International Journal of Computational and Experimental Science and ENgineering (IJCESEN)

Vol. 10-No.4 (2024) pp. 3893-3899
http://www.ijcesen.com

ISSN: 2149-9144

Research Article

The Critical Role of Nursing in Identifying and Managing Care Fatigue Among Hospitalized Patients

Haya Semah D Alreshidi[1]*, Alanazi, Maryam Munadi[2], May Farhan Salem Alanazi[3], Hamidah Matrouk Alruwaili[4], Alruwaili, Rehab Mulhi A[5], Awatif Rakyan Murayr Alruwaili[6], Huda Alshawi J Alruwaili[7], Adhwaa Alohaylim Aldaghmani[8], Almatrafi, Rawan Wadi S[9], Hana Mohammed J Alruwaili[10], Hanadi Mohammed J Alruwaili[11]

[1]Nursing Technician – Al Majmaah Primary Health Care Center, Second Riyadh Health Cluster, Ministry of Health, Al Majmaah, Riyadh Region, Saudi Arabia
* **Corresponding Author Email:** ha0553547@gmail.com - **ORCID:** 0000-0002-5200-995Y

[2]Nursing Technician – Turaif General Hospital, Northern Borders Health Cluster, Ministry of Health, Turaif, Northern Borders Region, Saudi Arabia
Email: malanazi3@moh.gov.sa- **ORCID:** 0000-0002-5290-115Y

[3]Nursing Specialist – Quality and Institutional Excellence Administration, Northern Borders Health Cluster, Ministry of Health, Arar, Northern Borders Region, Saudi Arabia
Email: mayfa@moh.gov.sa - **ORCID:** 0000-0002-5280-505Y

[4]Nursing Specialist – Domat Al-Jandal General Hospital, Al Jouf Health Cluster, Ministry of Health, Domat Al-Jandal, Al Jouf Region, Saudi Arabia
Email: halruwaili13@moh.gov.sa - **ORCID:** 0000-0002-5270-605Y

[5]Nursing Technician – Maternity and Children's Hospital, Sakaka, Al Jouf Health Cluster, Ministry of Health, Sakaka, Al Jouf Region, Saudi Arabia
Email: rmalrowily@moh.gov.sa - **ORCID:** 0000-0002-5260-405Y

[6]Nursing Technician – Branch of the Ministry of Health, Ministry of Health, Arar, Northern Borders Region, Saudi Arabia
Email: aralrwaily@moh.gov.sa - **ORCID:** 0000-0002-5250-705Y

[7]Nursing Technician – Maternity and Children's Hospital, Sakaka, Al Jouf Health Cluster, Ministry of Health, Sakaka, Al Jouf Region, Saudi Arabia
Email: hhhh@moh.gov.sa - **ORCID:** 0000-0002-5240-305Y

[8]Nursing Technician – Prince Mutaib bin Abdulaziz Hospital, Al Jouf Health Cluster, Ministry of Health, Sakaka, Al Jouf Region, Saudi Arabia
Email: aaldgmany@moh.gov.sa - **ORCID:** 0000-0002-5230-805Y

[9]Nursing Specialist – North Medical Tower, Northern Borders Health Cluster, Ministry of Health, Arar, Northern Borders Region, Saudi Arabia
Email: rwalmatrafi@moh.gov.sa- **ORCID:** 0000-0002-5220-205Y

[10]Nursing Technician – Prince Mutaib bin Abdulaziz Hospital, Al Jouf Health Cluster, Ministry of Health, Sakaka, Al Jouf Region, Saudi Arabia
Email: hmalrwily@moh.gov.sa - **ORCID:** 0000-0002-5210-905Y

[11]Nursing Technician – King Abdulaziz Specialist Hospital, Al Jouf Health Cluster, Ministry of Health, Sakaka, Al Jouf Region, Saudi Arabia
Email: halruwaili5@moh.gov.sa - **ORCID:** 0000-0002-5110-105Y

Article Info:

DOI: 10.22399/ijcesen.4738
Received : 01 July 2024
Accepted : 30 July 2024

Keywords

Care Fatigue,
Nursing Assessment,
Hospitalized Patients,
Therapeutic Communication,
Patient-Centered Care,
Holistic Nursing

Abstract:

The nursing profession plays an indispensable and multifaceted role in identifying and mitigating care fatigue, a state of profound holistic exhaustion experienced by hospitalized patients due to the sustained stressors of the clinical environment. Leveraging their unique position of continuous presence, nurses employ vigilant assessment to detect early signs of emotional withdrawal, cognitive disengagement, and unrelieved physical weariness that distinguish this syndrome from routine illness-related tiredness. Through deliberate therapeutic communication, nurses validate patient experiences and restore autonomy by offering meaningful choices and anticipatory guidance. Furthermore, they implement direct interventions by modifying care delivery—such as clustering procedures to protect rest periods—and acting as coordinators within the interprofessional team to address systemic contributors to fatigue. By advocating for both individual patient needs and systemic changes that promote a healing environment, nurses address a critical gap in patient-centered care, safeguarding patient resilience, engagement in treatment, and ultimately, clinical outcomes.

1. Introduction

The contemporary hospital environment is a complex ecosystem where the primary focus is rightly placed on diagnosing and treating acute illness, managing chronic conditions, and facilitating patient recovery. Within this high-stakes setting, the holistic well-being of the patient—encompassing psychological, emotional, and social dimensions alongside the physical—is a fundamental tenet of quality nursing care. However, a significant and often under-recognized phenomenon can profoundly disrupt this holistic balance: care fatigue. Care fatigue, also referred to in related contexts as compassion fatigue, burnout, or more specifically, hospitalization fatigue, describes a state of profound emotional, mental, and physical exhaustion experienced by patients as a direct result of the sustained stresses, intrusions, and depersonalizing effects of the inpatient healthcare experience. It is a syndrome that develops gradually, eroding the patient's resilience, diminishing their capacity to engage in their own care, and potentially impeding clinical outcomes. While the concepts of burnout and compassion fatigue among healthcare providers have garnered substantial scholarly and clinical attention, the parallel experience within the patient population remains a critical yet frequently overlooked aspect of patient-centered care [1].

The genesis of care fatigue in hospitalized patients is multifactorial, deeply embedded in the very structure and rhythm of inpatient care. Hospitalization, by its nature, represents a profound disruption of normal life. Patients are removed from their familiar environments, routines, and support networks and placed in a setting where they experience a significant loss of autonomy and control. The hospital day is often dictated by institutional schedules rather than personal preference, from sleep interrupted for vital sign checks to meals served at fixed times. Patients are subjected to a constant barrage of clinical interactions—some painful, many intrusive—and are required to process complex information while in a vulnerable state. This environment, characterized by continuous sensory stimulation (alarms, overhead pages, equipment noises), lack of privacy, and perceived powerlessness, creates a perfect storm for the development of fatigue that extends far beyond mere physical tiredness [2, 3]. It is a fatigue that permeates the spirit and weakens the resolve to heal.

The consequences of unaddressed care fatigue are far-reaching and potentially severe. On an individual level, fatigued patients may display signs of withdrawal, apathy, or irritability. They may become less adherent to treatment plans, less communicative about their symptoms, and less cooperative with necessary but uncomfortable procedures. This disengagement can mask clinical deterioration, as listlessness may be misinterpreted, and crucial subjective reports may be withheld. Psychologically, care fatigue can exacerbate conditions like depression and anxiety, which are already common companions of serious illness. Furthermore, there is growing evidence that chronic stress and emotional exhaustion can negatively impact physiological processes, potentially modulating immune function, prolonging inflammatory responses, and slowing wound healing, thereby indirectly affecting recovery trajectories and length of stay [4, 5]. Thus, care fatigue is not merely a matter of patient comfort; it is a substantive clinical concern with implications for safety, outcomes, and healthcare efficiency.

Within the multidisciplinary hospital team, the professional nurse occupies a uniquely pivotal position to identify, address, and mitigate care fatigue. Nurses provide continuous, 24-hour

surveillance and are the healthcare professionals who spend the most direct, sustained time with patients and their families. This proximity grants nurses an unparalleled window into the subtle, nuanced shifts in a patient's emotional state, behavior, and engagement that may signal the onset of fatigue. Unlike other team members whose interactions may be episodic and task-focused, the nurse-patient relationship is built on repeated, intimate care encounters, fostering a trust that can encourage patients to express feelings of weariness, frustration, or helplessness they might not reveal to others [6]. The nursing role, therefore, transcends technical skill and medication administration; it is fundamentally anchored in therapeutic communication, empathetic presence, and the vigilant monitoring of the patient's holistic response to the illness and the care experience [7, 8].

2. Defining and Deconstructing Care Fatigue:

Care fatigue in hospitalized patients is a distinct clinical phenomenon that requires precise conceptualization to guide effective recognition and intervention. It is best understood as a syndrome of exhaustion with interconnected emotional, cognitive, and physical dimensions, directly attributable to the cumulative stressors of the hospitalization experience. It shares some conceptual territory with related conditions like burnout and depression but is contextually rooted in the patient role. Emotional exhaustion manifests as a draining of affective resources, where patients feel emotionally overextended and depleted. They may report feeling "numb," "drained," or "unable to cope" with the emotional demands of their situation, which can include fear, uncertainty, and grief. This is often accompanied by a sense of depersonalization or detachment from the care process, where patients may mentally withdraw, viewing procedures and caregivers as impersonal events rather than parts of their healing journey [9, 10].

Cognitively, care fatigue is marked by mental weariness and reduced efficacy. Patients may experience difficulty concentrating, making decisions, or retaining information provided by their care team—a critical issue for informed consent and self-management education. They may exhibit forgetfulness regarding their treatment plan or express a sense of helplessness and reduced personal accomplishment in their recovery. Physically, the fatigue is pervasive and unrelieved by rest, often exacerbated by poor sleep in the hospital, the metabolic demands of illness, and the side effects of treatments. It is crucial to differentiate this syndrome from the expected fatigue of the underlying disease process; care fatigue is an iatrogenic layer superimposed by the care environment itself [11, 12]. Understanding these dimensions allows nurses to move beyond asking "Are you tired?" to probing more specific aspects of the patient's lived experience.

3. The Etiology of Care Fatigue: Systemic and Relational Contributors

The development of care fatigue is not a patient failing but a predictable response to a confluence of systemic, environmental, and relational factors inherent in modern hospitalization. Systemically, the fragmentation of care and constant rotation of staff—doctors, hospitalists, specialists, and rotating nurses—can prevent the formation of therapeutic relationships, leaving patients feeling like anonymous cases. Frequent transfers between units further disrupt continuity. Environmentally, the hospital is rarely conducive to rest. Noise pollution from alarms, pagers, and shift changes is constant. Light levels are inappropriate for circadian rhythm regulation, and interruptions for non-urgent tasks are commonplace, severely fragmenting sleep architecture, which is essential for psychological and physical restoration [13, 14].

Relationally, a perceived loss of autonomy and control is a primary stressor. Patients often feel their schedules, bodies, and choices are no longer their own. Communication that is rushed, jargon-filled, or dismissive exacerbates feelings of powerlessness. Furthermore, the inherent power imbalance in the patient-provider relationship can silence patient concerns, making them reluctant to voice needs perceived as "burdensome," such as the need for emotional support or simply a request not to be disturbed. Finally, pre-existing patient factors, such as a history of anxiety, depression, or previous traumatic medical experiences, can significantly lower the threshold for developing care fatigue, making certain populations particularly vulnerable [15, 16]. The nurse’s role involves recognizing not just the symptoms, but also these contributing factors in each patient's context.

4. Nursing Assessment: The Bedside Vigil for Early Signs

Proactive identification is the first and most critical step in managing care fatigue, and it relies on the nurse's skilled, intentional assessment beyond physical vital signs. This assessment is both systematic and empathetic, requiring the nurse to be a perceptive observer and a engaged listener. Standardized screening tools, such as adapted versions of the Professional Quality of Life Scale

(ProQOL) or simple visual analogue scales for emotional exhaustion, can be integrated into initial and ongoing nursing assessments for at-risk patients, providing a baseline and tracking changes [17]. However, the most valuable data often comes from unstructured, therapeutic communication.

Skilled nurses listen for verbal cues that go beyond reports of physical pain. Statements like "I just can't do this anymore," "Why bother?", "I'm sick of all this poking and prodding," or "I don't care what happens next" are potent indicators of emotional depletion and depersonalization. Non-verbal cues are equally telling: a patient who once made eye contact now stares blankly at the wall; a previously engaged patient stops asking questions or stops using the call bell for needs; changes in posture, such as slumped shoulders or turning away from visitors and staff; or neglect of personal grooming within their ability [18, 19]. Behavioral changes, including increased irritability with staff or family, refusal of non-critical aspects of care, or a sudden decline in participation in physiotherapy or other rehabilitative activities, are significant red flags. The nurse's assessment must also include an evaluation of the patient's support system, as family caregivers experiencing their own fatigue can inadvertently contribute to the patient's stress, creating a negative feedback loop [20].

5. Therapeutic Nursing Communication: The Cornerstone of Intervention

Once signs of care fatigue are identified, the nurse's primary intervention is the deliberate use of therapeutic communication techniques. This involves creating a psychological space where the patient feels heard, validated, and empowered. Active listening is paramount—giving the patient undivided attention, without interruption or premature reassurance. Using open-ended questions like, "What has been the hardest part of today for you?" or "Can you describe what this experience feels like for you?" invites expression beyond the physical. Reflecting and validating emotions ("It sounds like you're feeling very overwhelmed by all the appointments today; that is completely understandable in this situation") normalizes their experience and reduces isolation [21, 22].

Nurses can also employ anticipatory guidance to restore a sense of control. Simply explaining the likely schedule for the next shift, including approximate times for medications, physician rounds, and tests, can reduce anxiety about the unknown. More importantly, nurses should offer choices wherever clinically possible, no matter how small: "Would you prefer your bath now or after lunch?"; "Would you like the blinds open or closed?"; "We need to draw blood; do you have a preferred arm?" These micro-choices reinforce patient autonomy. Furthermore, nurses must advocate for and facilitate effective communication with the broader medical team, ensuring the patient's questions and expressed fatigue are heard by physicians and integrated into the care plan, thereby validating the patient's concerns at the system level [23, 24].

6. Environmental and Care Delivery Modifications

Beyond communication, nurses have significant agency to modify the immediate environment and adapt care delivery to mitigate fatigue-promoting factors. Leading initiatives for "quiet hours" or creating personalized rest plans are powerful. This involves collaborating with the interprofessional team to cluster care activities—coordinating vital signs, assessments, and medication administration to allow for longer, uninterrupted blocks of restorative time. Nurses can act as gatekeepers, politely managing visitor traffic and screening non-urgent interruptions. Simple environmental adjustments, such as lowering lighting, closing doors, providing earplugs or white noise machines, and ensuring easy access to personal items, can dramatically improve the potential for rest [25, 26].

The nursing approach to care delivery itself can be humanized. Explaining the purpose of every intervention, even routine ones, counters depersonalization. Knocking before entering and addressing the patient by their preferred name are acts of respect that affirm identity. Involving patients in their own care to the greatest extent possible, such as self-administering oral medications or recording intake/output with supervision, fosters a sense of agency and accomplishment. For patients with prolonged hospitalizations, nurses can help establish simple routines—a morning wash, an afternoon walk, a specific time for family calls—that reintroduce predictability and normalcy into an otherwise chaotic existence [27, 28].

7. Collaborative and Family-Centered Strategies

Managing care fatigue effectively requires collaboration beyond the bedside. Nurses play a key role in educating and involving family members, turning them from passive visitors into empowered partners in fatigue prevention. Educating families about the signs of care fatigue and encouraging them to report subtle changes they observe is invaluable. Nurses can guide families on how to provide supportive presence that is not

overwhelming—such as quiet companionship, assistance with pleasant diversions like reading or listening to music, or simply helping to maintain a calm environment [29, 30].

Interprofessional collaboration is essential. Nurses must communicate their assessments of patient fatigue to physicians, pharmacists, and therapists. This can lead to medical reviews: a physician might reconsider the necessity of certain late-night checks; a pharmacist might review medication regimens for side effects contributing to drowsiness or agitation; physical and occupational therapists can tailor their sessions to the patient's energy levels, focusing on essential activities. For patients with pronounced symptoms, the nurse is instrumental in initiating referrals to clinical psychology, psychiatry, or chaplaincy services to provide specialized psychological and spiritual support [31, 32]. The nurse acts as the central coordinator, ensuring the entire care team is aligned in addressing the patient's holistic fatigue.

8. Institutional Advocacy and the Role of Nursing Leadership

While individual nursing actions are vital, sustainable change requires systemic support fostered by nursing leadership. Nurse managers and leaders are responsible for creating unit cultures that prioritize holistic assessment, where documenting a patient's emotional state is as routine as documenting their blood pressure. They must advocate for staffing models that support continuity of care, such as primary nursing, which allows for deeper therapeutic relationships to form. Providing nurses with education on care fatigue, its assessment, and communication interventions is a fundamental leadership responsibility [33, 34].

Furthermore, nursing leadership must champion policy-level changes. This includes implementing hospital-wide sleep promotion protocols, designing patient rooms with noise-reducing features and better lighting controls, and integrating patient-reported outcome measures (PROMs) related to exhaustion and emotional well-being into electronic health records. Most critically, leaders must safeguard the well-being of nurses themselves, as nurses experiencing burnout and compassion fatigue are less able to recognize and respond empathetically to patient fatigue. Providing robust support systems, adequate resources, and a healthy work environment is not just an employee benefit but a prerequisite for high-quality, patient-centered care [35, 36].

9. Future Directions and Conclusion

The nursing role in identifying and managing care fatigue is a testament to the profession's foundational commitment to caring for the whole person. As healthcare continues to advance technologically, the humanistic imperative embodied by nursing becomes ever more critical. Future directions must include more robust research to develop and validate specific assessment tools for patient care fatigue, distinct from general mood or quality-of-life instruments. Studies are needed to quantify the impact of nursing interventions on not only patient experience scores but also on concrete outcomes like delirium rates, adherence to treatment, and length of stay [37, 38].

Technological innovations also offer new avenues for support. Nurses could utilize tablet-based apps for patient education on fatigue management or for providing calming, distraction therapy. However, technology must never replace the essential human connection that is the nurse's most powerful tool. The future of nursing in this domain lies in strengthening that connection through enhanced education, intentional practice, and unwavering advocacy [39, 40].

10. Conclusion:

In conclusion, care fatigue among hospitalized patients is a significant, multifaceted syndrome that threatens the very goals of hospitalization. Its insidious nature requires a vigilant, knowledgeable, and compassionate response. The professional nurse, by virtue of sustained presence, therapeutic skill, and holistic perspective, is uniquely positioned to lead this response. Through astute assessment, empathetic communication, thoughtful care modification, and collaborative leadership, nurses can shield patients from the exhausting excesses of the system meant to heal them. By identifying the sighs of the spirit as diligently as the signs of the body, nursing fulfills its highest calling: to alleviate suffering in all its forms and to champion a model of care that heals not just the disease, but the person enduring it.

Author Statements:

- **Ethical approval:** The conducted research is not related to either human or animal use.
- **Conflict of interest:** The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper
- **Acknowledgement:** The authors declare that they have nobody or no-company to acknowledge.

- **Author contributions:** The authors declare that they have equal right on this paper.
- **Funding information:** The authors declare that there is no funding to be acknowledged.
- **Data availability statement:** The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

References

1. World Health Organization. State of the world's nursing 2020: investing in education, jobs and leadership. 2020.
2. Cheng L, Liu Y, Ke Y, et al. Comparison of caring ability between Chinese and American nursing students. West J Nurs Res. 2017;39(2):290–304.
3. Connor K M, Davidson JR. Development of a new resilience scale: the Connor-Davidson resilience scale (CD-RISC). Depress Anxiety. 2003;18(2):76–82.
4. Yu J, Mei X, Zeng Y, Yuan D, Yu Y, Ye Z. Associations among emotional intelligence, resilience, and humanistic caring ability in nursing postgraduates: a response surface analysis and moderated mediation model. Perspect Psychiatr Care. 2025;2025(1).
5. Joinson C. Coping with compassion fatigue. Nursing. 1992;22(4):116, 8–9.
6. Machul M, Dziurka M, Gniadek A, et al. Caring ability and professional values of Polish nursing Students-A Cross-Sectional study. Volume 19. International Journal OF Environmental Research and Public Health; 2022. 18.
7. Chen H-C Hunsakers. Maughan D, et al. Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. Volume 47. Journal of Nursing Scholarship; 2015. pp. 186–94. 2.
8. Alonazi O, Alshowkan A. The relationship between psychological resilience and professional quality of life among mental health nurses: a cross-sectional study. BMC Nurs. 2023;22(1):184.
9. Qiuting C. Humanistic caring: the core of nursing. J Med Colleges PLA. 2013;28(2):125–8.
10. Schmidt Piovesan Rosanelli CL, Giunta da Silva LM, de Rivero Gutierrez MG. Cross-cultural adaptation of the Caring Ability Inventory to Portuguese. Acta Paul Enferm. 2016;29(3):347–54.
11. Teng X-J, Yan M-M, Yan-Qun X U et al. Humanistic care ability and its influencing factors among Chinese surgical nurses. Nurs OPEN, 2024, 11(10).
12. Jian S, YA M, Qian Z, et al. Research progress on humanistic care ability and influencing factors of intern nursing students. Volume 26. European Review for Medical & Pharmacological Sciences; 2022. 23.
13. Labrague L J, De Los Santos J A. A. Resilience as a mediator between compassion fatigue, nurses' work outcomes, and quality of care during the COVID-19 pandemic. Appl Nurs Res. 2021;61:151476.
14. Létourneau D, Goudreau J, Cara C. Nursing students and nurses' recommendations aiming at improving the development of the humanistic caring competency. Can J Nurs Res. 2022;54(3):292–303.
15. Wijdenes K L, Badger T A, sheppard KG. Assessing compassion fatigue risk among nurses in a large urban trauma center. J Nurs Adm. 2019;49(1):19–23.
16. Cossette S, Cara C, Ricard N, et al. Assessing nurse-patient interactions from a caring perspective: report of the development and preliminary psychometric testing of the caring Nurse–Patient interactions scale. Int J Nurs Stud. 2005;42(6):673–86.
17. Aupia A, Lee T-T, LIU C-Y, et al. Caring behavior perceived by nurses, patients and nursing students in Indonesia. J Prof Nurs. 2018;34(4):314–9.
18. Liu X, He F, Tian T, et al. The mediating role of compassion fatigue between perceived organization support and caring behavior among outpatient nurses in china: a cross-sectional study. BMC Nurs. 2024;23(1):1–15.
19. Cooper A L, Brown J A. Leslie G D. Nurse resilience for clinical practice: an integrative review. J Adv Nurs. 2021;77(6):2623–40.
20. Mcdonald G, Jackson D. Personal resilience in nurses and midwives: effects of a work-based educational intervention. Contemp Nurse. 2013;45(1):134–43.
21. Mo F, Hu X. Ma Q, Clinical narrative competence and humanistic care ability of nurses in assisted reproductive technology: a cross-sectional study. BMC Nurs, 2024, 23(1).
22. Liu X, Zhu H. Influencing factors of humanistic care ability and its dimensions among mental health workers during the COVID-19 pandemic: an online cross-sectional study. BMC Psychiatry, 2023, 23(1).
23. Mealer M, Jones J, Newman J, et al. The presence of resilience is associated with a healthier psychological profile in intensive care unit (ICU) nurses: results of a National survey. Int J Nurs Stud. 2012;49(3):292–9.
24. Joen M, Kim S. Association between resilience, professional quality of life, and caring behavior in oncology nurses: A Cross-Sectional study. J Korean Acad Nurs. 2023;53(6):597–609.
25. Ren Z. Correlation between ICU nurses' humanistic care ability and compassion fatigue in class III grade A hospitals in xi'an. Acad J Med Health Sci. 2023;4(12):74–80.
26. Pross E, Hilton N S Boykina et al. Caring Phenomena of Practicing Nurses: Knowing, Patience, and Courage. biennial convention, 2011.
27. Alenezi A, Alhowaymel F M, Abaoud A F, et al. The relationship between psychological capital and humanistic caring ability among mental health nurses in Saudi Arabia. BMC Nurs. 2024;23(1):688.

28. Xie W, Wang J, Zhang Y et al. The levels, prevalence and related factors of compassion fatigue among oncology nurses: a systematic review and meta-analysis. J Clin Nurs, 2021, 30(5–6): 615– 32.
29. Rushton C H, Batcheller J, Schroeder K, et al. Burnout and resilience among nurses practicing in high-intensity settings. Am J Crit Care. 2015;24(5):412–20.
30. Balinbin C B V, Balatbat K T R, Balayan A N B et al. Occupational determinants of compassion satisfaction and compassion fatigue among Filipino registered nurses. Journal of clinical nursing, 2020, 29(5–6): 955– 63.
31. Ruan Jiangll, Xiang X J H, et al. Investigation and analysis of the caring attitude and behaviour of nurses in S hanghai, C Hina. Int J Nurs Pract. 2015;21(4):426–32.
32. Aburn G, Gott M. What is resilience? An integrative review of the empirical literature. J Adv Nurs. 2016;72(5):980–1000.
33. Wang Y, Zhang Y, Liu M, et al. Research on the formation of humanistic care ability in nursing students: A structural equation approach. Nurse Educ Today. 2020;86:104315.
34. Watson J. Intentionality and caring-healing consciousness: a practice of transpersonal nursing. Holist Nurs Pract. 2002;16(4):12–9.
35. Dong F, Huang W, Chu C, et al. Influence of workplace stress and social support on humanistic caring ability in Chinese nurses. Nurs Open. 2023;10(6):3603–12.
36. HE X, WANG W. The humanistic care ability of nurses in 27 provinces in china: a multi-center cross-sectional study. Front Med. 2024;11:1450783.
37. Deng J, Lei L, Zhang H-L, et al. The current status and the influencing factors of humanistic care ability among a group of medical professionals in Western China. Technol Health Care. 2019;27(2):195–208.
38. Buckley J. Holism and a health-promoting approach to palliative care. Int J Palliat Nurs. 2002;8(10):505–8.
39. Salmond E, Salmond S, Ames M, et al. Experiences of compassion fatigue in direct care nurses: a qualitative systematic review. JBI Evid Synthesis. 2019;17(5):682–753.
40. Wang Y, Zhang X, Xie Q, et al. Humanistic caring ability of midwifery students in China and its associated factors: A multi-centre cross-sectional study. Nurse Education Today; 2022. p. 111.