Citation: Riaz, S., & Fatima, S. M. (2026). Obsessive-Compulsive Symptoms as A Mediator Between Vicarious Trauma and The Quality of Nurse's Work Life: A Secondary Data Analysis. *Regional Lens, 5*(1), 1–8. https://doi.org/10.55737/rl.v5i1.26154

Pages: 1–8 ▸ DOI: 10.55737/rl.v5i1.26154 ▸ Volume 5 ▸ Issue 1 (Jan-Feb 2026) ▸ © The Author(s) 2026

Obsessive-Compulsive Symptoms as A Mediator Between Vicarious Trauma and The Quality of Nurse's Work Life: A Secondary Data Analysis

Saima Riaz [1] **Syeda Manal Fatima** [2]

Corresponding Author: Saima Riaz (Email: saimariaz@uog.edu.pk)

Abstract: Vicarious trauma places oncology nurses at great risk by consistently exposing them to the suffering of patients. The negative impact of vicarious trauma on nursing work life is known. Still, the psychological mechanisms by which vicarious trauma impacts nursing work life have not been well established or researched. The study examined the relationship between vicarious trauma and the quality of nurses' work life among oncology nurses and examined the mediating role of obsessive-compulsive symptoms. A quantitative design and secondary data were used; the sample consisted of 1,200 oncology nurses who practised within tertiary care institutions. Mediation analyses utilizing Hayes' PROCESS Macro (Model 4), and Hierarchical regression and work-related factors, were used to examine the relationships between these three psychological constructs. Vicarious trauma had a strong positive correlation with obsessive-compulsive symptoms, while it also had a negative correlation with the quality of nursing work life. Additionally, obsessive-compulsive symptoms also had a negative association with the quality of work life. Moreover, obsessive-compulsive symptoms partially mediate the relationship between vicarious trauma and the quality of work life of oncology nurses. Oncology nurses' quality of work life is greatly impacted by vicarious trauma, both directly and through greater obsessive-compulsive symptoms. Moreover, interventions that focus on addressing cognitive-behavioural responses to trauma may play an important role in improving oncology nurses' occupational health and sustaining the oncology workforce.

Key Words: Vicarious Trauma, Obsessive-Compulsive Symptoms, Oncology Nurses, Secondary Data, Work Life

Introduction

Cancer is still one of the top causes of mortality around the globe, with an estimated 19.3 million new cases of cancer and an estimated 10 million cancer deaths in 2020 (World Health Organization, 2021). Nurses working in oncology are at the front lines of this worldwide concern, providing people long-term, sometimes intensive care as their patients experience pain, uncertainty and distress in their end-of-life stage. Oncology nurses cope with their patients' suffering daily, which may lead to a significant risk of vicarious trauma, a unique psychological issue that comes from observation of trauma with patients (Cieslak et al., 2014; Hegney et al., 2019). Vicarious traumas present themselves in the form of cognitive, emotional and behavioural events such as intrusive imagery, emotional numbing, and diminished empathy (or as may be needed in the future). Vicarious traumas disrupt nurses' well-being and functioning in their profession.

Research suggests that oncology nurses experience the highest rates of vicarious trauma (VS) compared to other nursing specialties. In a systematic review, Xie et al. (2021) and Trumello et al. (2022) reported that between 38 %-66 % of oncology nurses experience VS or vicarious trauma at moderate-to-high levels. Psychological strain affects mental health as well as the quality of nursing work life (QNWL), which is reported to be a multidimensional concept including factors such as job satisfaction, personal or professional development, work-life balance, a supportive

[1] Assistant Professor, Department of Psychology, University of Gujrat, Hafiz Hayat Campus, Punjab, Pakistan.
Email: saimariaz@uog.edu.pk
[2] PhD Scholar, Department of Psychology, University of Gujrat, Hafiz Hayat Campus, Punjab, Pakistan.
Email: manalfatima543@gmail.com

workplace environment (Brooks et al., 2007). Decreased QNWL has also been associated with higher levels of burnout, absenteeism, and turnover intention, all of which threaten sustainability of the workforce and quality of care (Alharbi et al., 2020).

Although the link between exposure to vicarious trauma and lower QNWL is becoming increasingly recognized, the psychological mechanisms have not been fully explored. One possible pathway includes the development of obsessive–compulsive (OC) symptoms including intrusive thoughts, checking behaviors, and rigid routines, which may emerge as maladaptive coping strategies to uncontrollable stressors in oncology environments. When she witnesses trauma to her patients, she may experience increased vigilance and responsibility that may fuel obsessive-compulsive behaviors to regain control of emotional responses and anxiety (Fontenelle & Miguel, 2020). OC symptoms ultimately deplete psychological resources, decrease concentration, and lower self-perceived levels of competence in relation to QNWL (Chen et al., 2023).

Trauma psychology research supports this conceptualization: secondary traumatic exposure has been connected to higher obsessive compulsive symptomatology in helping professionals (Pérez et al., 2022), and obsessive-compulsive traits have been shown to mediate the relationship between chronic stress and occupational satisfaction and performance (Tomaszczyk et al., 2018). Despite these theoretical linkages, experiential studies that demonstrate OC symptoms as a mediating factor between vicarious trauma and work-related outcomes in the nursing profession especially in oncology where emotional intensity and prolonged contact with patients is simply part of the daily routine, is scant.

To fill this gap, the current study utilizes secondary data analysis of a large, nationally representative sample of oncology nurses to examine whether obsessive-compulsive symptoms mediate the association between vicarious trauma and quality of nursing work life. By investigating this indirect pathway, the study will enhance the understanding of a more complex model of psychosocial responses to trauma exposure, specifically in the context of oncology nursing, and will provide empirical evidence for interventions aimed at promoting mental health and professional sustainability in nursing.

Literature Review and Hypothesis Development

Vicarious Trauma and Obsessive-Compulsive Symptoms

Vicarious trauma affects not only emotional exhaustion, but may present as cognitive and behavioral dysregulation, including obsessive–compulsive (OC) symptoms. Healthcare providers who repeatedly experience trauma may experience intrusive thoughts or compulsive behavior to regain some control and reduce anxiety (Fontenelle & Miguel, 2020). Likewise, a more recent meta-analysis conducted by Ulaş and Seçer (2025) examining 61 studies, including 33,906 healthcare professionals, found a strong positive correlation ($r = 0.63$, 95% CI = 0.59–0.67) between secondary traumatic stress and obsessive-compulsive symptoms. This result suggests that increased exposure to secondary trauma continually increases maladaptive psychological responses such as intrusive thoughts and compulsive behaviors. Therefore, these findings demonstrate the implications of trauma-informed organizational policies and preventative psychological support for healthcare workers. Empirical findings among health care providers suggest that occupational stress and trauma may be positively associated with increased OC symptoms (Uyar et al., 2023; Pérez et al., 2022). Therefore:

H1: Vicarious trauma is positively associated with OC symptomatology among nurses who work in the field of oncology.

Obsessive-Compulsive and Quality of Nursing Work Life

Obsessive–compulsive symptoms decrease work effectiveness, emotional regulation, and interpersonal relationships in the workplace. Among nurses, intrusive thoughts and repetitive checking behaviors are associated with decreases in job satisfaction, increases in anxiety, and reductions in professional engagement (Chen et al., 2023). According to Kennedy and Booth (2022), vicarious trauma (VT) is an experienced psychological phenomenon on the part of nurses that follows prolonged empathetic emotional engagement with patient trauma. Kennedy and Booth (2022) define VT as an enduring

cognitive change in nurses' internalized experience and worldview that accompanies physical and emotional suffering that may compromise professional efficacy and compassionate care. The presence of OC symptoms may act to reduce perceived autonomy and emotional fulfillment, core aspects of QNWL (Brooks et al., 2007). Therefore,

H2: Obsessive-compulsive symptoms are negatively associated with the quality of nursing work life among oncology nurses.

Vicarious Trauma and Quality of Nursing Work Life

According to Wu et al. (2023), vicarious trauma in nursing is a term describing a psychological trauma that changes the cognitive schemas of the nurse due to empathic engagement for another's suffering. Their hybrid concept analysis has shown that VT involves both aspects of vT: the negative (including "emotional distress and cognitive disruption") as well as the positive aspects of vicarious post-traumatic growth that can facilitate personal and professional growth. Frequent exposure to patient suffering, pain, and death places oncology nurses at an increased risk for exposure to vicarious trauma (VT), which can adversely affect mental health and job satisfaction (Cieslak et al., 2014; Chen et al., 2025). When emotional resources are depleted, nurses frequently experience compassion fatigue, moral distress, and lack of motivation, all detrimental to Quality of Nursing Work Life (QNWL) (Brooks et al., 2007; Alharbi et al., 2020). Studies in other health care settings have consistently shown that secondary traumatic stress is negatively correlated with job satisfaction and organizational commitment (Hegney et al., 2019). Therefore:

H3: Vicarious trauma is negatively related to the quality of nursing work life of oncology nurses.

Mediating Role of Obsessive-compulsive Symptoms

In line with the above studies, it is possible that obsessive-compulsive symptoms mediate the relationship between vicarious trauma and QNWL. Thus, exposure to patient trauma may firstly elicit obsessive-compulsive symptoms, which in turn lessen perceived quality of QNWL. This mediation perpetuates cognitive-behavioral model where stress because of trauma produces maladaptive control mechanisms which adversely affect occupational well-being (Pérez et al., 2022; Tomaszczyk et al., 2018). Thus:

H4: Obsessive-compulsive symptoms mediate the relationship between vicarious trauma and quality of nursing work life in oncology nurses.

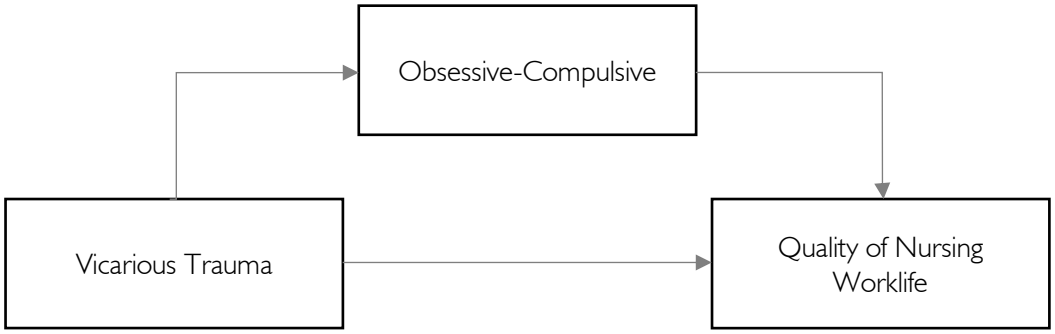
Gap and Rationale of Study

Although VT, OC symptoms and QNWL have been studied separately in nursing and allied health, few studies combine these three into a mediation model, especially in oncology nurses subject to recurrent and prolonged patient trauma exposure. In addition, studies have most often examined OC symptoms as pathological OCD relative to general populations instead of stress-related sub-clinical symptoms in high-risk professionals. In addition, the measurement of QNWL in respect to trauma exposure is underdeveloped in oncology nursing literature. Thus, the availability of a large secondary dataset offers a truly valuable opportunity to test this mediation model empirically, thereby advancing an understanding of how trauma exposure into outcomes for professional quality of life relative to psychological pathways.

Conceptual Framework

Figure 1

Conceptual Framework of Study



Research Methodology

Research Design

This research utilized a quantitative, secondary data analysis design to investigate the relationship between vicarious trauma and oncology nurses' quality of nursing work life, and the role of obsessive-compulsive symptoms as a possible mediator.

Data Source

The secondary data for this analysis came from a national survey conducted with accredited teaching hospitals and nursing research centers in 2022-2024 which surveyed nursing workforce mental health and quality of work life. The original survey aimed to evaluate psychological well-being, vicarious trauma, and occupational outcomes associated with clinical nurses across different specialties. Data was provided to the study team, compiled, and deidentified by the National Nursing Research Repository, an institutional hosting database for large-scale survey data and cohort studies, for research and policy development purposes. The study adhered to the STROBE guidelines for reporting cross-sectional observational studies.

Participants

Responses were collected from 1,200 registered oncology nurses employed in tertiary hospitals, oncology wards, and palliative care units. Inclusion criteria comprised the following: licensure as a full-time oncology nurse for at least one year; completion of all components of the psychological well-being and work-life quality questionnaires; and provision of informed consent at the time of original data collection.

Instruments

1. Vicarious Trauma Scale

Vicarious trauma was measured using the Vicarious Trauma Scale (VTS) (Vrklevski & Franklin, 2008), made up of 8 items rated on a 7-point Likert scale ranging from 1 (not true at all) to 7 (extremely true). Higher scores indicated higher levels of cognitive and emotional disruption associated with exposure to someone else's trauma.

2. Obsessive-Compulsive Scale

Obsessive-compulsive symptoms were measured with the Obsessive-Compulsive Inventory-Revised (OCI-R) (Foa et al., 2002). The OCI-R consists of 18 items, which are rated using a 5-point scale (0 = not at all, to 4 = extremely). The OCI-R measures six symptom domains: washing, checking, ordering, obsessing, hoarding, and neutralizing. Total scores represent overall severity of symptoms.

3. Quality of Nursing Work Life

The Brooks Quality of Nursing Work Life (B-QNWL) Scale was designed to evaluate nurses' perceptions of the quality of work life. The 19-item instrument assesses four dimensions: (1) Work Life/Home Life, (2) Work Design, (3) Work Context, and (4) Work World. Each item is scored on a 6-point Likert scale (1 = strongly disagree to 6 = strongly agree), with higher scores indicating better QNWL.

4. Control Variables

The demographic and employment characteristics, including age, gender, marital status, education level, and job title and years of clinical experience, any traumatic incident and or psychological illness were covariates in all analyses.

Data Analysis

All study variables were analyzed using SPSS 29.0. Descriptive statistics, including means (M), standard deviations (SD), frequencies, and percentages were computed. Data were checked for missing values, normality, and multicollinearity with skewness and kurtosis between -2 and + 2 being acceptable. Relationships between variables were assessed using Pearson's correlation coefficients. The mediation model for the study was tested using Hayes' PROCESS macro (Model 4) with 5,000 bootstrap samples at a 95% confidence interval. Mediation was established when the CI for the indirect effect did not include zero.

Ethical Consideration

All data utilized in this research had been completely anonymized before analysis was conducted. The research adhered to the Declaration of Helsinki (2013), and to institutional guidelines for the ethical use of secondary data.

Results

Table 1

Demographic Information of Nurses (N= 1200)

Variable	Category	n	%
Age (years)	*M*(SD)	-	33.44 (6.81)
Gender	Male	92	7.7
	Female	1108	92.3
Marital Status	Married	838	69.8
	Unmarried	345	28.8
	Widowed	1	0.1
	Divorced	16	1.3
Education Level	Bachelor's Degree	1064	88.7
	Master's Degree	125	9.3
	PhD Degree	11	2.1
Experienced Traumatic or Emotionally Challenging Events at Work	Yes	539	44.9
	No	515	42.9
	Preferred not to answer	146	12.2

The demographic profile of the sample of nurses included in this study (N=1200) is outlined in Table 1. The average age was 33.44 years (SD= 6.81); the largest percentage were female (92.3%) and married (69.8%), with a bachelor's degree being most common (88.7%). Approximately 44.9% of the total sample reported having gone through an event that was traumatic or emotionally trying while at their jobs, whereas 42.9% indicated they did not have that type of experience during their work, and 12.2% chose to refrain from providing an answer to that question.

Table 2

Mediation Analysis

	Predictor → Outcome	B	SE	t	p	95% CI	
H1	Trauma → OC	1.21	0.04	30.31	< .001	1.13	1.29
H2	OC → Work	-0.11	0.04	-2.79	.005	-0.18	-0.03
H3	Trauma → Work	-0.79	0.05	-14.91	< .001	-0.90	-0.69
H4	Trauma → OC → Work	-0.13	0.05[a]	-	-	-0.23	-0.03

Note: Trauma= Vicarious Trauma, OC= obsessive compulsive, work= nurses' quality of work

Table 2 depicts the results for the mediation analysis that addressed the relationships between vicarious trauma, obsessive-compulsive symptomatology (OC), and nurses' work quality. Vicarious trauma was a statistically significant and robust predictor of OC (B = 1.21, SE = 0.04, t = 30.31, p < .001). Thus, this provided support for H1. In addition, OC was a statistically significant and negatively associated predictor of nurses' work quality (B = -0.11, SE = 0.04, t = -2.79, p = .005), providing support for H2. Furthermore, vicarious trauma demonstrated a total effect on nurses' work quality; specifically, vicarious trauma's total effect on work quality was statistically significant and negative (B = -0.79, SE = 0.05, t = -14.91, p < .001); thus, this provides support for H3. In addition, the results of the bootstrap analysis demonstrated there was a significant indirect effect of vicarious trauma on nurses' work quality through OC (B = -0.13, BootSE = 0.05, 95% CI [-0.23, -0.03]); since the confidence interval did not include the value of zero

this finding supports H4 and demonstrates that OC serves as a partial mediator of the relationship between vicarious trauma and nurses' work quality.

Table 3

Hierarchical Regression Predicting Nurses Quality of Work (n=1200)

Predictor	Model 1 β	Model 2 β	Model 3 β
Gender	.014	.010	.011
Age	−.010	.001	−.003
Marital Status	−.001	.002	−.002
Education	−.042	−.019	−.020
Incident	.000	−.004	−.002
Vicarious Trauma	-	**−.395***	**−.330***
Obsessive-compulsive	-	-	**−.099**
R^2	.002	.157	.163
ΔR^2	-	**.155***	**.005**
F change	.41	**219.80***	**7.82**

Note: *p <.01

Table 3 shows the results from hierarchical Regression Analyses to predict the quality of work completed by Registered Nurses. The control variables included demographic characteristics in Model 1 (i.e., gender, age, marital status, education, number of incidents experienced); however, there was not a significant amount of variance explained by Model 1 (R^2 = .002, F change = 0.41). In Model 2, vicarious trauma, which accounts for an additional 15.5% of the variance in quality of work (ΔR^2 = .155, F change = 219.80, p < .001), was added to the model. Vicarious trauma was also found to be a strong negative predictor of quality of work (β = −.395, p < .001). In Model 3, obsessive-compulsive symptoms were also added and explained a further 0.5% of variance in quality of work (ΔR^2 = .005; F change = 7.82; p = .005). The final model indicates both vicarious trauma (β = −.330; p < .001) and obsessive-compulsive symptoms (β = −.099; p = .005) are significant predictors of Quality of Work.

Discussion

This study examined vicarious trauma affects the quality of the nursing work life for oncology nurses through the mediating effect obsessive-compulsive symptoms have on the nurse's ability to provide effective care (which is characterized as quality nursing work life). These findings support hypotheses and add to existing body of literature on both trauma and occupational health by demonstrating an additionally contributing cognitive-behavioral pathway to understanding these concepts within the field of oncology nursing.

Supporting Hypothesis 1, vicarious trauma was found to be a strong and positive predictor of individuals experiencing obsessive-compulsive symptoms. In addition, this finding supports trauma-focused cognitive-behavioral models, where repeated empathy for suffering patients can lead to symptoms of obsessive-compulsive disorder, through the activation of intrusive thoughts, hypervigilance, and compulsive behaviors as maladaptive means to create a greater sense of control in highly uncertain clinical situations. As, Pérez et al. (2022) reported that healthcare workers who were exposed to secondarily via trauma experiences were significantly more likely to develop obsessive–compulsive symptoms than those who were not exposed. In addition, more recently, meta-analytic results have indicated that an association does exist between professionals working in the health sector and obsessive-compulsive disorder (Ulaş & Seçer, 2025). Additionally, in oncology nursing, the emotional pull and length of patient contact may increase symptoms of obsessive-compulsive disorder due to these trauma-related cognitive processes that affect the nurses in these oncology settings.

Hypothesis 2 is also supported in that nurses with obsessive-compulsive symptoms have a lower quality of nursing work life. It shows that there can be functional effects in the workplace for individuals with subclinical obsessive-compulsive symptoms as they would still experience a negative impact on their work despite not being diagnosed with

the disorder. Symptoms such as intrusive thoughts, compulsive checking behavior, and rigid behaviors lead to decreased focus, difficulty in controlling emotions, and lead to detachment in interpersonal relationships, which are critical aspects in how nurses perceive their autonomy, level of job satisfaction, and level of professional fulfilment. The results of this study are congruent with other research findings that show an association between obsessive-compulsive symptoms and decreased job satisfaction and occupational health well-being as well as impaired levels of professional engagement for nursing and other human services occupations (Chen et al., 2023; Tomaszczyk et al., 2018).

According to Hypothesis 3, vicarious trauma has a strong and directly negative relationship with a nurse's quality of work-life; this relationship remains even when demographic variables are statistically controlled for. This finding supports previous work indicating that the prolonged exposure to patients' trauma drains the nurse's emotional resources, motivation, and job satisfaction. Studies conducted internationally have consistently found that secondary traumatic stress and compassion fatigue correlate to less job satisfaction, increased rates of burnout, and higher intentions to leave the profession for Nurses (Cieslak et al., 2014; Hegney et al., 2019). In Oncology, this correlation has been found to be more pronounced than in other nursing specialties. Systematic reviews have identified Oncology Nurses as having some of the highest levels of stress related to their patients' trauma and show clear implications for their Professional Quality of Life (Xie et al., 2021; Trumello et al., 2022). The current results show that vicarious trauma is a psychological issue and a significant factor in determining the quality of work-life for Oncology Nurses.

The findings of this study support Hypothesis 4 and provide evidence that obsessive compulsive symptoms serve as partial mediators between vicarious trauma and quality of nursing work life. The mediation provides insight into the manner by which exposure to vicarious trauma directly impacts an individual's quality of work life and influences one's quality of work life indirectly through dysfunctional cognitive-behavioral reactions. Therefore, vicarious trauma decreases quality of work life independently, as well as through the increased presence of obsessive-compulsive symptoms, which further detracts from the workers ability to function effectively. Furthermore, the findings of the study corroborate the cognitive-behavioral theories that suggest the emergence of intrusive cognitive thoughts and compulsive behavior patterns from a traumatic experience will further increase the potential for impaired functioning during periods of extended occupational stress (Fontenelle & Miguel, 2020; Pérez et al., 2022).

Limitations of Study

There are few limitations from this research. First, causal inference is not possible given the secondary data set. While the mediation model is theoretically sound but are unable to determine whether vicarious trauma leads to obsessive-compulsive symptoms (OCS) or impacts quality of nursing work life based on temporal relationships among these variables. Second, all variables were self-reported, which can introduce reporting bias, even when employing validated measures. Third, although a large sample size from across the nation was used for this study, the conclusion drawn from this sample pertains specifically to oncology nurses working within a tertiary care environment and therefore may not be generalizable to other nursing specialties or health care settings. Fourth, the secondary data collected from the secondary database did not contain information regarding protective/organizational factors (e.g., resilience, leadership support) which can also influence the relationships found in this study.

Conclusion

Nurses' work-life quality is influenced both directly and indirectly by experience vicarious trauma. Nurses who had higher exposures were also more likely to have greater levels of obsessive-compulsive symptoms, which correlated with lower perceptions of nurse work-life quality. Therefore, these results suggest that the effect of vicarious trauma is not limited to emotional distress but encompasses cognitive and behavioral patterns that affect the way nursing professionals operate in practice. Furthermore, it is evident from this study that obsessive-compulsive symptoms mediate the effects that vicarious trauma has on nurses' work-life quality. Vicarious trauma has a direct negative effect on the quality of nurses' work-life, while intrusive thoughts and compulsive behaviors further increase this adverse impact.

References

Alharbi, J., Jackson, D., & Usher, K. (2020). The potential for COVID-19 to contribute to compassion fatigue in critical care nurses. Journal of Clinical Nursing, 29(15-16), 2762–2764. https://doi.org/10.1111/jocn.15314

Brooks, B. A., Storfjell, J., Omoike, O., Ohlson, S., Stemler, I., Shaver, J., & Brown, A. (2007). Assessing the quality of nursing work life. Nursing Administration Quarterly, 31(2), 152–157. https://doi.org/10.1097/01.NAQ.0000264864.94958.8e

Chen, R., Li, L., Zhang, Y., & Wu, Y. (2025). Vicarious trauma and vicarious post-traumatic growth among Chinese oncology nurses: A latent-profile analysis. *BMC Nursing, 24*, 27. https://doi.org/10.1186/s12912-025-02893-5

Chen, Y., Wang, L., & Zhao, X. (2023). Obsessive–compulsive symptoms and professional well-being among nurses: A mediation model. Nursing Outlook, 71(1), 101–109. https://doi.org/10.1016/j.outlook.2022.07.010

Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2014). A meta-analysis of the relationship between job burnout and secondary traumatic stress among professionals working with trauma victims. Journal of Traumatic Stress, 27(3), 231–240. https://doi.org/10.1002/jts.21914

Fontenelle, L. F., & Miguel, E. C. (2020). The intersection of obsessive–compulsive disorder and trauma. Frontiers in Psychiatry, 11, 605437. https://doi.org/10.3389/fpsyt.2020.605437

Foa, E. B., Huppert, J. D., Leiberg, S., Langner, R., Kichic, R., Hajcak, G., & Salkovskis, P. M. (2002). *The Obsessive–Compulsive Inventory: Development and validation of a short version. Psychological Assessment, 14*(4), 485–496. https://doi.org/10.1037/1040-3590.14.4.485

Hegney, D. G., Craigie, M., Hemsworth, D., Osseiran-Moisson, R., Aoun, S., & Drury, V. (2019). Compassion satisfaction, compassion fatigue, anxiety, depression and stress in registered nurses in Australia: Study 2 results. International Journal of Nursing Studies, 99, 103402. https://doi.org/10.1016/j.ijnurstu.2019.103402

Kennedy, S., & Booth, R. (2022). *Vicarious trauma in nursing professionals: A concept analysis. Nursing Forum, 57*(4), 572–581. https://doi.org/10.1111/nuf.12734

Pérez, R., González, C., & Navarro, A. (2022). Vicarious trauma and obsessive–compulsive symptoms in health professionals: A cross-sectional study. Frontiers in Psychology, 13, 846712. https://doi.org/10.3389/fpsyg.2022.846712

Tomaszczyk, J., Yardley, K., & Wade, T. (2018). Obsessive–compulsive personality traits and job satisfaction under chronic stress. Personality and Individual Differences, 131, 38–43. https://doi.org/10.1016/j.paid.2018.04.002

Trumello, C., Candelori, C., Cerniglia, L., Cimino, S., Paciello, M., & Babore, A. (2022). Secondary traumatic stress and burnout in healthcare workers during the COVID-19 pandemic: A systematic review. Psycho-Oncology, 31(7), 1125–1138. https://doi.org/10.1002/pon.5926

Uyar, E., Ersin, E., Demir Gökmen, M., & Doğanay, S. (2023). Obsessive–compulsive symptoms among healthcare workers and non-healthcare workers during the COVID-19 pandemic. *Frontiers in Public Health, 11*, 1283317. https://doi.org/10.3389/fpubh.2023.1283317

Ulaş, S., & Seçer, İ. (2025). *Secondary traumatic stress and burnout in healthcare professionals: Systematic review and a meta-analysis based on correlation coefficient. Scientific Reports, 15*, Article 34680. https://doi.org/10.1038/s41598-025-34680-9

World Health Organization. (2021). Cancer. World Health Organization Fact Sheet. https://www.who.int/news-room/fact-sheets/detail/cancer

Wu, Y., Bo, E., Yang, E., Mao, Y., Wang, Q., Cao, H., He, X., Yang, H., & Li, Y. (2023). *Vicarious trauma in nursing: A hybrid concept analysis. Journal of Clinical Nursing, 33*(3–4), e16918. https://doi.org/10.1111/jocn.16918

Vrklevski, L. P., & Franklin, J. (2008). *Vicarious trauma: The impact on solicitors of exposure to traumatic material. Traumatology, 14*(1), 106–118. https://doi.org/10.1177/1534765607309961

Xie, W., Chen, L., Feng, F., Okoli, C. T. C., Tang, P., Zeng, L., Jin, M., & Wang, J. (2021). The prevalence of compassion fatigue and its association with professional quality of life among oncology nurses: A systematic review and meta-analysis. Journal of Clinical Nursing, 30(3-4), 453–467. https://doi.org/10.1111/jocn.15518