measures to reduce the risk of infection to the provision of adequate information and psychosocial support. However, research suggests that in certain oncology settings, patients may perceive the level of individualized care they receive as limited [8]. These perceptions may not be universal and can vary depending on contextual factors such as the healthcare system, available resources, and patient–provider communication practices. As reported in the literature, nurses in environments with insufficient resources focus only on specific interventions and struggle to meet the needs of all patients [9,10]. This situation results in basic nursing interventions being neglected, delayed, incompletely or not fully implemented and delivered with lower quality [1,11,12,13]. These MNC interventions may result in patient suffering that could otherwise be prevented, unmet needs, and negative impacts on patient safety and the quality of care [14,15]. When assessing the care needs of patients in oncology units together with the increasing workload of nurses, it can be said that this patient group is more likely to encounter MNC. Therefore, it is necessary to develop systematic strategies to improve the quality of care.

Emerging evidence suggests that communication and teamwork are critical,yet often underestimated,determinants of missed nursing care (MNC), both in general and in oncology settings. Ineffective communication, widely identified as a key contributor to MNC, can hinder coordination, delay clinical interventions and increase the risk of adverse events, particularly in the complex and emotionally demanding context of oncology [16,17]. Similarly, strong teamwork has been identified as a protective factor against MNC, being associated with higher nurse satisfaction, improved continuity of care, and better patient outcomes [18].

In parallel, compassion is increasingly recognized as a fundamental dimension of high-quality nursing care. A lack of compassionate care may lead nurses to focus predominantly on technical tasks at the expense of holistic, patient-centered care, resulting in reduced emotional support, diminished patient autonomy and depersonalized care [5]. However, in the context of healthcare delivery, compassion is often not operationalized as a standalone measurable variable but rather manifests through interpersonal processes, particularly communication and teamwork. Accordingly, communication within the therapeutic team, collaborative practices, and the expression of compassion toward patients and colleagues are closely intertwined and jointly shape care quality.

However, despite advances in MNC research, there remains a gap in understanding how all these factors, such as compassion, interpersonal communication skills and teamwork, contribute to MNC, particularly in oncology. Addressing this gap is critical to developing targeted, evidence-based interventions aimed at improving patient care and promoting both caregiver well-being and teamwork.

AIM

The aim of this scoping review is to identify and summarize empirical studies-qualitative, quantitative, and mixed methods – examining the role of compassion, teamwork and communication in multidisciplinary nursing care (MNC) among oncology nurses. The review will consider studies across diverse healthcare systems to capture both international perspectives and context-specific insights.

METHODS

Design

A scoping literature review was conducted and is reported here in accordance with the Preferred Reporting Items for Systematic reviews and Meta-Analyzes extension for Scoping Reviews (PRISMA) checklist [19]. The review was conducted according to the six steps of Arksey and O'Malley's methodological framework: (i) identification of the research question and (ii) relevant studies; (iii) selection of studies, (iv) collection of data, (v) collation, summarization and reporting of results, (vi) consultation (optional)

(Arksey and O'Malley, 2005) [20]. In addition, this review was registered on the OSF platform (registration DOI: https://doi.org/10.17605/OSF.IO/R6EVB) to ensure transparency, reduce bias, avoid duplication and increase the credibility of the research.

Search methods

Identifying the research questions

In the preliminarily phase, the conceptual definitions of the phenomenon under study were identified and shared among the authors (Tab. 1) to design consistent research questions and define fields of investigation.

Tab. 1. Concepts under investigation

Compassion is a (a) virtue and a necessary trait of nursing and being a nurse [21]; (b) a feeling evoked by witnessing others' pain that leads to taking measures to help them [22]; (c) the human and moral dimension of care and the philosophical foundation of the nursing discipline and profession [23]. Being compassionately responsive to the care needs of patients is one of the professional standards of nursing [21].
Teamwork is the cooperative work and ability of a group of people to work efficiently to achieve a common goal [24,25]. It is based on cooperation and mutual respect, with members contributing to the achievement of the common goal according to their professional perspective and responsibilities [26]. A positive team culture fundamentally shapes the perception of psychological safety among members and fosters an environment where individuals feel safe to voice their concerns, share observations and raise issues without fear of judgment or negative consequences. Team dynamics that promote cohesion, psychological safety and shared mental models can reduce errors and improve patient outcomes [27]. In addition, well-functioning teams characterized by mutual respect, clearly defined roles, structured communication, and relationship-based coordination are associated with improved safety and lower error rates [28].
Communication is a fundamental component of nursing practice across all clinical settings and professional functions, serving as a conduit for the delivery of compassionate care and the facilitation of interprofessional collaboration [29]. It can be defined as the purposeful and dynamic exchange of information, emotions and understanding between nurses, patients, and the healthcare team, with the goal of ensuring safe, compassionate and patient-centered care. As an essential professional competency, communication enables nurses, particularly in oncology settings, to address the complex emotional, informational, and psychosocial needs of patients, thereby supporting their coping with illness, treatment adherence, and overall well-being [30].

Secondly, the review question was defined as follow: "What is known from the empirical literature about the role of compassion, teamwork, and communication in relation to MNC among oncology nurses?" Five main sub-questions were additionally established as follow:

1. What are the main characteristics of existing studies that explore compassion, teamwork and communication in oncology nursing?
2. How have the roles of compassion, teamwork and communication in relation to MNC among oncology nurses been examined in the literature?
3. What gaps exist in the current international literature regarding compassion, teamwork, communication, and MNC in oncology nursing and what areas warrant further research?

The rationale for the three research questions was as follows: (a) compassion is typically divided into three sub-processes: cognitive (perceiving), moral (feeling or empathizing), and behavioral (responding) dimensions. Each of these sub-processes is inherently communicative and involves intersubjective sense-making between the person offering compassion and the person receiving it; (b) the effective teamwork involves collective practices of compassion embedded in a "care-taking system" in which all member work together to mitigate burnout and emotional distress by sharing significant stresses in the workplace [31]. These factors may interact with each other and thus influence the relationship with the patients and the MNC, but also the processes enacted by the teamwork, the support given to each nurses in delivering the expected care, the work environment and the communication.

Identifying relevant studies

Studies were identified by searches independently conducted by two researchers (A.B. and P.B.) on January 28, 2025, in the electronic databases PubMed, Scopus, Web of Science, CINAHL and ProQuest (Health and Medical Complete). The searches were tailored to the specific databases, with inclusion criteria using keyword groups such as compassion, compassionate, teamwork, collaboration, communication, MNC, unfinished care, implicit rationing of care, implicit rationing, rationing of care, rationed care, and the prioritization process, omitted care, unfinished task, with the use of Boolean operators and various combinations. Example of search string in CINAHL database is included in Table 2.

Tab. 2. Exemple of search string in CINAHL database

CINAHL (date=28.01.2025, 10:11)		
Search number	**Query**	**Results**
S20	S17 AND S18 AND S19	4
S19	S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16	891
S18	S1 OR S2 OR S3 OR S4 OR S5	321,414
S17	TI oncology OR AB oncology	73,211
S16	TI task undone OR AB task undone	1
S15	TI task left undone OR AB task left undone	0
S14	TI omitted nursing care OR AB omitted nursing care	2
S13	TI prioritization process OR AB prioritization process	106
S12	TI rationed care OR AB rationed care	8
S11	TI rationing of nursing care OR AB rationing of nursing care	69
S10	TI implicit rationing OR AB implicit rationing	98
S9	TI implicit rationing of nursing care OR AB implicit rationing of nursing care	37
S8	TI unfinished care OR AB unfinished care	18
S7	TI unfinished nursing care OR AB unfinished nursing care	36
S6	TI missed nursing care OR AB missed nursing care	22
S5	TI communication OR AB communication	155,258
S4	TI collaboration OR AB collaboration	90,123
S3	TI teamwork OR AB teamwork	9523
S2	TI compassionate OR AB compassionate	3502
S1	TI compassion OR AB compassion	8304

For additional searches, the reference list of articles included in this review was manually screened by two researchers (A.B., P.B.). In case of disagreement between researchers, the remaining researcher (B.D) was asked for consensus.

According to the framework of Peter et al., which refers to population (P), concept (C1) and context (C2), the inclusion criteria were set as follows: the study was considered eligible if it (P) included oncology nurses as its population, (C1) it focused on the role of compassion, teamwork and communication on MNC, (C2) in oncology settings [32]. Additionally, empirical studies (qualitative, quantitative or mixed methods) published in a peer-reviewed journal and written in English were considered as inclusion criteria. In addition, grey literature and dissertations were also included in the study.

We excluded studies that reproduced editorials, commentaries, study protocols and reviews that referred to populations or settings other than oncology nurses and departments, that did not refer to the impact of compassion, teamwork and communication on MNC, and that did not report outcomes related to MNC.

Selecting the studies

All the eligible studies were uploaded into the reference manager system RAYYAN AI. Using this system and the visual inspection, duplicate articles (n = 10) were detected and removed. After elimination of the duplicate studies, the study selection process was divided into two different phases to ensure a systematic selection process. In the first phase, a total of 10 studies were further assessed by reviewing their titles and abstracts against the predefined inclusion and exclusion criteria. This process was conducted independently by two researchers (A.B., P.B.) with three options (include, exclude, maybe). Before the second phase, a third researcher (B.D.) was consulted to reach a consensus in case of disagreement about the inclusion of a study. In the second phase, the remaining five studies were examined in detail by reading the full texts, with all researchers participating in the review. Data collection was guided by research questions. In this phase, some articles were excluded, for example, after a detailed assessment of their summaries and conclusions to determine their relevance to the research focus. At the end of the second phase, the reference lists of all included studies were reviewed by two researchers, and in case of conflict between two researchers, the opinion of a third researcher was sought. Subsequently, the reference lists of the included studies were manually screened by all researchers to ensure search completeness, which resulted in the inclusion of two additional eligible studies [5,6]. In total, seven studies were included: five from the database screening and two from reference list screening. The data selection process was summarized in a PRISMA flowchart (Fig. 1) [33].

Charting the data and (v) collating, summarizing, and reporting results

All eligible studies were subjected to a data extraction process. The extraction grid consisted of (i) author(s), year, country; (ii) aim, study design; (iii) participants, sample size, setting; (iv) data collection, tool(s), time; and (v) main outcomes related to MNC in three factors as follows compassion, teamwork, communication (Tab. 2).

First, one randomly selected study was extracted by two researchers independently and shared with all researchers to determine the extraction process and test the data extraction grid. Then, the remaining six studies were

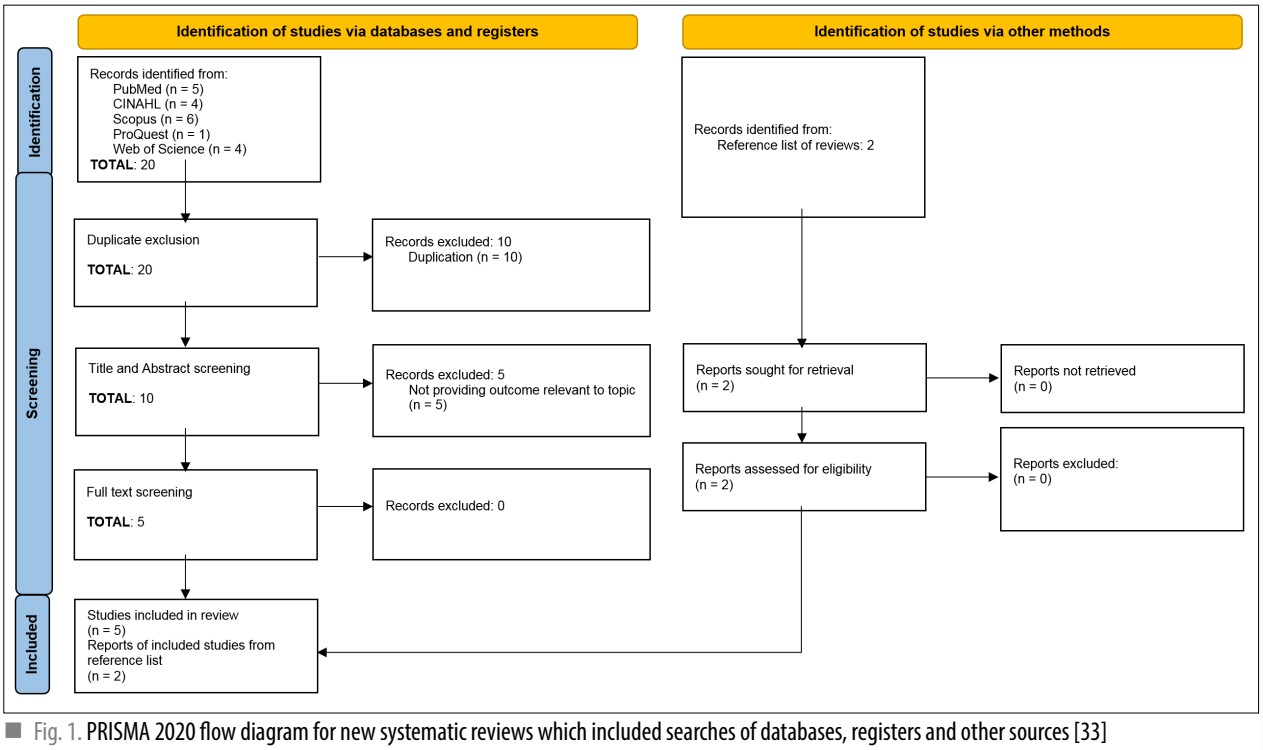

Fig. 1. PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources [33]

divided into two groups (3-3) between two researchers (A.B., P.B.). They performed the data extraction independently and exchanged information to check the data. In case of conflicts, the third researcher (B.D.) was consulted to reach a consensus.

The data were analysed using a convergent integrated methodology, whereby findings from qualitative, quantitative and mixed-methods studies were transformed into a compatible format (primarily through qualitizing quantitative results into textual descriptions) and then integrated in order to reflect shared concepts across study types [34]. In the final phase, these categories were aggregated to produce synthesized findings, which were presented in both systematic and narrative form.

Consultation

A consultation was conducted by purposefully identifying an expert in this field of research (A.P.), selected from among the top 20 most prolific authors in the area of MNC over the past years [35]. The expert was provided with a draft of the research protocol and preliminary findings, and written feedback was gathered. This consultation contributed to refining the scope of the review by highlighting underexplored areas, suggesting additional conceptual frameworks to interpret the findings, and validating the relevance of the categories identified. The insights helped strengthen the discussion, particularly in relation to gaps in existing research and directions for future studies.

Data synthesis

First, the characteristics of the included articles were systematically described, such as the context of the studies, the profile of the participants, the methodology used and the measurement instruments. Then, in line with the research questions, the relationship between the variable's "compassion", "teamwork" and "communication" and "MNC" in oncology units/departments was examined using the narrative synthesis method.

The narrative synthesis approach aimed to develop a holistic understanding of the findings by thematically highlighting similarities and differences [36]. In this process, the effects of each variable on the MNC were comparatively analyzed and synthesized. In addition, a content gap analysis was conducted by reviewing the literature studies we received [20]. This analysis provided insight into what types of studies were conducted on this topic, what situations they focused on, and what types of topics were limited. In this way, both the extent of the existing literature was mapped and the priority needs for future research were identified.

RESULTS

Characteristics of studies

As indicated in Table 3, seven studies published between 2015 and 2025 were considered [6,18]. Three studies were conducted in Europe (e.g. in Portugal), two in Asia (e.g. in Taiwan) and the others in the Middle East (in Iran) and South America (in Brazil) [5,16,17,37]. Five studies used a quantitative study design and the remaining two used a qualitative study design [5,6,16-18,38].

All studies were conducted in oncology departments, either in monocentric or multicenter centers. In monocentric studies, the study setting was typically designated as "cancer center hospital" (n=2), "oncology hospital" (n=1) or "large private hospital" (n=1) [16,18,37,38]. In multicenter studies, three university hospitals (n=1), two hospitals (n=2) and in the remaining two "hospitals" without specifying the number were included [5,6,17,18].

The number of nurses involved ranged from 10 to 583 [17,38]. The nurses were senior nurses, educational and clinical supervisors, specialist nurses, nursing technicians, team leaders, supervising nurses [5,16-18,37,38]. In addition, one study involved associate professors of nursing, and one study did not specify the role of the nurses involved [6,38].

Across the included studies, the educational requirements for participants varied. In one study, a minimum of a bachelor's degree was required, while two studies specified a technical degree as the eligibility criterion [5,37,38]. In most studies, participants held at least a bachelor's or a master's degree [6,17,18]. However, one study did not report the educational level of the participating nurses [38].

In three studies, most participants were between 25 and 34 years old [6,37,38]. In the remaining four studies, the average age ranged from 33.7±7.1 to 39.45 ± 9.50 years [16,18]. In addition, the majority of participants in all studies were female.

In five studies, participants had at least three months (=1), six months (=1) and 12 months (=3, e.g. Paiva et al.) experience in oncology departments [17,37,38]. Moreover, most of them had more than 10 years of experience in Papastavrou et al., between 6-10 years in the studies by Xu et al., between 6-23 years in studies by Dehghan-Nayeri et al., between 2-17 years in one, between 0-35 years in one, between 6 months and 27 years in one and less than 2 years in one [5,6,16-18,37,38].

The MISSCARE questionnaire was used in four studies with different types of instruments such as the Communication Satisfaction Questionnaire, the Nursing Decision-Making Instrument and the Ten-Item Personality Inventory [6,17,18,37]. In addition to the MISSCARE questionnaire, one study used the Teamwork Scale, the Professional Identity Scale and the Self-Assessment of Nursing Deficiencies in the Oncology Department Scale to collect data [38]. In addition, interviews and focus groups were conducted in the two other qualitative studies [5,17]. Furthermore, the years of data collection range from 2014 to 2023, although two studies do not provide these dates [5,6,18,38].

Compassion and MNC

With the exception of one study, none of the included studies reported information on compassion and MNC in oncology departments [5]. In this qualitative study, nurse managers observed that some nurses demonstrated a lack of compassion, focusing primarily on technical procedu-

res and tests while overlooking patients' emotional and holistic needs. This absence of compassion was described as neglect of patient needs, arbitrary prioritization of care, and a decline in overall service quality (Tab 3).

■ Tab. 3. Key characteristics and main outcomes of included studies

Author(s) Year Country	Aim Study design	Participants Sample size Setting	Data collection Tool(s) Time	Main findings related to MNC		
				Compassion	Teamwork	Communication
Dehghan-Nayeri, N., Shali, M., Navabi, N., Ghaffari, F. 2018 [5] Iran	To determine factors affecting missed nursing care in oncology units from the perspective of nurse managers. An inductive qualitative content analysis.	20 nursing managers in oncology units by purposeful sampling with at least having bachelors' degree and at least 12 months working as a nurse manager at three university hospitals. Roles: • 10 head nurses • 2 educational supervisor • 4 clinical supervisor • 4 chief nurse manager Gender:70% females Age: Mean 34.13 ± 6.02 years Experience working in oncology units: from 6 years to 23 years.	Data saturation is followed to stop collecting data. Using audio-recorded in 20 individual interviews and 2 focus group with nursing managers. Time://	Some nurses lack a caring attitude, focusing more on test results like doctors rather than fulfilling their core role of patient care and accountability. This attitude leads to patients' needs being ignored, priorities being determined arbitrarily and service quality being reduced.	Most participants felt that teamwork boosts productivity and improves nurses' skills and attitudes, helping doctors better understand nursing roles and reducing missed care. Fear of losing the patient's or colleagues' trust, doctors' orders not recorded in nursing records, nurses not included in patient care decisions, visiting times not coordinated with nurses may cause MNC.	Strained relationships between managers and nurses may cause MNC. For cultural or private reasons, communication between patient and nurse is restricted, causing care to be delayed or skipped altogether. The lack of communication between doctor-patient and nurse results in nurses not being able to fully participate in the care process and leads to MNC.
Paiva, I.C.S., Amaral, A.F.S., Moreira, I. 2021 [17] Portugal	To identify strategies perceived by the nurses in an oncology hospital to minimize MNC. Exploratory, descriptive, cross-sectional study with a qualitative approach .	10 nurses working medical specialty inpatient wards for more than 1 year at an oncology institution. through the environmental sampling technique. Roles: 20% specialist nurses Gender: 80% females Age: ranged from 27 to 49 years (mean: 37.90 ± 6.33 years) Experience working in oncology units: Varied from 2 years to 17 years (mean: 11.9 ± 5.5 years). Educational level: 20% had master's degree.	A self-administered questionnaire A semi-structured interview script Time: From 5 September to 9 October 2018	//	Lack of ability to seek help and work together within the team can reduce the holistic assessment of critical incidents. Regular and structured team feedback on nurses' interventions increases professional development and team collaboration. Interdisciplinary collaboration and the working of all health professionals towards a common goal positively affects the quality of care. Shared reflection and open communication within the team make it easier for nurses to recognize their mistakes in care and prevent repetition.	Lack of method in shift handovers can disrupt continuity of care and cause MNC Lack of communication within the team leads to problems such as difficulty in asking for help and failure to learn from critical events Sharing quality indicators and regular feedback can increase motivation and prevent MNC Good leadership and democratic management increase the quality of care by strengthening team communication and cooperation Coordination of bureaucratic work by a nurse allows nurses to focus on care priorities Strong communication with medical teams is essential for effective and complete care

cont. Tab. 3. Key characteristics and main outcomes of included studies

Author(s) Year Country	Aim Study design	Participants Sample size Setting	Data collection Tool(s) Time	Main findings related to MNC		
				Compassion	Teamwork	Communication
Paiva, I.C.S., Ventura, F.I.Q.S., Vilela, A.C.L., Moreira, I.M.P.B. 2025 [18] Portugal	To define MNC and factors for the influence of nurses' decision-making and personality traits on MNC. A cross-sectional, multicentric, descriptive-correlational study.	298 nurses working in two Portuguese hospitals dedicated to cancer care by convenience sample. Roles: 82.6.% nurses and 16.4% specialized nurses Gender: 85.6% female Age: ranged from 23 to 65 years (mean: 39.45 ± 9.50 years) Experience working in oncology units: varied from 0 years to 35 years (mean: 11.67 ± 9.54 years). Educational level: 81.7% had bachelor's degree	Portuguese versions of the MISSCARE Survey Nursing Decision-Making Instrument Ten-Item Personality Inventory Time: From 16 January to 16 August 2023	//	Nurses' satisfaction with teamwork was found to be a protective factor for MNC. "Satisfaction with the level of teamwork" was negatively correlated with MNC (r=–0.146; p=0.012). Lack of communication within the team can lead to disruption of care: "Tension or communication breakdowns with the medical staff" was identified as an important cause for MNC. Nurses' communication problems with the medical team (in the plans of action stage) during the analytical decision-making process increase MNC (r=0.141; p=0.015).	"Team communication" is among the causes of MNC, but its effect is less than other factors (2.63±0.58). There is a negative correlation between the first stage of the decision-making process (data collection for patient assessment) and team communication (r=-0.138; p=0.017): this indicates that MNC may be high at the beginning of the decision-making process due to poor communication skills. The personality trait of emotional stability is associated with lower communication-related MNC (r=0.158; p=0.006), meaning that emotionally stable nurses experience fewer errors due to communication problems.
Pan, S.P., Lin, C.F. 2020 [37] Taiwan	To understand the relationship between organizational communication satisfaction and missed nursing care in six oncology wards. A cross-sectional study.	111 valid questionnaires; nurses who were >20 years old and had worked in the six oncology wards for >3 months at a stand-alone cancer centre hospital in Taipei. Gender: 100 % females Age:46.2% between 26–34 years Education level: • 11.3% Nursing school • 88.7% University/2-year technical program/ 4-year technical program Roles: • 65.1% Registered nurse • 34.9% Registered nurse and team leader Work shift: • 64.2% day shift • 35.8% graveyard shift Number of years of nursing experience: 34 % ≤2 years Shift type: 98.1 % 12 hr	Two instruments: • Communication Satisfaction Questionnaire • The MISSCARE questionnaire Time: December 2018 (in two weeks)	//	//	The first three factors influencing organizational communication satisfaction are the following: • the degree of work coordination between self and colleagues from one's assigned department or unit (5.52±0.89), • the degree of communication for goal completion between self and colleagues from one's assigned department or unit (5.50±0.92) • the degree of streamlined communication between self and colleagues from one's assigned department or unit (5.42±0.90). The responses indicate that communication status could lead to MNC. The items of MNC taken together were also significantly correlated to communication status (r= 0.21, p<0.05).

cont. Tab. 3. Key characteristics and main outcomes of included studies

Author(s) Year Country	Aim Study design	Participants Sample size Setting	Data collection Tool(s) Time	Main findings related to MNC		
				Compassion	Teamwork	Communication
Papastavrou, E., Charalambous, A., Vryonides, A., Eleftheriou, C., Merkouris, A. 2016 [6] Republic of Cyprus	To investigate nursing care rationing in oncology units as reported by nurses working in those units. A descriptive, co-relational, cross-sectional study.	157 self-completed questionnaires, from different hospitals. Gender: • 62.4 % Female • 37.6 % Male Age: 57.3% between 25-34 years old Education: • 4.5 % Diploma • 82.8 % Bachelor's degree • 12.7 % Masters/PhD Hours of work: 92.3% 37.5/ week or more Work experience: 33.1% between 5 - 10 years and 33.1 % more than 10 years	The MISSCARE questionnaire Time: One month in 2014	//	Most likely reasons for missed care reported: • inadequate number of staff (155, 98.7%), • Lack of back up support from team members (151, 96.2%), • Inadequate hand-off from previous shift or sending unit (148, 94.8%), • Other departments did not provide the care needed (150, 96.2%).	The most reasons of MNC on communication are the following: • tension or communication breakdowns within the nursing team (152, 96.8%), • tension or communication breakdowns with the medical staff (146, 93%), • tension or communication breakdowns with other ancillary/support Departments (152, 96.8%), • Nursing assistant did not communicate that care was not provided (150, 95.5%).
Rabin, E.G., de Silva, C.N., de Souza, A.B., Lora, A.B., Viegas, K. 2019 [16] Brazil	To determine the prevalence and the reasons for missed nursing care in inpatient oncology units. A cross-sectional study	83 nursing professionals working in three shifts at least 6 months in oncology units at a large private hospital. Roles: • 83.1% nursing technicians • 16.9% nurses Gender: 90.4% females Age: Ranged from 22 to 56 years (mean: 33.7±7.1) Educational level: • 81.9% technical qualifications • 12% postgraduate diplomas • 6% bachelor's degrees Experience working in oncology units: Varied from 6 months to 27 years (mean: 1.4).	Two self-reported instruments A sociodemographic questionnaire The MISSCARE questionnaire Time: From May to August 2017	//	//	The main reason for the existence of MNC is communication among communication, labor, and material resources. First three important reasons of MNC among communication in order: • 66.2% Tension or communication breakdowns within the nursing team (2.81±1.064) • 66.2% Caregiver responsible unavailable (2.77±1.086) • 60.2% Lack of back up support from team members (2.73±1.159) The last three communication reasons for MNC in order: • Inadequate hand-off from previous shift or sending unit (2.29±0.931) • Nursing assistant did not communicate that care was not done (2.42±1.049) • Unbalanced patient assignment per Professional (2.60±0.923)

cont. Tab. 3. Key characteristics and main outcomes of included studies

Author(s) Year Country	Aim Study design	Participants Sample size Setting	Data collection Tool(s) Time	Main findings related to MNC		
				Compassion	Teamwork	Communication
Xu, X., Jia, S., Zhang, S., Mai, X., Mao, Z., Han, B. 2022 [38] China	To investigate the status quo and influencing factors of teamwork among oncology nurses to inform strategies for improving clinical treatment effect and survival time of cancer patients. A cross-sectional study	583 nurses, working at 34 surgical wards in Henan Cancer Hospital carrying out enhanced recovery after surgery, who had worked in the ward for ≥1 year. Two groups: • 251 (43%) in the high-enhanced recovery after surgery group • 332 (57%) people in the low- enhanced recovery after surgery Roles: • 342 supervisor nurse • 229 senior nurse and below • 12 associate professors in nursing Gender: 575 females Age:389 nurses, between 25-34 years Work shift: • 64.2 % Day shift • 35.8% Graveyard shift Number of years of nursing experience: 246 nurses, between 6-10 years.	Four instruments: • The general information questionnaire • The Chinese nursing teamwork scale • The occupational identity scale • The self-assessment scale of nursing deficiency in the oncology department Time://	//	On the dimensions of team leadership, trust and support, and team mental model, professional identity and MNC had explanation rates of over 30%. In the oncology department, MNC acted as a partial mediating factor in the link between professional identity and team leadership, trust and support, and team mental model. Professional identity had the biggest impact on the team leadership component and might positively impact nursing teamwork through missed nursing care. Reduced work pressure can elicit a positive emotional response, which can lead to a more positive assessment of work environments, a decrease in nursing care missed, an increase in nurses' job satisfaction, and the encouragement of teamwork.	//

Teamwork and MNC

Only five studies addressed teamwork, and the remaining two studies did not report any data (Tab. 3) [16,37]. Effective teamwork in oncology departments contributed to nurses' professional development, increased nurse productivity, enabled physicians to understand the role of nurses, and reduced MNC [5,17]. In one study, the most frequently cited reasons for MNC in oncology were inadequate staffing, lack of team support, poor handover processes, and poor support from other departments [6]. Three studies highlighted the importance of communication within the team, finding that oncology nurses' fear of losing patient or colleagues, poor communication within the team, lack of coordination, and tension between healthcare professionals also led to increased MNC [5,18]. Regular feedback, open communication, and interdisciplinary collaboration contribute positively to the quality of care by increasing both nurses' awareness of their errors and team harmony [17]. On the other hand, one of the two different studies found that satisfaction with teamwork reduced number of MNC, while communication problems increased this rate [18]. Other studies have reported that the interaction between professional identity and the dimensions of team leadership, trust and support, and the team's mental model significantly explains the level of MNC. Furthermore, a lower workload has been found to positively influence both job satisfaction and teamwork, acting as a facilitating factor in promoting a more effective and cohesive care environment [38].

Communication and MNC

More attention is paid to the aspect of communication (Tab. 3): Only one study lacked information on this variable, while six studies provided information [38]. Their findings suggest that communication deficiencies in nursing have a significant impact on MNC. Four studies reported that communication problems are the cause of MNC and that communication gaps experienced by nurses as a team with medical staff and support departments disrupt the continuity of care and lead to MNC [6,16]. Situations such as lack of methodology in shift handover, information transfer by nursing assistants and unavailability of the nurse in charge play a crucial role in the disruption of care [16,17]. A study conducted in the Middle East reports that cultural or confidentiality-related limitations and poor communication between the patient and caregiver can also lead to delays or omitted care [5]. One study found a negative significant association between communication

deficiencies experienced by nurses in the first phase of the decision-making process (patient assessment) and MNC, suggesting that poor communication during the decision--making process may negatively affect the quality of care [18]. In addition, this study found that nurses with high emotional stability were less likely to experience communication-related MNC [18]. Another study focused on institutional communication and reported that among the factors determining satisfaction with institutional communication, the degree of open and purposeful communication with colleagues in the assigned unit was associated with MNC [37]. Dissatisfaction with the communication environment, lack of coordination within the team, and lack of leadership are among the main factors contributing to delay or omission of care [6,16,17].

Gaps in available literature

Based on the limited evidence in existing literature, including only seven studies, it can be cautiously assumed that good teamwork, communication and also compassion play an important role in reducing MNC in nurses working in oncology departments. However, there are still significant research gaps regarding the relationship between these three variables and MNC in oncology departments. Firstly, the effect of compassion on MNC was not directly expressed because the only study with a qualitative design mentioned a caring attitude, which may include not only compassion but also other affective dispositions [5]. While compassion was included as a key concept in the initial analytical framework, the available evidence predominantly focused on communication and teamwork. This raises the question of whether compassion should be treated as an equivalent variable or rather as a relational dimension embedded within these processes. In practice, compassionate care is expressed through behaviors such as attentive communication, emotional presence, and supportive collaboration. Therefore, deficits in compassion may manifest indirectly through ineffective communication or fragmented teamwork.

Although macrodynamics related to communication are often cited as one of the causes of MNC, the relative effects of individual micro communication dynamics between nurses, nurse and physician, and nurses and patients on MNC have not been studied in detail [18]. Furthermore, while the effect of teamwork in reducing MNC is highlighted, studies on how this relationship relates to variables such as organizational culture, leadership style, and institutional support are lacking. Furthermore, given the complex physical, emotional and psychosocial needs to be addressed when caring for oncology patients, there is a lack of empirical data on how the care priorities specific to this patient group are implemented by nurses, particularly in relation to the three variables investigated in this study: communication, compassion and teamwork. Finally, it is evident that theoretical models and structural analyzes that holistically address the combined effects of the variables of compassion, teamwork and communication on MNC in oncology departments are not adequately addressed in the literature. In this context, multidimensional and interdisciplinary approaches specifically tailored to oncology departments are needed.

DISCUSSION

The aim of this scoping review was to map and summarize the existing empirical evidence on the role of compassion, teamwork and communication in relation to MNC in oncology nurses. The discussion is orientated along two lines: methodological and results-oriented. Firstly, scoping reviews usually analyze a single concept or phenomenon. In our case, we have attempted a variation on the more classical models by examining three key variables that, in our experience, may influence the occurrence of MNC in the specific context such as oncology. These three variables were chosen because they are interrelated and closely linked – they act almost as proxies for understanding both the individual level (compassion) and the group level (communication and teamwork) [39]. From a methodological perspective, this approach accelerates the synthesis of literature, especially in areas where there are few publications, and it also provides a broader perspective – albeit focused on a specific setting (oncology) and on a complex set of variables that can lead to both research insights and practical implications.

Secondly, from the results perspective, the review included seven studies published between 2016 and 2025, suggesting that research in this area is scarce. The studies showed moderate global representation, with three conducted in Europe, two in Asia, one in the Middle East and one in South America. Most of these studies used quantitative designs, while two employed qualitative methods to explore nurses' experiences in more depth. Participants' demographics were consistent across all studies, with the majority being female and between 25 and 39 years old. They had different professional profiles and levels of education, ranging from technical training to master's degrees, and their oncology-specific professional experience suggests that the samples largely represented experienced nurses. In terms of data collection instruments, the MISSCARE questionnaire was the most widely used, often supplemented by other validated instruments, e.g. to measure teamwork or communication.

The scoping review revealed a significant gap in empirical research on compassion in the context of MNC in oncology nurses. Only one study, which took a qualitative approach, indirectly touched on this concept through the notion of ‚care-taking disposition', but this term likely encompasses several affective attributes beyond compassion, such as empathy, patience or professional commitment [5]. Therefore, no study has directly examined compassion as a measurable construct in relation to MNC. This absence is notable given the central role of compassion in nursing (including oncology), where emotional responsiveness and human connection are critical to meeting patients' complex needs [40]. The extensive lack of empirical data on this variable suggests that compassion is still under-theorised and under-measured in the context of MNC. This may reflect the general challenges in operationalising and quantifying compassion in nursing research [41]. These findings suggest that more theory-based, qualitatively rich studies are needed to understand how compassion, or lack of compassion, manifested in oncology setting and contributes to MNC.

Teamwork proved to be an influential factor in the context of MNC, as supported by five of the seven included studies. The results suggest that effective teamwork promotes professional development, increases productivity, fosters interprofessional understanding (especially between nurses and physicians) and contributes to the reduction of MNC [5,17]. Conversely, poor team dynamics, including inadequate staffing, limited support, ineffective handovers and breakdowns in interdepartmental collaboration, have been identified as key contributors to MNC [6]. This is in line with the recent literature review of Polish studies on care rationing, which found that effective collaboration with other team members is crucial for ensuring efficient teamwork in healthcare facilities, and improving the atmosphere of teamwork and sense of safety in the work environment which helps improving the quality of patient care and reducing the extent of care rationing [4]. A Slovakian study in acute care facilities also found a statistically significant correlation between rationed care and the level of teamwork [42].

The interaction between teamwork and communication processes within teams is particularly striking [17,18]. Our review has shown that regular feedback, open dialogue and interdisciplinary collaboration improve not only the quality of care, but also error detection and team cohesion. Links between effective teamwork and communication and lower rationing of care has been demonstrated in several studies [42,43]. Although some of the reviewed studies confirm the importance of teamwork in reducing MNC, they tend to examine it in isolation without considering its interaction with contextual variables such as organisational culture, leadership styles or institutional support mechanisms. This limits our understanding of how teamwork is shaped or constrained by the broader environment in which nurses work. For example, it is still unclear whether strong teamwork can mitigate MNC under conditions of high workload in oncology departments.

Of the three variables analysed, communication was the most frequently addressed in the included studies, with six of the seven studies reporting findings in this regard. Communication deficits, both interpersonal and institutional, contribute significantly to MNC, particularly in the patient assessment and decision-making phase [18]. Studies show that cultural barriers, lack of team coordination and poor leadership exacerbate communication problems and lead to delays or omissions in care [6,16]. In addition, nurses with higher emotional stability report fewer communication-related cases of MNC [18]. Although communication is more frequently cited in the literature as a contributing factor to MNC, the analysis remains macro-level and descriptive. Most studies emphasise systemic communication breakdowns,such as poor handovers or lack of interdisciplinary coordination,but do not unpack the micro-level communication dynamics that occur in nurse-nurse, nurse-physician or nurse-patient interactions as demonstrated in another clinical setting [44]. Consequently, little is known about how specific communication behaviours or relationship patterns directly affect care omissions, decision-making processes or task prioritisation in oncology.

Strengths and limitations

This review has several strengths and weaknesses. Firstly, although the numerous databases were searched, their selection may have led to a publication bias that limits access to certain studies. Secondly, the inclusion of only English-language publications may have restricted the representation from non-English speaking contexts,which is particularly important given that the variables under review, such as compassion and communication, may carry different mean-ings across cultural settings. To mitigate this limitation, an international research team (see authors) contributed to the review, yet the transferability of these findings across countries and health systems remains uncertain. Thirdly, unlike systematic reviews, scoping reviews do not appraise the methodological quality of included studies, and variations in study design and rigor may have influenced the robustness of the findings. Moreover, some of the key in-sights, particularly the role of compassion in MNC, were derived from a single qualitative study, which limits the strength and generalizability of this conclusion [5]. Fourthly, while variables such as compassion, teamwork, and communication were examined individually, limited evidence was available on how these elements interact in practice. The lack of inte-grated analyses within the primary studies restricted our ability to explore their interrelation-ships fully, which should be considered when interpreting the findings. Finally, the researchers' interpretation may have been influenced by the use of thematic, narrative and gap analyses, which inherently involve qualitative synthesis. To reduce this risk, expert consultation was sought to validate interpretations and highlight gaps in the evidence.

CONCLUSIONS

Based on the limited empirical evidence identified in this scoping review, comprising only seven studies, it can be cautiously suggested that communication and teamwork may influence the occurrence of missed nursing care (MNC) in oncology settings. There is also preliminary indication that compassion plays a role,but it is rarely operationalised or examined as a distinct variable. Overall, the available evidence remains fragmented and insufficient to support firm or generalisable conclusions, highlighting important gaps in the current literature.

While communication and teamwork in relation to MNC among oncology nurses have received some attention, compassion appears to be under-investigated. Moreover, even when communication and teamwork are examined, they are often addressed primarily in functional or organisational terms, with limited consideration of their relational and ethical dimensions.

Given the complexity and emotional demands of oncology care, the findings suggest the need for a more comprehensive conceptualisation of MNC that incorporates relational aspects of care, including interpersonal and social processes, as integral components of safe and high-quality practice. However, this perspective requires further empirical validation.

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REFERENCES

1. Kalisch BJ. Missed nursing care. J. Nurs. Care Qual. 2006;21(4):306-313. https://doi.org/10.1097/00001786-200610000-00006
2. Jones TL, Hamilton P, Murry N. Unfinished nursing care, missed care, and implicitly rationed care: state of the science review. Int. J. Nurs. Stud. 2015;52(6):1121-1137. https://doi.org/10.1016/j.ijnurstu.2015.02.012
3. Kalisch BJ, Landstrom G, Williams RA. Missed nursing care: errors of omission. Nurs. Outlook. 2009;57(1):3-9. https://doi.org/10.1016/j.outlook.2008.05.007
4. Antoszewska A, Gutysz-Wojnicka A. Factors influencing nursing care rationing in Poland -a literature review. Pielęg. XXI Wieku. 2025;24(2(91)):146-155. https://doi.org/10.12923/pielxxiw-2025-0015
5. Dehghan-Nayeri N, Shali M, Navabi N, et al. Perspectives of oncology unit nurse managers on missed nursing care: a qualitative study. Asia. Pac. J. Oncol. Nurs. 2018;5(3):327-336.
6. Papastavrou E, Charalambous A, Vryonides S, et al. To what extent are patients' needs met on oncology units? The phenomenon of care rationing. Eur. J. Oncol. Nurs. 2016;21:48-56. https://doi.org/10.1016/j.ejon.2016.01.002
7. International Agency for Research on Cancer. World Cancer Report 2020. IARC Press; 2020. Accessed August 5, 2025. https://www.iccp-portal.org/sites/default/files/resources/IARC%20World%20Cancer%20Report%202020.pdf
8. Burg MA, Adorno G, Lopez EDS, et al. Current unmet needs of cancer survivors: analysis of open-ended responses to the American Cancer Society Study of Cancer Survivors II. Cancer. 2015;121(4):623-630. https://doi.org/10.1002/cncr.28951
9. Papastavrou E, Andreou P, Vryonides S. The hidden ethical element of nursing care rationing. Nurs. Ethics. 2014;21(8):876-885. https://doi.org/10.1177/0969733013513210
10. Vryonides S, Papastavrou E, Charalambous A, et al. The ethical dimension of nursing care rationing: a thematic synthesis of qualitative studies. Nurs. Ethics. 2016;23(8):846-862. https://doi.org/10.1177/0969733014551377
11. Ball JE, Murrells T, Rafferty AM, et al. "Care left undone" during nursing shifts: associations with workload and perceived quality of care. BMJ Qual. Saf. 2014;23(2):116-125. https://doi.org/10.1136/bmjqs-2012-001767
12. Palese A, Ambrosi E, Prosperi L, et al. Missed nursing care and predicting factors in the Italian medical care setting. Intern Emerg. Med. 2015;10(6):693-702. https://doi.org/10.1007/s11739-015-1232-6
13. Nortvedt P, Pedersen R, Grøthe KH, et al. Clinical prioritizations of healthcare for the aged-professional roles. J. Med. Ethics. 2008;34(5):332-335. https://doi.org/10.1136/jme.2007.020693
14. Aiken LH, Sloane DM, Bruyneel L, et al. Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. Lancet. 2014;383(9931):1824-1830. https://doi.org/10.1016/S0140-6736(13)62631-8
15. Lucero RJ, Lake ET, Aiken LH. Variations in nursing care quality across hospitals. J. Adv. Nurs. 2009;65(11):2299-2310. https://doi.org/10.1111/j.1365-2648.2009.05090.x
16. Rabin EG, Silva CND, Souza AB, et al. Application of the MISSCARE scale in an oncology service: a contribution to patient safety. Rev. Esc. Enferm. USP. 2019;53:e03513. https://doi.org/10.1590/S1980-220X2018025403513
17. Paiva IC, Amaral AF, Moreira IM. Missed nursing care in a Portuguese hospital: nurses' perceptions of minimizing strategies. Rev. Enferm. Referência. 2021;5(7):e20146. https://doi.org/10.12707/RV20146
18. Paiva ICS, Ventura FIQS, Vilela ACL, et al. Influence of oncology nurses' decision-making and personality traits on missed nursing care and related factors: a correlational study. Eur. J. Oncol. Nurs. 2025;74:102749. https://doi.org/10.1016/j.ejon.2024.102749
19. Tricco AC, Lillie E, Zarin W, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): checklist and explanation. Ann. Intern. Med. 2018;169(7):467-473. https://doi.org/10.7326/M18-0850
20. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. Int. J. Soc. Res. Methodol. 2005;8(1):19-32.
21. Papadopoulos I, Shea S, Taylor G, et al. Developing tools to promote culturally competent compassion, courage, and intercultural communication in healthcare. J. of Compassionate Health Care. 2016;3(2). https://doi.org/10.1186/s40639-016-0019-6
22. DeSteno D. Compassion and altruism: how our minds determine who is worthy of help. Current Opinion in Behavioral Sciences. 2015;3:80-83. https://doi.org/10.1016/j.cobeha.2015.02.002
23. Schantz ML. Compassion: a concept analysis. Nursing Forum. 2007;42(2):48-55. https://doi.org/10.1111/j.1744-6198.2007.00067.x
24. Collins English Dictionary. TEAMWORK definition and meaning.2024. https://www.collinsdictionary.com/dictionary/english/teamwork [Accessed 03 Aug. 2025].
25. McEwan D, Ruissen GR, Eys MA, et al. The effectiveness of teamwork training on teamwork behaviors and team performance: a systematic review and meta-analysis of controlled interventions. PLoS ONE. 2017;12(1):e0169604. https://doi.org/10.1371/journal.pone.0169604
26. Chivaka R. From a group of people to a well-functioning team: A transformative leadership model in healthcare. Business, Management and Economics. 2024. IntechOpen. http://dx.doi.org/10.5772/intechopen.1005512 [Accessed 22 Dec. 2024].
27. Nurok M, Sundt TM, Frankel A. Teamwork and communication in the operating room: relationship to discrete outcomes and research challenges. Anesthesiology Clinics. 2011;29(1):1-11. https://doi.org/10.1016/j.anclin.2010.11.012
28. Bolton R, Logan C, Gittell JH. Revisiting relational coordination: a systematic review. The Journal of Applied Behavioral Science. 2021;57(3):290-322. https://doi.org/10.1177/0021886321991597
29. Alder S. Communication in nursing. The HIPAA Journal. 2025. https://www.hipaajournal.com/communication-in-nursing/ [Accessed 4 Aug. 2025].
30. Azarabadi A, Bagheriyeh F, Moradi Y, et al. Nurse-patient communication experiences from the perspective of Iranian cancer patients in an outpatient oncology clinic: a qualitative study. BMC Nurs. 2024;23(1):682. https://doi.org/10.1186/s12912-024-02339-4
31. McAllum K, Fox S, Ford JL, et al. Communicating compassion in organisation: a conceptual review. Front. Commun. 2023;8:1144045. https://doi.org/10.3389/fcomm.2023.1144045
32. Peters MDJ, Marnie C, Tricco AC, et al. Updated methodological guidance for the conduct of scoping reviews. JBI Evid. Synth. 2020;18(10):2119-2126. https://doi.org/10.11124/JBIES-20-00167
33. Page MJ, McKenzie JE, Bossuyt PM, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ. 2021;372:n71. https://doi.org/10.1136/bmj.n71
34. Stern C, Lizarondo L, Carrier J, et al. Methodological guidance for the conduct of mixed methods systematic reviews. JBI Evid. Synth. 2020;18(10):2108-2118. https://doi.org/10.11124/JBISRIR-D-19-00169
35. Sarpong AA, Arabiat D, Gent L, et al. A bibliometric analysis of missed nursing care research: current themes and way forward. Nurs. Forum. 2023;58(4):773-785. https://doi.org/10.1155/2023/8334252
36. Popay J, Roberts H, Sowden A, et al. Guidance on the conduct of narrative synthesis in systematic reviews. ESRC Methods Programme; 2006:1-92.
37. Pan SP, Lin CF. The relationship between organizational communication and missed nursing care in oncology wards in Taiwan. Nurs. Open. 2022;9(6):2750-2760. https://doi.org/10.1002/nop2.976
38. Xu X, Jia S, Zhang S, et al. Analysis of the factors influencing teamwork among oncology nurses based on multigroup structural equation model. Ann. Transl. Med. 2022;10(18):1015. https://doi.org/10.21037/atm-22-4217
39. Meneses-La-Riva ME, Fernández-Bedoya VH, Suyo-Vega JA, et al. Enhancing healthcare efficiency: the relationship between effective communication and teamwork among nurses in Peru. Nurs. Rep. 2025;15(2):59. https://doi.org/10.3390/nursrep15020059
40. Salehi M, Ghasemian A, Najar AV, et al. From compassion to burnout: emotional labor in oncology nursing – a qualitative study. BMC Nurs. 2025;24:272. https://doi.org/10.1186/s12912-025-02928-x
41. Malenfant S, Jaggi P, Hayden KA, et al. Compassion in healthcare: an updated scoping review of the literature. BMC Palliat. Care. 2022;21(1):80. https://doi.org/10.1186/s12904-022-00942-3
42. Kohanová D, Solgajová A, Bartoníčková D. The association of rationed nursing care and the level of teamwork in acute care setting: a cross-sectional study. Pielęg. XXI Wieku. 2024;23(2(87)):100-105. https://doi.org/10.2478/pielxxiw-2024-0017
43. Chiappinotto S, Papastavrou E, Efstathiou G, et al. Antecedents of unfinished nursing care: a systematic review of the literature. BMC Nurs. 2022;21(1):137. https://doi.org/10.1186/s12912-022-00890-6
44. He M, Zhu X, Dong Y, et al. Exploring the role of communication in missed nursing care: a systematic review. J. Adv. Nurs. 2022;78(12):4019-4033. https://doi.org/10.1111/jan.15444

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