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# THE IMPACT OF EMOTIONAL LABOR AND SECONDARY TRAUMATIC STRESS ON QUALITY OF LIFE AMONG MENTAL HEALTH NURSES IN PAKISTAN.

Maria Ilyas<sup>1\*</sup>, Dr Aftab Hussain<sup>2</sup>, Sara Siddiqui<sup>3</sup>, Qurrat-ul-ain Aini<sup>4</sup>, Farah Jabeen<sup>5</sup>, Hala Ali Shibli<sup>6</sup>

 <sup>1\*</sup>MS Scholar, Department of Applied Psychology, Riphah International University Islamabad. mariyaso457@gmail.com
 <sup>2</sup>Assistant Professor, Department of Applied Psychology, Riphah International University, Islamabad. aftab.hussain@riphah.edu.pk
 <sup>3</sup>MS Scholar, Department of Public Health, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology, sarasiddiqui01@outlook.com
 <sup>4</sup>Department of Education, Universidad Católica De Murcia, Spain, aqurrat-ul-ain@dubaischoolsmirdif.ae
 <sup>5</sup>Department of Applied Psychology, University of Punjab, farah.jabeen2015@pea.ae
 <sup>6</sup>Department of Education, Universidad Católica De Murcia, Spain, hala.shibli@ese.gov.ae

\*Corresponding Author: Maria Ilyas

\*MS Scholar, Department of Applied Psychology, Riphah International University Islamabad. mariyaso457@gmail.com

## Abstract

Mental care nursing is among the most challenging professions that involves consistent emotional engagement and regulation. Because mental disorders are becoming more common, there is a greater need for top-notch mental and psychiatric nurse services than there are currently available (1). Current study is focused on studying the impact of emotional labor (EL) and secondary traumatic stress (STS) on quality of life (QoL) among psychiatric nurses along with studying the effect of demographics i.e. age, gender, monthly income and hospital setting, on study variables. For that purpose current study employed cross-sectional research design and recruited a sample of (N = 140) calculated via G\*Power. Purposive sampling technique was employed, since only psychiatric nurses were needed for the study. The data was collected from different cities of Pakistan. Following measures were used to collect data from the sample: Emotional labor scale (2), Professional quality of life scale version-5 (3) and Quality of Life Scale (4). Results reported, that emotional labor (EL)- surface acting (SA) and deep acting (DA), DA showed a significant positive association with QoL, whereas SA reported significant negative association with QoL. STS reported negative and significant association with QoL. Moreover, results further showed EL-DA reported significant positive relation with STS. The results emphasize that by promoting self-care and providing readily accessible measures for dealing with emotional stressors will in return ensure the well-being of the psychiatric nurses.

**Keywords:** Emotional labor, Secondary traumatic stress, Psychiatric nurses, Quality of life, Mental health

## Introduction

As the prevalence of mental diseases increases, so does the demand for high-quality mental and psychiatric nursing services (Huang et al., 2020). The health care sector is based on "social mission" careers that provide physical and health security, meet others' basic requirements, and teach patients how to function in society. According to Żołnierczyk-Zreda (2020), employees in this business prioritize helping and caring for others. Work-related stress can harm all professionals, but nurses are more likely to suffer (Yehene et al., 2024). Continuous workloads, different tasks, and traumatic experiences contribute to global nursing shortages (Zaghini et al., 2020). Current study focuses on such effects i.e EL and STS and how it influences on their overall QoL.

## Emotional Labor (EL)

According to Hochschild (5) "emotional labor" refers to the situation where a worker's emotions and feelings do not align with the expected emotional expression, and instead involves the deliberate management of one's emotions to present a specific facial and bodily expression that can be observed by others. To put it in simple words, employees control their feelings and emotional outbursts in exchange for a salary that follows feeling-based norms (6). That said workers frequently adopt one of two emotional management techniques to ensure that their behavior adheres to the expected emotional conduct. Surface acting (SA) just modifies the emotion's external manifestation and results in a manufactured emotional display. Deep acting (DA), on the other hand, alters the emotion felt in order to modify it and produce a true emotional display (7).

Zaghini et al. (8) explained that the fundamental component of a therapeutic interaction between healthcare workers and their patients is emotional engagement. The notions of emotional engagement and labor become inalienable components of nursing practice since nurses provide high-quality compassionate care, which is why it is the most stressful professions, leading to burnout.

## Secondary Traumatic Stress (STS)

Secondary traumatic stress (STS) is a syndrome characterized by symptoms like avoidance, intrusion and heightened arousal. It occurs due to indirect encounter to trauma within a professional setting. STS pertains to the developing the symptoms or diagnoses resembling Post-Traumatic Stress Disorder (PTSD) resulting from another person's traumatic experience (9).

Hensel et al. (10) reported that professionals who deal therapeutically with trauma patients are susceptible to STS. When empathizing, staff members connect emotionally and empathically with clients which puts the worker in danger because of the emotional connection (11). Empathy is a particularly important gateway to STS because of its universal nature, as discussed in Ludick and Figley's (12) study. Injurious cumulative emotional energy is left behind by constant contact and empathetic interaction, which, if unchecked, can result in STS.

## Quality of life (QoL)

Quality of life (QoL) has become a key idea and goal for study and practice in the fields of medicine and health (13). The definition of QoL and what should be measured are still hotly contested conceptual and methodological issues, despite the significance of QoL in health and medicine (14). Furthermore QoL is described as a complicated idea that is defined and interpreted in various ways both within and across disciplines. The World Health Organisation (WHO, 1998) offers a unified definition of Quality of Life (QoL) as an individual's subjective assessment of their situation in life, taking into account their cultural background, personal objectives, expectations, standards, and concerns. There is no single definition for the concept. WHO pointed out that life happiness, personal happiness, mental and physical health, and social welfare are all parts of quality of life (4).

More and more healthcare workers are getting burned out and unhappy (RCP, 2015). Both of these states are bad for the treatment of patients, and higher levels of burnout are directly linked to lower levels of contentment in healthcare workers (15,16).

#### Literature Review

People working in the medical and health care field who are better at managing their emotions (i.e., who have high emotional intelligence) showed improved well-being and decreased levels of workplace stress. Karimi et al. (2016) reported that those who engaged in excessive amount of EL, which included dissonance between their expressed and perceived emotions, had lower levels of wellbeing and experienced more stress at work.

STS and EL are directly related (17–19). Study reported that, medical professionals often feel pressured to act differently than they genuinely feel. This fact has a strong connection to their lifestyles having higher degrees of STS (20).

A study examined the relationships among EL, QoL, and work satisfaction. Healthy behaviors were positively correlated with both job satisfaction and QoL. However, EL decreases as health promotion efforts increase (21).

In reference to literature on QoL and STS, there is currently a dearth of literature. However, if we consider the WHO-highlighted aspects of QoL (physical, mental, and social wellness, satisfaction, and personel wellbeing) we find some research to back up our claim. Studies have depicted that STS has an inverse effect on the well-being of the service provider. These studies show that STS causes more severe depression and anxiety-related problems as well as a lower QoL in general (22). Social work researchers reported that, constant interaction with individuals that were reported to have experienced some trauma might be harmful to mental health workers' wellbeing (Cieslak et al., 2014; Hensel et al., 2015).

Günüşen et al. (2018) reported that, STS is a significant issue for nurses due to its harmful affect on both their mental health as well as physical wellbeing including their ability to execute their jobs. An investigation was conducted to examine the correlations between (STS), psychological well-being (specifically purpose in life, environmental mastery, and self-acceptance), and life satisfaction among social workers in Namibia. The results revealed an inverse correlation between secondary traumatic stress (STS) and social workers' perception of their life's purpose, ability to navigate their environment, self-approval, and overall contentment with life. The most accurate indicators of life pleasure were environmental mastery and low arousal (25).

Psychiatric nurses in Pakistan are most likely to be victims of violence, which can have mental effects like stress, anxiety, and less job happiness, as well as physical effects like wounds and short-term or long-term disability (26). Recognising and addressing the affects of EL and STS on the quality of life of mental health nurses is crucial. On the other hand, there aren't many studies that look at the problems nurses face in mental settings in Pakistan, even though these nurses work in very busy and stressful places (26).

The research on psychiatric nurses in Pakistan is restricted to studies on organizational commitment and burnout (27), approach toward use of physical restraints (28), perceived stress in nurses (29), and other topics. In relation to QoL, majority of studies are focused on medical patients, such as stroke patients (30), haemodialysis patients (31), patients with -thalassemia major (-TM) patients (32), and so on. The current study will help in filling in the gap of knowledge in reference to the impact of EL and STS on QoL in mental health nurses.

#### **Theoretical Framework**

#### **Conservation of resource theory (COR)**

The theory of conservation of resources by Hobfoll (33,34) laid the foundation of current study. The COR theory focuses on, loss of resources as it is not only more potent than resource acquisition in scale, but it also affects people more quickly and at a rising rate over time. In the context of psychiatric nurses, EL and exposure to traumatic stress may deplete the personal and professional resources, leading high stress level, burnout, and ultimately impacting their QOL and mental health.

## Methodology

Current study adopted quantitative explanatory design and cross-sectional survey method to collect data from psychiatric nurses working in government and private hospitals in different cities of Pakistan i.e Swat, Peshawar, Islamabad, Rawalpindi and Lahore of Pakistan. The sample size (N=140) was determined using the "G\*Power" computer software (35).

## Measures

*Demographics Sheet.* This questionnaire was used to gather basic demographic information like age, gender, monthly income and hospital type from research participants.

*Emotional labor scale (ELS; (2). This multi-item subscales that correspond to two dimensions: surface acting and deep acting (2). For these two scales, the reliability alpha coefficients were 0.82 for deep acting (DA) and 0.84 for surface acting (SA) (Brotheridge & Lee, 2003).* 

*Professional quality of life scale version-5 (ProQOL; Stamm, 2009).* STS was measured using this scale. Responses were taken on 10 items, on a 5-point Likert scale (from 1=Never to 5=Very Often). High score indicate higher levels of STS. The Cronbach alpha for STS is 0.85 (36).

*Quality of life scale (WHOQOL-BREF) (WHO, 1998).* The form is self-report and has 26 items. Each item is a different aspect. The things in a person's life that are thought to have improved their quality of life are called "facets." The scale checks your general health, your mental health, your social interactions, your environment, and your physical health. The level of internal consistency is above 0.70, which is an acceptable number (37).

## Statistical analysis

A descriptive statistics analysis was done to look into the properties of the scales used in the study and the group itself. Linear regression analysis was used to find out what effect EL- (SA and DA), and STS on the QoL in psychiatric nurses. The Pearson correlation analysis was used to look at how the study factors were connected. In a study of psychiatric nurses, ANOVA was used to look into how demographic factors affected study variables.

## Ethical considerations

The research was conducted following ethical considerations, from constructing research questions to presenting findings. Research participants were asked to fill out questionnaires after providing proper informed consent. Anonymity and confidentiality was also ensured on the part of the participant's identity. People who are taking part in the study can quit at any time if they want to stay neutral and give honest answers.

## **Conceptual Framework**



## Results

**Table 1** Descriptive Analysis of Demographic Variables (N=140)

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Demographic variables	F	%
Gender		
Male	49	35
Female	91	65
Age		
20-30 years	88	62.9
30-40 years and more	52	37.1
Monthly Income		
>25000	60	42.9
25-30,000	44	31.4
35-40,000	15	10.7
<45000	21	15
Hospital		
Private	93	66.4
Government	47	33.6

Note. n=number of participants, % = percentage of participants.

Table 1 shows percentage and frequency of all the data used in this study. In the present study the distribution of the psychiatric nurses participants according to gender, male and (f=49, 35%) female (f=91, 65%) participants were taken for present study. Age range is, 20-30 years (f=88, 62.9%) and 30-40 and more (f=52, 37.1%). Participants monthly income level distribution is less than 25000 (f=60, 42.9%), 25000-30000 (f=44, 31.4%), 35000-40000 (f=15, 10.7%) and more than 45000 (f=21, 15%). Majority of population resided in urban area (f=98, 70%) and (f=42, 30%) in rural area. Most of the psychiatric nurses worked in private setting (f=93, 66.4%) and (f=47, 33.6%) worked in government hospitals.

Variable	SA-ELS	DAEIS	CTC	0.01
		DA-ELS	212	QUL
	F	F	F	F
Age	1.20	1.19	1.04	.98
Gender	1.37	.89	2.41***	3.23***
Monthly Income	2.16*	1.41	1.46	4.59***
Hospital setting	.97	1.69	2.19**	1.55*

**Table 2** One-way ANOVA for Impact of Demographic Variables on Study Variables (N=140)

Note. \*p < .05. \*\*p < .01.

To examine the impact of demographics on all study variables. A one-way analysis of variance test was conducted and the F-statistic values are presented in Table 02. The table indicates that gender had a substantial influence on STS ( $F = 2.41^*$ , p < .001), with QOL ( $F = 3.23^{***}$ , p < .001), and there was insignificant influence of gender on SA-ELS (F =

1.37, *n.s*), and on SA-ELS (F = .89, *n.s*). For age significant effect was not reported for all of the variables, SA-ELS (F = 1.20, *n.s*), with DA-ELS (F = 1.19, *n.s*), with STS (F = 1.04, *n.s*), and with QOL (F = .98, *n.s*). For monthly income significant effect was reported with SA-ELS (F = 2.16, p < .05), and with QOL (F = 4.59, p < .001), whereas it reported insignificant effect with DA-ELS (F = 1.19, *n.s*) and with STS (F = 1.46, *n.s*). Influence of hospital setting was found to be significant with STS ( $F = 2.19^{***}$ , p < .01), with QOL ( $F = 1.55^{*}$ , p < .05), and reported insignificant with SA-ELS (F = 1.69, *n.s*).

**Table 3** Descriptive Statistics, Reliability and Correlation Matrix for all the Variables Used in the Study (N = 140)

				Sillery	(1) 1	•)					
Variables	Mean	SD	α	1	2	3	4	5	6	7	8
1. Age	29.44	5.15			13	02	08	01	07	02	11

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2. Gender	1.65	.48		 	39**	.24* *	.08	15	.000	04
3. Monthly income	1.98	1.07		 		.06	.01	.17*	.03	.17*
4. Hospital	1.34	.48		 			07	01	.02	.05
5. Surface acting-ELS	7.96	2.86	.71	 				.27**	.29**	17**
6. Deep Acting-ELS	8.84	2.52	.73	 					.07	.19*
7. Secondary traumatic	332.84	84.53	.88	 						17*
stress 8. Quality of life	86.99	12.04	.86	 						

Note. \*p < .05. \*\*p < .01.

The numbers in Table 03 are for the descriptive statistics, the reliability matrix, and the correlation matrix for all structures. We found that all constructs are reliable by using the method given by Cronbach (1951). The values for all constructs are above.70, which is good according to what other researchers have said. The correlation values of all the factors in the study that are important; where SA significant negative correlation with QoL, r = -.17, n = 140, p < .05, indicating high level of surface acting is related to low level of QoL. DA reported significant positive relationship with QoL r= .18, n = 140, p > .05, indicating high level of deep acting is related to high level of QoL. Study further reported that there was a strong, negative correlation between STS and QoL with, r = -.16, n = 140, p < .05, indicating high level of STS is related to low level QoL.

**Table 4** Regression Analysis Predicting Emotional Labor Effects on Quality of life (N=140)

	Quality of life		
Variable	β	$\mathbb{R}^2$	F
SA-ELS	25**	00**	
DA-ELS	.26**	.09**	6.79**

*Note*. SA-ELS= surface acting-emotional labor scale, DA-ELS= deep acting-emotional labor scale. \*\*\*p<.001.

Table 4 shows the impact of EL i.e SA and DA on QoL in psychiatric nurses. For QoL the R<sup>2</sup> value of .09 revealed that the predictor variable that is EL- SA and DA, explained 9% variance in the outcome variable that is QoL with F (2,139) = 6.78, P<.001.

**Table 5** Regression Analysis Predicting Secondary Traumatic Stress Effects on Quality of life and
 Depression (N=140)

	Quality of life	e		
Variable	β	$\mathbb{R}^2$	F	
STS	17*	.03*	4.05*	
	Note. STS=	secondary traumati	c stress.	

\*\*\*p<.001.

Table 5 shows the impact of STS on QoL in psychiatric nurses. For QoL the R<sup>2</sup> value of .03 revealed that the predictor variable, STS explained 3% variance in the outcome variable QoL with F (2,139) =4.05, P<.05.

## Discussion

The findings of our study reported that SA has a significant negative influence on QoL, whereas DA reported positive effects on QoL. The findings are in line with previous results. Studies have reported that DA is also positively associated with well-being (38); this can be explained by the way that when a person utilizes DA, they present their true feeling and do not emotionally exhaust themselves, which The Impact Of Emotional Labor And Secondary Traumatic Stress On Quality Of Life Among Mental Health Nurses In Pakistan.

leads to enhancing their quality of life. On the contrary, SA reportedly had a negative effect on QoL. The findings are consistent with earlier research; that surface role-play demands significant exertion posing a threat to overall well-being (39).

STS reportedly had negative effect on the QOL of psychiatric nurses. The findings are in line with previous research. Studies have shown that STS has negative impact on the well-being of service providers, leading to more severe depression and anxiety-related disorders and lower overall QOL (40).

#### Implications

The present study advances psychiatric nurse research. It assessed emotional labor, STS, and QoL in Pakistani psychiatric nurses, which has not been studied so far. The findings suggests that EL and STS in psychiatric nurses impacts on QoL. This could harm client care. Professionals' high rates of STS and EL suggest improved clinical supervision and self-efficacy training.

#### Limitations

There were a few difficulties with this study. First, the study's results might not have been as accurate as they could have been because the sample size was too small. Secondly, the group had selection bias because people were chosen using purposive sampling methods (Neuman, 2014). Third, the study's electronic advertising made it harder to find out how many people responded, which reduced the study's external validity (Neuman, 2014). Fourth, the results were subject to common-method bias because they only used self-report measures.

#### Conclusion

The purpose of this study was to evaluate the effects of EL and STS on QOL in Pakistani psychiatric nurses. Our study reported that emotional labor (SA and DA) had significant relation with QoL, with SA reporting negative whereas DA reporting positive association with QoL. The findings also revealed that there was negative correlation between STS and QoL.

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## References

- Huang X, Wang L, Dong X, Li B, Wan Q. Effects of nursing work environment on work-related outcomes among psychiatric nurses: A mediating model. J Psychiatr Ment Health Nurs. 2020; 28(2):186–96.
- 2. Brotheridge CM, Lee RT. Development and validation of the emotional labour scale. J Occup Organ Psychol. 2003; 76(3):365–79.
- 3. Stamm BH. ProQOL. 2009. Professional quality of life: Compassion satisfaction and fatigue version 5 (ProQOL). Available from: https://img1.wsimg.com/blobby/go/dfc1e1a0-a1db-4456-9391-18746725179b/downloads/ProQOL\_5\_English\_Self-Score.pdf?ver=1712345351117\_
- 4. World Health Organization (WHO). Development of the World Health Organization WHOQOL-BREF quality of life assessment. Psychol Med. 1998; 28(3):551–8.
- 5. Karimi M, Brazier J. Health, health-related quality of life, and quality of life: What is the difference? PharmacoEconomics. 2016; 34(7):645–9.

- 6. Grandey AA, Sayre GM. Emotional labor: regulating emotions for a wage. Curr Dir Psychol Sci. 2019 Apr; 28(2):131–7.
- 7. Hochschild AR. The managed heart: Commercialization of human feeling. 2nd ed. Berkeley, CA: University of California Press; 2003.
- 8. Zaghini F, Biagioli V, Proietti M, Badolamenti S, Fiorini J, Sili A. The role of occupational stress in the association between emotional labor and burnout in nurses: A cross-sectional study. Appl Nurs Res. 2020 Aug; 54:151277.
- 9. Roden-Foreman JW, Bennett MM, Rainey EE, Garrett JS, Powers MB, Warren AM. Secondary traumatic stress in emergency medicine clinicians. Cogn Behav Ther. 2017; 46(6):522–32.
- 10. Hensel JM, Ruiz C, Finney C, Dewa CS. Meta-analysis of risk factors for secondary traumatic stress in therapeutic work with trauma victims. J Trauma Stress. 2015; 28(2):83–91.
- 11. Huggard P, Unit G. A systematic review of the measurement of compassion fatigue, vicarious trauma, and secondary traumatic stress in physicians. Australas J Disaster Trauma Stud. 2013; 1:2013–1.
- 12. Ludick M, Figley CR. Toward a mechanism for secondary trauma induction and reduction: Reimagining a theory of secondary traumatic stress. Traumatology. 2017 Mar; 23(1):112–23.
- 13. Fayers PM, Machin D. Quality of life: The assessment, analysis and reporting of patient-reported outcomes. 3rd ed. New Jersey, USA: John Wiley & Sons; 2016.
- Haraldstad K, Wahl A, Andenæs R, Andersen JR, Andersen MH, Beisland E, et al. A systematic review of quality of life research in medicine and health sciences. Qual Life Res. 2019; 28:2641– 50.
- 15. Hall LH, Johnson J, Watt I, Tsipa A, O'Connor DB. Healthcare staff wellbeing, burnout, and patient safety: A systematic review. Harris F, editor. PLOS ONE. 2016 Jul 8; 11(7):e0159015.
- 16. Johnson J, Louch G, Dunning A, Johnson O, Grange A, Reynolds C, et al. Burnout mediates the association between depression and patient safety perceptions: a cross-sectional study in hospital nurses. J Adv Nurs. 2017 Jul; 73(7):1667–80.
- 17. Choi SH, Lee H. Workplace violence against nurses in Korea and its impact on professional quality of life and turnover intention. J Nurs Manag. 2017 Oct; 25(7):508–18.
- Copeland D, Henry M. The relationship between workplace violence, perceptions of safety, and Professional Quality of Life among emergency department staff members in a Level 1 Trauma Centre. Int Emerg Nurs. 2018 Jul; 39:26–32.
- Kwak Y, Han Y, Song J, Kim J. Impact of emotional labour and workplace violence on professional quality of life among clinical nurses. Int J Nurs Pract [Internet]. 2020 Feb [cited 2023 Jun 17]; 26(1). Available from: <u>https://onlinelibrary.wiley.com/doi/10.1111/ijn.12792</u>
- 20. Bellali T, Manomenidis G, Tzourakis P, Vogiatzaki E, Platis C. The impact of emotional labor and workaholism in health care professionals' secondary traumatic stress. Hell J Nurs Sci. 2019 Dec 31; 46–56.
- Park YN, Yoon SU. Health promotion behavior of some local dental hygienist convergence impact on emotional labor, quality of life, job satisfaction. J Korea Converg Soc. 2016; 7(3):25– 33.
- 22. Živanović M, Vukčević Marković M. Latent structure of secondary traumatic stress, its precursors, and effects on people working with refugees. Kavushansky A, editor. PLOS ONE. 2020 Oct 30; 15(10):e0241545.
- 23. Cieslak R, Shoji K, Douglas A, Melville E, Luszczynska A, Benight CC. A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. Psychol Serv. 2014 Feb; 11(1):75–86.
- 24. Hensel JM, Ruiz C, Finney C, Dewa CS. Meta-Analysis of risk factors for secondary traumatic stress in therapeutic work with trauma victims: Secondary traumatic stress risk factors. J Trauma Stress. 2015 Apr; 28(2):83–91.
- 25. Perstling M, Rothmann S. Secondary traumatic stress, psychological wellbeing and life satisfaction of social workers in Namibia. J Psychol Afr. 2012 Jan; 22(1):1–9.

- 26. Jafar D, Nasir A, Hussain A. Experiences of nurses regarding challenges faced while dealing with psychiatric patients in both public and private tertiary care hospitals of Karachi, Pakistan. J Pak Med Assoc. 2023 Mar 15; 73(4):776–80.
- 27. Yasmin K, Marzuki NA. Impact of organizational commitment on intention to quit among psychaitric nurses: evidence from Pakistan. Int J Learn Dev. 2015; 5(4):89–102.
- 28. Aslam N, Khan A, Habib N, Ahmed A. The moderating role of life satisfaction in the relationship between burnout and depression among nursing staff: a human rights concern in Pakistan. Int J Hum Rights Healthc. 2022 Dec 12; 15(5):416–25.
- 29. Sidra SI. Comparision of perceived stress between nurses working in medical and psychiatric wards. JPMA. 2020; 70(1952).
- 30. Khalid W, Rozi S, Ali TS, Azam I, Mullen MT, Illyas S, et al. Quality of life after stroke in Pakistan. BMC Neurol. 2016 Dec; 16(1):250.
- Anees M. Demographics factors affecting quality of life of hemodialysis patients-Lahore, Pakistan. Pak J Med Sci [Internet]. 2014 Dec 31 [cited 2023 Jun 17];30(5). Available from: http://pjms.com.pk/index.php/pjms/article/view/5239
- 32. Yasmeen H, Hasnain S. Quality of life of Pakistani children with  $\beta$ -Thalassemia major. Hemoglobin. 2018 Nov 2; 42(5–6):320–5.
- 33. Hobfoll SE. The ecology of stress. Taylor & Francis; 1988.
- 34. Hobfoll SE. Conservation of resources: A new attempt at conceptualizing stress. Am Psychol. 1989; 44(3):513–24.
- 35. Faul F, Erdfelder E, Lang AG, Buchner A. G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behav Res Methods. 2007; 39(2):175–91.
- 36. Sacco TL, Ciurzynski SM, Harvey ME, Ingersoll GL. Compassion satisfaction and compassion fatigue among critical care nurses. Crit Care Nurse. 2015; 35(4):35–42.
- 37. Webster J, Nicholas C, Velacott C, Cridland N, Fawcett L. Validation of the WHOQOL-BREF among women following childbirth. Aust N Z J Obstet Gynaecol. 2010; 50(2):132–7.
- Yao L, Gao J, Chen C, Mu D. How does emotional labor impact employees' perceptions of wellbeing? Examining the mediating role of emotional disorder. Sustainability. 2019; 11(23):6798.
- 39. Martínez-Iñigo D, Alcover CM, Holman D. Emotional labor and emotional exhaustion: Interpersonal and intrapersonal mechanisms. Work Stress. 2007; 21:30–47.
- 40. Živanović M, Marković MV. Latent structure of secondary traumatic stress, its precursors, and effects on people working with refugees. Kavushansky A, editor. PLOS ONE. 2020; 15(10):e0241545.