JOURNAL OF INTERDISCIPLINARY PERSPECTIVES

ISSN Print: 2984-8288, ISSN Online: 2984-8385
Vol. 4 No. 2, pp. 351-358, February 2026

Original Article

Compassion and Compassion Fatigue of Hemodialysis Nurses: Basis for an Action Plan

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Article History:

Date received: November 25, 2025
Date revised: January 18, 2026
Date accepted: January 29, 2026

Recommended citation:

Melo, R., Go, R.M., Moraleja, B.A., Salonga, S.I., Lacambra, G.M., & Quintana, M.L. (2026). Compassion and compassion fatigue of hemodialysis nurses: Basis for an action plan. *Journal of Interdisciplinary Perspectives*, *4*(2), 351-358.
https://doi.org/10.69569/jip.2025.769

Abstract. Compassion is essential in nursing practice, particularly in high-demand settings such as hemodialysis units, where prolonged patient interaction may predispose nurses to compassion fatigue. This study aimed to determine the levels of compassion and compassion fatigue and examine their relationship with selected demographic variables among hemodialysis nurses in the Third District of Laguna. A descriptive correlational design was employed involving 65 hemodialysis nurses. Data were collected using adopted and standardized questionnaires, including a 16-item compassion scale and a 30-item compassion fatigue scale. The instruments were validated by four experts using an authorized validation tool and pilot-tested prior to data collection. Data were analyzed using frequency and percentage distribution, median, Spearman's rho, and chi-square tests. Results showed that a majority of respondents reported low (68%) or moderate (32%) levels of burnout. In terms of secondary traumatic stress, 40% of the nurses experienced low levels, while 60% reported moderate levels, indicating a notable presence of compassion fatigue among the respondents. Compassion satisfaction was significantly associated with selected demographic factors, including age, years of service, and marital status, with older, more experienced nurses reporting higher levels of satisfaction. However, no statistically significant relationships were found between demographic variables and overall compassion levels. These findings suggest that compassion fatigue among hemodialysis nurses is influenced more by work-related demands and professional exposure than by demographic characteristics alone. The study highlights the need for targeted interventions that promote nurses' well-being, support emotional resilience, and help sustain compassion to ensure the continued delivery of high-quality patient care.

Keywords: *Compassion; Compassion fatigue; Hemodialysis nursing; Nurses.*

Compassion is widely recognized as a fundamental human quality that involves awareness of others' suffering and a genuine desire to alleviate it (Gilbert et al., 2017). Compassion is sometimes described in scientific literature as the sensitivity to the suffering of oneself and others, coupled with the motivation to prevent or relieve it (Gilbert & Choden, 2014; Jinpa, 2015). This definition emphasizes not only emotional understanding but also purposeful action. In healthcare, compassion is considered an ethical cornerstone, grounded in the recognition of shared humanity among patients, families, and healthcare professionals (De

Zulueta, 2016). Compassionate care supports holistic treatment and has been shown to improve both patient outcomes and healthcare workers' well-being.

Despite its importance, compassion in healthcare is not always consistently sustained. The absence of compassion has been linked to adverse patient outcomes, increased complaints, and rising healthcare costs (Malenfant et al., 2022; Trzeciak et al., 2017). One major factor contributing to this decline is compassion fatigue, a condition arising from prolonged exposure to patients' suffering and emotional distress. Healthcare environments are characterized by numerous stressors, including long working hours, staff shortages, heavy workloads, and frequent encounters with illness, trauma, and death (Spurlock, 2020; Wasson et al., 2020). Individuals experiencing compassion fatigue may feel emotionally exhausted, detached, or overwhelmed, which can hinder their ability to empathize despite their intention to provide care (Nikeghbal et al., 2021). Studies suggest that compassion fatigue is not the result of excessive compassion but instead of sustained emotional strain, limited institutional support, and insufficient training in emotional regulation and self-care (Aslan et al., 2022).

Nurses are particularly vulnerable to compassion fatigue due to the nature of their work, which requires continuous emotional engagement with patients and families. Among nursing specialties, hemodialysis nursing presents unique challenges. Hemodialysis nurses provide long-term, highly specialized care to patients with chronic kidney disease, often forming close therapeutic relationships over extended periods. Literature indicates that despite being skilled and committed professionals, hemodialysis nurses frequently report moderate to high levels of compassion fatigue due to repetitive exposure to patient suffering, complex treatment regimens, and demanding workloads (Wang et al., 2022). Compassion fatigue in nurses can manifest physically, emotionally, socially, and cognitively, potentially leading to burnout, psychological distress, job turnover, medical errors, and diminished quality of care.

Although international studies on compassion and compassion fatigue among nurses are well documented, research within the Philippine healthcare context remains limited. Existing local studies tend to focus on general nursing populations or high-acuity settings such as emergency departments and intensive care units, with less attention given to nurses working in hemodialysis centers. This gap underscores the need for context-specific research on compassion and compassion fatigue among hemodialysis nurses, accounting for their distinct work environment and professional demands.

Therefore, this study aims to assess compassion and compassion fatigue among hemodialysis nurses and to examine their relationships with selected demographic variables. The findings are expected to contribute to nursing research by providing evidence to inform targeted interventions that support nurses' well-being and sustain compassionate care. This study also aligns with Sustainable Development Goal 3: Good Health and Well-being, emphasizing the importance of safeguarding healthcare providers' health to ensure the delivery of high-quality, compassionate care to patients and communities.

Methodology

Research Design

This study employed a quantitative, descriptive, correlational methodology to measure hemodialysis nurses' levels of compassion and compassion fatigue and to examine their relationships with specific demographic factors. Without any intervention or modification, this design was chosen to describe the existing situation and find connections between variables. (McBurney & White, 2023). It was appropriate for examining compassion-related outcomes in a real-world clinical setting using standardized instruments and statistical analysis.

Participants and Sampling Technique

The study population consisted of registered hemodialysis nurses working in hemodialysis centers. Purposive sampling was used to ensure that participants met the specific inclusion criteria relevant to the study objectives. A total of 67 nurses met the criteria, and 65 nurses (n = 65) voluntarily participated. Inclusion criteria included being a registered nurse currently assigned to a hemodialysis unit, while nurses not assigned to hemodialysis units or not registered were excluded.

Research Instrument

The Professional Quality of Life Scale (ProQoL) (Stamm, 2010) and the Compassion Scale (Pommier, 2011) were used to gather data. Both are validated tools frequently used in healthcare research to evaluate burnout, secondary

traumatic stress, compassion, and compassion satisfaction, using 5-point Likert scales. In this investigation, the instruments demonstrated satisfactory reliability (α = .834 and α = .876, respectively).

Data Gathering Procedures

Data collection was conducted after securing approval from the administrators and head nurses of nine hemodialysis centers. The survey was administered using a hybrid approach through face-to-face distribution and Google Forms beginning March 4, 2025. Informed consent was obtained prior to participation, and confidentiality was ensured in compliance with the Data Privacy Act of 2012. Completed responses were encoded in Google Sheets and submitted for statistical analysis.

Data Analysis Procedure

Data were analyzed using descriptive and inferential statistics—frequency and percentage distributions were used to describe demographic characteristics and levels of compassion and compassion fatigue. The median was used to determine the central tendency of compassion subscales. Spearman's rho was applied to assess relationships between ordinal variables due to non-normal data distribution. At the same time, the chi-square test was used to examine associations between categorical demographic variables and study outcomes. These analyses ensured valid and interpretable results.

Ethical Considerations

The study adhered to the National Ethical Guidelines for Research Involving Human Participants (2022). Approval was obtained from the research adviser, the Dean of the College of Nursing, and participating institutions. Participation was voluntary, informed consent was secured, and all data were kept confidential and securely stored in accordance with RA 10173 (Data Privacy Act of 2012).

Results and Discussion

Demographic Results

Table 1 shows the sex distribution of hemodialysis nurses: 13 male and 52 female. This finding is aligned with Clayton-Hathway et al (2023), wherein females are often considered better at 'caring' while males are expected to be best suited for 'curing' with their technical knowledge and skills. Mao et al. (2024) stated that female patients sometimes refuse male care. These insights highlight that communication between the patient and nurse is crucial to avoid rejection and ensure compassionate care.

Table 1. *Sex of the Respondents*

Sex	Frequency	Percentage (%)
Male	13	20
Female	52	80
Total	**65**	**100**

Table 2 shows the age distribution of hemodialysis nurses. The majority of respondents were female (80%), with males comprising 20% of the sample. This aligns with previous findings that nursing remains a female-dominated profession (Clayton-Hathway et al., 2023). Gender distribution may influence nurse–patient interactions, as studies suggest some patients prefer care providers of a specific gender (Mao et al., 2024), highlighting the importance of communication skills and patient-centered care.

Table 2. *Age of the Respondents*

Age	Frequency	Percentage (%)
20 - 25	13	20.00
26 - 30	7	10.77
31 - 35	20	30.77
36 - 40	15	23.08
41 - 45	4	6.15
46 - 50	3	4.62
51 - 55	2	3.08
56 - 60	0	0.00
61 Above	1	1.54
Total	**65**	**100**

Table 3 shows the marital status distribution of hemodialysis nurses: 27 were single and 38 were married. These results indicate that single nurses tend to be more flexible with their time and more open to taking night duties,

weekends, and even holiday schedules. While Sahin et al. (2023) determined that married nurses often benefit from social support, particularly through communication with their partners, which helps regulate emotions when faced with stress.

Table 3. *Marital Status of the Respondents*

Marital Status	Frequency	Percentage (%)
Single	27	41.54
Married	38	58.46
Total	**65**	**100**

Table 4 shows the monthly income of hemodialysis nurses. Based on the results, the distribution of monthly income was as follows: 58 (41.54%) earned 37,000 or less; 6 (9.23%) earned between 38,000 and 41,000; and 1 (1.54%) earned between 42,000 and 45,000. These findings suggest a possible disparity between public- and private-sector salaries or between different job classifications. It is particularly concerning given that hemodialysis nursing demands both advanced technical skills and emotional resilience. Despite the complexity and pressure of the role, their compensation does not reflect the value of their work. These income disparities may contribute to job dissatisfaction, emotional fatigue, and high turnover, highlighting deeper issues in the healthcare system, such as pay inequality and the undervaluing of specialized nursing roles.

Table 4. *Monthly Income of the Respondents*

Monthly Income Range	Frequency	Percentage (%)
37,000 and below	58	41.54
38,000 to 41,000	6	9.23
42,000 to 45,000	1	1.54
Total	**65**	**100**

Table 5 shows the year of service of hemodialysis nurses, the distribution of years of service was as follows: 22 or 33.85% had between 1 to 2 years and 11 months of service, 14 or 21.54% had between 3 to 5 years and 11 months, 12 or 18.46% had between 6 to 9 years and 11 months, six or 9.23% had between 10 to 12 years and 11 months of service, six or 9.23% had 12 years and above of service, and five or 7.69% had less than a year of service. These findings align with those of Nelson et al. (2022): nurses with less than 10 years of work experience reported lower levels of compassion fatigue than those with more than 10 years of experience, who reported higher levels. On the other hand, the study by Amir and Okalo (2022) states that those who have worked for 11 - 15 years are 0.147 times less likely to experience compassion fatigue than those who have worked for 1 - 5 years.

Table 5. *Years of Service of the Respondents*

Years of Service	Frequency	Percentage (%)
Less than a year	5	7.69
1 to 2 Years and 11 Months	22	33.85
3 to 5 Years and 11 Months	14	21.54
6 to 9 Years and 11 Months	12	18.46
10 to 12 Years and 11 Months	6	9.23
12 Years Above	6	9.23
Total	**65**	**100.00**

Descriptive Results

Table 6 presents the level of compassion among the 65 hemodialysis nurses. More than half of the respondents (56.92%) were classified as having low compassion, while 43.08% demonstrated high compassion. This distribution suggests that a considerable proportion of nurses may experience difficulty sustaining compassion, likely due to the emotional and physical demands of hemodialysis care. However, the presence of a substantial group with high compassion suggests that some nurses can maintain empathetic engagement despite workplace stressors.

These findings are consistent with Gifkins et al. (2020), who reported that high-pressure clinical environments can negatively affect compassion levels. At the same time, the results align with Nikpey et al. (2023), who emphasized that nurses can sustain compassionate care through personal resilience and adaptive coping strategies. From the perspective of Watson's Theory of Human Caring, nurses' ability to maintain compassion is closely linked to their emotional well-being; diminished emotional resources may compromise caring behaviors, while adequate support may help preserve compassionate practice.

Table 6. *Level of Compassion of the Respondents*

Level	Frequency	Percentage
Low	37	56.92
High	28	43.08
Total	**65**	**100.00**

Table 7 shows the levels of compassion fatigue among the respondents across its three components. Compassion satisfaction was predominantly moderate (60%), with 40% reporting high satisfaction and none reporting low levels. Burnout levels were generally low, with 68% of nurses classified as low and 32% as moderate. In contrast, secondary traumatic stress was more pronounced, with 60% experiencing moderate levels and 40% reporting low levels. These results indicate that while most hemodialysis nurses continue to derive fulfillment from their work and report low burnout, moderate secondary traumatic stress remains a concern. This pattern suggests ongoing emotional exposure associated with long-term patient care. Similar findings were reported by Cao and Chen (2021), who noted that repetitive, long-term care in dialysis settings contributes to emotional strain. Some also found higher levels of compassion fatigue among dialysis nurses than in other nursing specialties, due to prolonged patient relationships and continuous caregiving demands.

Consistent with the role theory proposed by Mead and Goffman, hemodialysis nurses occupy roles that require sustained technical competence alongside emotional involvement. Without adequate institutional support, these dual demands may heighten vulnerability to compassion fatigue. The findings highlight the importance of workplace strategies such as stress management programs, counseling services, and peer support systems to help nurses maintain emotional balance and sustain high-quality patient care.

Table 7. *Level of Compassion Fatigue of the Respondents*

Scale	Low	Moderate	High	Total
Compassion Satisfaction	0	39 (60%)	26 (40%)	**65**
Burnout Scale	44 (68%)	21 (32%)	0	**65**
Secondary Traumatic Stress	26 (40%)	39 (60%)	0	**65**

Table 8 shows that a majority of respondents reported low levels of compassion (56.92%), indicating early emotional strain that may affect compassionate care delivery. This finding is consistent with Özan and Polat (2024), who identified workload-related emotional pressure as a factor reducing compassion among nurses. In contrast, compassion satisfaction remained largely intact, with most respondents reporting moderate (n = 39) to high (n = 26) levels, similar to the findings of Nikpey et al. (2023). The present findings indicate that nurses in dialysis settings often maintain meaningful engagement with their work despite emotional challenges.

Burnout levels were predominantly low (n = 44), suggesting effective coping or workplace support. However, secondary traumatic stress was elevated, with most respondents falling in the moderate (n = 39) to high (n = 26) categories, reflecting sustained exposure to patient suffering. This pattern aligns with Wang et al. (2022), who identified secondary traumatic stress as a prominent contributor to compassion fatigue among hemodialysis nurses. These findings underscore the need for targeted interventions such as resilience training, peer support, and mental health services to prevent compassion fatigue and sustain high-quality patient care.

Table 8. *Compassion and Compassion Fatigue Levels of the Respondents*

Aspect	Observation
Compassion Level	More respondents have low compassion (56.92%) than high.
Compassion Satisfaction	The majority are at moderate (39) and high (26) satisfaction, with none at low.
Burnout	The majority are in the low burnout range (44).
Secondary Traumatic Stress	High (26) and Moderate (39) — a concern as it reflects exposure to traumatic stress.

Inferential Results

Table 9 shows that none of the demographic variables—sex (p = .802), age (p = .064), civil status (p = .228), monthly income (p = .091), or years of service (p = .913)—were statistically significant predictors of compassion. These results indicate that demographic characteristics do not determine compassion among hemodialysis nurses. Instead, compassion appears to be influenced by internal factors such as emotional resilience, professional experience, and ethical commitment, consistent with the findings of Duarte & Pinto-Gouveia (2017a) and Sinclair et al. (2017).

Table 9. *Respondents' Level of Compassion with their Demographic Profile*

Profile	P-value	Interpretation	Statistical Analysis
Sex	.802	Not Significant	Chi Square
Age	.064	Not Significant	Spearman rho
Civil Status	.228	Not Significant	Chi Square
Monthly Income	.091	Not Significant	Spearman rho
Years in Service	.913	Not Significant	Spearman rho

Table 10 shows significant relationships between compassion satisfaction and age ($p < .001$), civil status ($p = .014$), and years of service ($p = .024$). Older, married, and more experienced nurses reported higher compassion satisfaction, likely due to stronger coping strategies, professional confidence, and social support. Sex ($p = .613$) and monthly income ($p = .701$) were not significant. These results suggest that compassion satisfaction is influenced more by life experience, professional identity, and supportive relationships than by external demographic factors, supporting prior studies emphasizing the protective role of fulfillment against compassion fatigue (Duarte & Pinto-Gouveia, 2017a; Hunsaker et al., 2015; Sinclair et al., 2017).

Table 10. *Respondents' Level of Compassion Fatigue (Compassion Satisfaction) with their Demographic Profile*

Profile	P-value	Interpretation	Statistical Analysis
Sex	.613	Not Significant	Chi Square
Age	p <.001	Significant	Spearman rho
Civil Status	.014	Significant	Chi Square
Monthly Income	.701	Not Significant	Spearman rho
Years in Service	.024	Significant	Spearman rho

Table 11 shows the relationship between burnout and demographic factors. Civil status ($p = .005$) was the only variable associated with significant differences, with single nurses reporting higher levels of moderate burnout than married nurses. Sex ($p = .894$), age ($p = .121$), monthly income ($p = .609$), and years of service ($p = .335$) had no significant impact. These findings suggest that social support, potentially provided through marriage, may help protect nurses from the emotional exhaustion of their work. Burnout appears to be driven primarily by the emotional demands of caregiving rather than demographic traits, emphasizing the importance of coping strategies, emotional resilience, and support systems to reduce vulnerability to burnout in hemodialysis nursing (Duarte & Pinto-Gouveia, 2017b; Sinclair et al., 2017; Yu et al., 2021).

Table 11. *Respondents' Level of Compassion Fatigue (Burnout) with their Demographic Profile*

Profile	P-value	Interpretation	Statistical Analysis
Sex	.894	Not Significant	Chi Square
Age	.121	Not Significant	Spearman rho
Civil Status	.005	Significant	Chi Square
Monthly Income	.609	Not Significant	Spearman rho
Years in Service	.335	Not Significant	Spearman rho

Table 12 shows the relationship between secondary traumatic stress and demographic factors. None of the variables, sex ($p = .448$), age ($p = .421$), civil status ($p = .355$), monthly income ($p = .119$), or years of service ($p = .969$) showed a significant relationship, indicating that demographic characteristics do not influence secondary traumatic stress among hemodialysis nurses. These results suggest that secondary traumatic stress is primarily driven by repeated exposure to patient suffering and the emotional demands of caregiving, rather than demographic traits. Interventions to address secondary traumatic stress should focus on enhancing emotional resilience, coping strategies, and organizational support to help nurses manage the psychological impact of long-term patient care (Duarte & Pinto-Gouveia, 2017a; Hunsaker et al., 2015; Sinclair et al., 2017; Yu et al., 2021).

Table 12. *Respondents' Level of Compassion Fatigue (Secondary Traumatic Stress) with their Demographic Profile*

Profile	P-value	Interpretation	Statistical Analysis
Sex	.448	Not Significant	Chi Square
Age	.421	Not Significant	Spearman rho
Civil Status	.335	Not Significant	Chi Square
Monthly Income	.119	Not Significant	Spearman rho
Years in Service	.969	Not Significant	Spearman rho

Conclusion

This study contributes to nursing knowledge by providing empirical evidence on the levels of compassion, compassion satisfaction, and compassion fatigue among hemodialysis nurses in the Third District of Laguna. This

area remains underexplored in the Philippine context. It demonstrates that high compassion can coexist with moderate to high levels of compassion fatigue, particularly secondary traumatic stress, underscoring the complex emotional demands of dialysis nursing. The findings suggest several implications. In nursing practice, healthcare institutions should implement structured support mechanisms, such as mentoring, psychological services, and resilience-building programs. For policy, routine assessment of compassion fatigue and the inclusion of nurse psychological safety in organizational standards are recommended. For nursing education, integrating emotional resilience, reflective practice, and stress-management skills into curricula may better prepare nurses for emotionally intensive clinical environments. For research, future studies may expand to multiple regions, employ probability sampling, and evaluate targeted interventions to mitigate compassion fatigue in dialysis settings. This study has limitations, including its purposive sampling method, focus on a single district, and reliance on self-reported measures, which may limit generalizability. Future research addressing these limitations would strengthen the evidence base and provide broader insights. The study highlights the need for sustained institutional support to promote nurse well-being, which is essential to maintaining compassionate, high-quality patient care.

Contributions of Authors

Author 1: Led the research team; conceptualized and designed the study; coordinated the overall research process; conducted data collection and analysis; drafted the manuscript; and performed final revisions.
Author 2: Conceptualization; literature review; research instrument; data gathering procedure; data collection and analysis; conclusion; manuscript drafting and revision.
Author 3: Conceptualization; literature review; research instrument; data gathering procedure; data collection and analysis; conclusion; manuscript drafting and revision.
Author 4: Conceptualization; literature review; research instrument; data gathering procedure; data collection and analysis; conclusion; manuscript drafting and revision.
Author 5: Served as research adviser; provided supervision and methodological guidance; critically reviewed the manuscript; and gave final approval for submission.
Author 6: Served as publication mentor; provided academic and technical guidance; offered methodological consultation; and reviewed the manuscript for publication readiness.

Funding

The research received no specific funding.

Conflict of Interests

The authors declare no conflict of interest.

Acknowledgment

The authors would like to thank Sr. Lina L. Amante, FdCC, Dean of Canossa College, and Sr. Rita D. Nedtran, FdCC, Dean of the College of Nursing, for their institutional support. We are grateful to Dr. Marc Lester F. Quintana, Ed.D., M.A.N., R.N. (US-RN), Research Mentor, and Ms. Girlie Mannphy A. Lacambra, M.A.N., R.N., R.M., Research Adviser, for their guidance and expertise throughout the conduct of this study. We also acknowledge Ms. Kathleen B. Corcolon, R.N., M.A.N., and Ms. Vivian P. Lajara, R.N., M.A.N., for their academic and clinical guidance. Our appreciation is extended to Mr. Paul Adrian S. Avecilla, RPm, and Mr. Jaimes Aerolle D. Tan, RPm, MSPsy, for their assistance in statistical analysis. We thank Ms. Dulce Belarmino, R.N., M.A.N., Ms. Bernadette Barrento, R.N., R.M., M.A.N., and Dr. Alvin Belen, M.D., for validating the research instrument, and Ms. Norlen Dwight Valmon, R.N., for assistance during data collection. The authors also thank Dr. Kristin Neff and Ms. Beth Hudnall Stamm, Ph.D., for granting permission to use the Professional Quality of Life instrument, and Mr. Ryan Michael Oducado for permission to utilize the validation tool. Appreciation is extended to the administrations and staff of the participating hemodialysis centers for their cooperation, as well as to all individuals who provided support throughout the research process.

References

Aslan, H., Erci, B., & Pekince, H. (2022). Relationship between compassion fatigue in nurses and work-related stress and the meaning of life. Journal of Religion and Health. https://doi.org/10.1007/s10943-020-01142-0

Cao, X., & Chen, L. (2021). The impact of resilience on turnover intention in dialysis nurses: The mediating effects of work engagement and compassion fatigue. Japan Journal of Nursing Science, 18(3), e12414. https://doi.org/10.1111/jjns.12414

Clayton-Hathway, K., Humbert, A.L., Griffiths, H., McIlroy, R., & Schutz, S. (2020). Gender and nursing as a profession: Valuing nurses and paying them their worth. Royal College of Nursing. https://doi.org/10.1111/j.1442-2018.2010.00526.x

Crabtree-Nelson, S., DeYoung, P., Vincent, N., Myers, T., & Czerwinskyj, J. (2022). Compassion fatigue, compassion satisfaction, and burnout: A study of nurses in a large Texas health-care system. Journal of Nursing Scholarship, 54(6), 720–727. https://doi.org/10.1111/jnu.12780

De Zulueta, P.C. (2016). Compassion in healthcare: A missing link in quality improvement. Journal of the Royal Society of Medicine, 109(5), 180–185. https://doi.org/10.1016/j.nedt.2014.04.003

Duarte, J., & Pinto-Gouveia, J. (2017a). Empathy and feelings of guilt experienced by nurses: A cross-sectional study of their role in burnout and compassion fatigue symptoms. Applied Nursing Research, 35, 42–47. https://doi.org/10.1016/j.apnr.2017.02.006

Duarte, J., & Pinto-Gouveia, J. (2017b). The role of psychological factors in oncology nurses' burnout and compassion fatigue symptoms. European Journal of Oncology Nursing, 28, 114–121. https://doi.org/10.1016/j.ejon.2017.04.002

Gilbert, P., Catarino, F., Duarte, C., Matos, M., Kolts, R., Stubbs, J., Ceresatto, L., Duarte, J., Pinto-Gouveia, J., & Basran, J. (2017). The development of compassionate engagement and action scales for self and others. Journal of Compassionate Health Care, 4(1), 1–24. https://doi.org/10.1186/s40639-017-0033-3

Hunsaker, S., Chen, H.-C., Maughan, D., & Heaston, S. (2015). Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. Journal of Nursing Scholarship, 47(2), 186–194. https://doi.org/10.1111/jnu.12122

Jinpa, T. (2015). A fearless heart: How the courage to be compassionate can transform our lives. Avery / Penguin Random House.

Kabunga, A., Kigongo, E., Udho, S., Auma, A.G., Tumwesigye, R., Musinguzi, M., & Anyolitho, M.K. (2025). Compassion fatigue and coping strategies among healthcare providers in Central Uganda: A facility-based cross-sectional study. BMJ Open, 15(8), e102203. https://doi.org/10.1136/bmjopen-2025-102203

Malenfant, S., Jaggi, P., Hayden, K.A., & Sinclair, S. (2022). Compassion in healthcare: An updated scoping review of the literature. BMC Palliative Care, 21(1), 80. https://doi.org/10.1186/s12904-022-00942-3

Mao, A., Cheong, P.L., Van, I.K., & Tam, H.L. (2021). "I am called girl, but that doesn't matter": Perspectives of male nurses regarding gender-related advantages and disadvantages in professional development. BMC Nursing, 20(1). https://doi.org/10.1186/s12912-021-00539-w

Nikpey, S., Ghafourifard, M., & Ghahramanian, A. (2023). The association of compassionate care and coping with disease among patients undergoing hemodialysis. Renal Replacement Therapy, 9(1). https://doi.org/10.1186/s41100-023-00499-8

Özan, A., & Polat, H. (2024). Determination of compassion and compassion fatigue in intensive care nurses. SAGE Open Nursing, 10. https://doi.org/10.1177/23779608241247395

Sahin, S., Duzgun, A.A., Unsal, A., Kirmizigul, E.I., & Ozdemir, A. (2023). Assessment of compassion fatigue and empathy levels in nurses during the COVID-19 outbreak: Turkey's case. Journal of Religion and Health, 62(2), 1343–1357. https://doi.org/10.1007/s10943-023-01749-z

Sinclair, S., Kondejewski, J., Jaggi, P., Roze des Ordons, A., Kassam, A., Hayden, K.A., Harris, D., & Hack, T. (2021). What works for whom in compassion training programs offered to practicing healthcare providers: A realist review. BMC Medical Education, 21(1). https://doi.org/10.1186/s12909-021-02863-w

Spurlock, D., Jr. (2020). The nursing shortage and the future of nursing education is in our hands. Journal of Nursing Education, 59(6), 303–304. https://doi.org/10.3928/01484834-20200520-01

Su, J.J., Masika, G.M., Paguio, J.T., & Redding, S.R. (2020). Defining compassionate nursing care. Nursing Ethics, 27(2), 480–493. https://doi.org/10.1177/0969733019851546

Trzeciak, S., Roberts, B., & Mazzarelli, A. (2017). Compassionomics: Hypothesis and experimental approach. Medical Hypotheses, 107, 92–97. https://doi.org/10.1016/j.mehy.2017.08.015
Wang, Y.-Y., Xiong, Y., Zhang, Y., Li, C.-Y., Fu, L.-L., Luo, H.-L., & Sun, Y. (2022). Compassion fatigue among haemodialysis nurses in public and private hospitals in China. International Journal of Nursing Practice, 28(1), e13011. https://doi.org/10.1111/ijn.13011
Wasson, R., Barratt, C., & O'Brien, W. (2020). Effects of mindfulness-based interventions on self-compassion in health care professionals: A meta-analysis. Mindfulness. https://doi.org/10.1007/s12671-020-01342-5