IOSR Journal of Nursing and Health Science (IOSR-JNHS)
e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 15, Issue 3 Ser. II (May. – June. 2026), PP 61-67
www.iosrjournals.org

Prevalence of Burnout Syndrome and its associated factors among critical care nurses: A Descriptive Study

Megha Patel[1], Prof. Rinu Mathew[2*]
[1] *M.Sc. Nursing Student, Shrey Institute of Nursing and Allied Sciences, Ahmedabad - 380013, Gujarat, India.*
[2] *Principal, Shrey Institute of Nursing and Allied Sciences, Ahmedabad - 380013, Gujarat, India*
Corresponding Author: Prof. Rinu Mathew,
Principal, Shrey Institute of Nursing and Allied Sciences,
Ahmedabad – 380013, Gujarat, India.

Abstract
Background*: This study aimed to assess the prevalence of burnout syndrome and its associated factors among critical care nurses of selected private hospitals of selected districts of Gujarat state*
Materials and Methods*: A quantitative, non-experimental descriptive research design was adopted for the study. The study was conducted in selected hospitals of selected districts of Gujarat state. A total of 200 critical care nurses were selected using non probability purposive sampling technique. The conceptual framework was based on Betty Neuman's Health Care Model. Data were collected using a five-point Likert's rating scale and structured questionnaire. Content validity was established through expert opinion, and reliability was assessed using Karl Pearson's split-half method. Data analysis was done using descriptive statistics (frequencies, percentages, and mean ± standard deviation) and inferential statistics (Chi-square test).*
Results: *None of the nurses fell within the "No Burnout Syndrome" or the "Very Severe Burnout Syndrome" category. Majority (54.0%) had moderate level of burnout syndrome, followed by* ***32.5%*** *with severe burnout. Only a small minority (****13.5%****) reported mild symptoms. Additionally, the key factors contributing to burnout syndrome among nurses included workload pressure, unclear job roles, lack of cooperation among colleagues, and communication difficulties with superiors.*
Conclusion*: The study findings highlighted a critical concern, revealing that a significant* ***86.5%*** *of the surveyed population experienced moderate-to-severe levels of burnout syndrome. This suggests that there is an urgent need to create awareness as well as introduce structured institutional interventions, such as workload optimization and improved management support, to mitigate burnout and safeguard the mental health of nursing workforce.*
Keywords: *Prevalence, burnout syndrome, associated factors, critical care nurses, hospitals*

Date of Submission: 06-06-2026 Date of Acceptance: 17-06-2026

I. Introduction

Nurses serve as the vital backbone of the health care system and playing an indispensable role in direct patient care **(Sivakumar et al., 2019).** Despite their critical importance, psychological stress experienced by nurses is one of the most underappreciated yet impactful issues **(Chuang et al., 2016)**. Nurses specifically working in an Intensive Care Unit (ICU) is document exceptional level of stress due to severity of illness of the patients and the subsequent high mortalities, giving rise to regular traumatic and ethical issues and challenging daily work **(Ramírez-Elvira et al., 2021).**

The World Health Organization **(WHO, 2019)** recognizes burnout as a severe occupational phenomenon. It is identified as a psychological syndrome resulting from chronic, poorly managed stress within the workplace environment. It is more than just feeling tired after a long shift; it is a profound psychological response to chronic, unmanaged workplace stress. Academically, burnout is broken down into three main phases: emotional exhaustion, personal detachment from patients (depersonalization), and reduced personal accomplishments **(Maslach & Leiter, 2016)**. Nurses deal with emotionally challenging situations every single day. When this stress goes unaddressed for too long, it completely drains their emotional reserves, affects their connection to their patients, and steals away at their confidence **(García-Sierra et al., 2023)**. Ultimately, nurse burnout is not just a personal mental health crisis, it directly threatens patient safety and the overall quality of healthcare. Burned out nurses are physically and mentally depleted which increases the risk of medication errors, missed clinical decisions and decreased patient satisfaction. Hence, treating burnout as an expected part of the job can be really dangerous mistake.

To fix this crisis, health care organizations may need concrete and localized statistical evidences not vague assumptions. The objective of this study was to measure the prevalence, thus changing the conversation

from a general complaint into undeniable data. Measuring prevalence only proves *that* a problem exists; identifying the **associated factors** diagnoses *why* it is happening. If data explicitly proves that burnout is statistically associated to work place environment like severe workload, lack of clarity and strained relationship with higher authorities, then burnout syndrome won't just be considered as an individual problem but an institutional failure, pointing directly to the structural and managerial policies and norms that must be timely.

II. Materials and Methods

A non-experimental descriptive survey research design was adopted for this study, which was undertaken over a period of two months from January, 2025 to February, 2025. The target population included critical care nurses working in selected hospitals of selected districts of Gujarat state.

The study enrolled a sample of 200 eligible nurses based on the available nursing workforce during the designated data collection period, while balancing time constraints and institutional feasibility. The participants were selected using a non-probability purposive sampling technique based on eligibility criteria. Ethical approval was obtained and written consent was taken from all participants prior to data collection.

Data were collected using two instruments: a five-point Likert's rating scale to assess the prevalence and a structured questionnaire to identify the associated factors contributing to burnout syndrome.

Prevalence Scoring and Categorization: The prevalence scale comprised of 20 items assessing the physical and psychological symptoms of burnout syndrome, utilizing an equal distribution of positively and negatively phrased statements to ensure response validity. Total scores ranged from a minimum of 20 to a maximum of 100, with higher scores reflecting greater occupational burnout. Severity levels were classified into five distinct tiers: a score of exactly 20 signified No Burnout Syndrome; 21 to 40 indicated Mild Burnout; 41 to 60 represented Moderate Burnout; 61 to 80 denoted Severe Burnout; and scores from 81 to 100 demonstrated Very Severe Burnout Syndrome.

Descriptive statistics, including frequencies, percentages, and mean ± standard deviation, were used to summarize demographic data, prevalence and association scores. Inferential statistics, specifically the Chi-square tests, were utilized to examine the associations between selected demographic variables and the participants' knowledge and attitude levels.

III. Results

The findings are presented under the following sections: demographic characteristics of the participants, assessment of prevalence of burnout syndrome, identification of associated factors contributing to burnout syndrome and determination of association between demographic variables and prevalence of burnout syndrome among critical care nurses working in selected hospitals of selected districts of Gujarat state.

Analysis and interpretation of demographic variables of the samples

Table 1 Frequency and percentage wise distribution of samples based on demographic variables.

[N=200]

Sr. No.	Demographic variables	Variables	Frequency (f)	Percentage (%)
1	Age in years	21 - 30 years	150	75.0
		31 – 40 years	42	21.0
		41 – 50 years	8	4.0
		>50 years	0	0
2	Gender	Male	59	29.5
		Female	141	70.5
		Transgender	0	0
3	Marital status	Single	102	51.0
		Married	92	46.0
		Divorced	6	3.0
		Separated	0	0
4	Education	GNM	128	64.0
		B.Sc / P,B.B.Sc Nursing	72	36.0
		M.Sc. Nursing and above	0	0
		ICU	91	45.5

5	**Current department of work**	PICU	1	.5
		SICU	21	10.5
		MICU	87	43.5
6	**Years of experience**	0-5	106	53.0
		6-10	86	43.0
		11-16	6	3.0
		>16	2	1.0

Table 1 presents data on various variables related to sample population. The age distribution indicates that the majority (75.0%) fall within the 21–30 years category, followed by 21.0% in the 31–40 years range, and a smaller proportion (4.0%) between 41–50 years, with no participants above 50 years. Regarding gender, 70.5% of the respondents are female, while 29.5% are male, with no representation from the transgender category.

Marital status data shows that 51.0% of respondents are single, 46.0% are married, and 3.0% are divorced, with no participants in the separated category. Educational qualifications reveal that 64.0% have completed General Nursing and Midwifery (GNM), while 36.0% hold a B.Sc. or Post Basic B.Sc. in Nursing, with no respondents having M.Sc. Nursing or higher qualification.

Regarding the current department of work, 45.5% of the respondents work in the ICU, while 43.5% are in the MICU. A smaller proportion (10.5%) work in the SICU, and only 0.5% are in the PICU. Finally, years of experience data indicate that 53.0% have 0–5 years of experience, 43.0% have 6–10 years, 3.0% have 11–16 years, and only 1.0% have more than 16 years of experience.

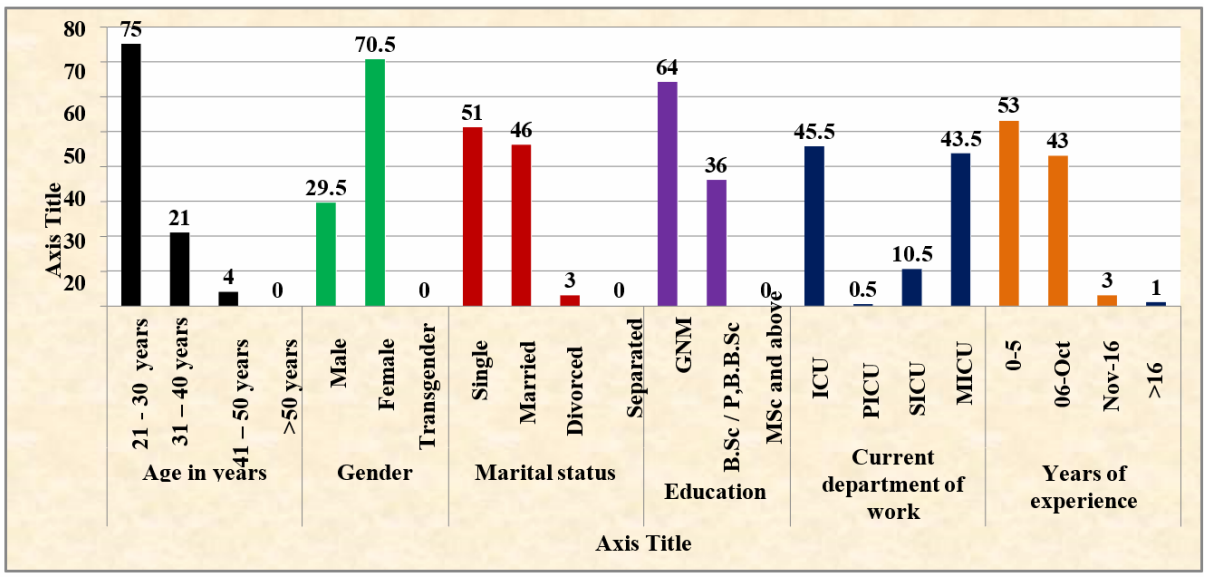

Figure 1: Column graph showing distribution of samples based on demographic variables

Analysis and interpretation of data related to prevalence of Burnout Syndrome among the critical care nurses

Table-2 Frequency and percentage distribution of level of Burnout Syndrome among critical care nurses [N=200]

Level of Burnout Syndrome	Scores	Frequency (f)	Percentage (%)
No Burnout Syndrome	=20	0	0
Mild Burnout Syndrome	21 – 40	27	13.5
Moderate Burnout Syndrome	41 – 60	108	54.0
Severe Burnout Syndrome	61 – 80	65	32.5
Very Severe Burnout Syndrome	81 – 100	0	0
Total		**200**	**100**

Table 2 presents the frequency and percentage distribution of the level of Burnout Syndrome among 200

respondents. The results indicate that none of the participants fall within the "No Burnout Syndrome" category or the "Very Severe Burnout Syndrome" category. A small proportion (13.5%) of respondents experience mild burnout, while the majority (54.0%) fall within the moderate burnout category. Additionally, 32.5% of participants experience severe burnout. These findings suggest that a significant portion of the population experiences moderate to severe levels of burnout.

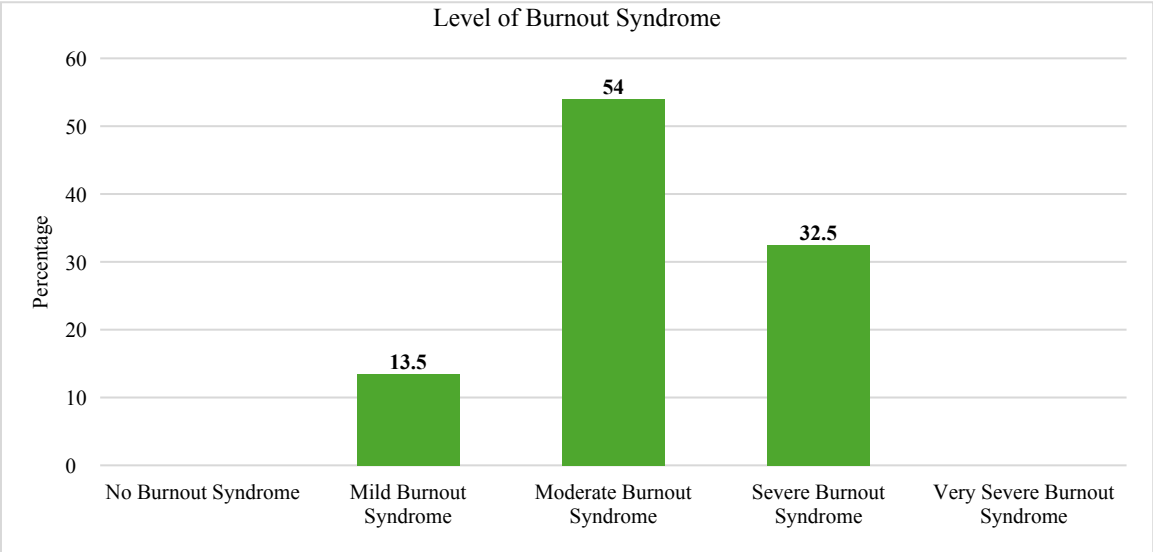

Figure 2: Column graph showing percentage distribution of level of burnout syndrome among critical care nurses

Table 3. Mean, mean %, median and standard deviation of burnout syndrome score

[N=200]

Mean score	53.27
Mean percentage	53.27%%
Median	54
Standard deviation	10.07

Table 3 presents the statistical measures of Burnout Syndrome scores among the participants. The mean score was found to be 53.27, with a mean percentage of 53.27%, indicating a moderate level of Burnout Syndrome among the sample. The median score was 54, suggesting that half of the participants had a Burnout Syndrome score above this value. The standard deviation was 10.07, reflecting the extent of variation in Burnout Syndrome scores among the participants. These findings suggest a considerable degree of Burnout Syndrome, with notable variability within the group

Analysis and interpretation of data related to associated factors of burnout syndrome among critical care nurses

Table 4 Associated factors of burnout syndrome among critical care nurses

[N=200]

Sr. No.	Statements	Yes		No	
		f	%	f	%
1	Are you satisfied with your job?	111	55.50	89	44.50
2	Do you feel that your work is appreciated and rewarded appropriately?	111	55.50	89	44.50
3	Do you feel people simply expect too much from you?	135	67.50	65	32.50
4	Are you clear about your roles and responsibilities in your job?	101	50.50	99	49.50

5	Do you get stressed out because of heavy workload?	126	63.00	74	37.00
6	Do you feel equality in workload, salary and status?	151	75.50	49	24.50
7	Do you feel your work is boring?	62	31.00	138	69.00
8	Do you feel your colleagues and supervisors compete rather than cooperate?	97	48.50	103	51.50
9	Do you get stressed out because of extended shifts and overtime?	85	42.50	115	57.50
10	Do you find difficulty in communicating and interacting with superiors?	118	59.00	82	41.00
11	Are you having enough opportunities for professional advancement?	125	62.50	75	37.50

Table 4 outlines various factors associated with burnout syndrome among samples. The findings reveal that 55.5% of nurses are satisfied with their jobs and feel their efforts are appropriately appreciated and rewarded, while a substantial 44.5% do not share the same view. Additionally, 67.5% of nurses feel that excessive expectations are placed on them, potentially contributing to stress and burnout. A notable 63.0% report feeling overwhelmed by a heavy workload, which is a significant contributor to job-related stress.

Regarding workplace fairness, 75.5% of respondents feel there is equality in workload, salary, and status, while 24.5% disagree, indicating potential disparities that may lead to dissatisfaction. Interestingly, 50.5% of nurses feel clear about their roles and responsibilities, whereas 49.5% express uncertainty, which could contribute to workplace stress and reduced efficiency. Additionally, 48.5% believe their colleagues and supervisors foster a competitive rather than cooperative work environment, which may impact teamwork and overall morale.

Work-related fatigue is another prominent issue, with 42.5% of nurses reporting stress due to extended shifts and overtime, though 57.5% do not perceive it as a major challenge. Moreover, communication barriers with superiors affect 59.0% of respondents, potentially leading to misunderstandings and workplace tension. Lastly, 62.5% of nurses feel they have sufficient opportunities for professional advancement, while 37.5% believe they lack growth opportunities, which could impact motivation and career satisfaction.

These findings emphasize the key stressors contributing to burnout among staff nurses, including workload pressure, unclear job roles, lack of cooperation among colleagues, and communication difficulties with superiors.

Analysis on association between the prevalence of Burnout Syndrome with the Demographic variables of participants

Table 5 Association between the prevalence of Burnout Syndrome with the Demographic variables of critical care nurses

[N=200]

Sr. No	Demographic variables	Mild	Moderate	Severe	F	$\chi 2$ Value	Table value	df	Remarks
1	**Age in years**					**9.968**	**9.488**	**4**	**S**
	21 - 30 years	23	84	43	150				
	31 – 40 years	2	19	21	42				
	41 – 50 years	2	5	1	8				
2	**Gender**					0.003	5.991	2	NS
	Male	8	32	19	59				
	Female	19	76	46	141				
3	**Marital status**					4.322	9.488	4	NS
	Single	18	55	29	102				
	Married	9	49	34	92				
	Divorced	0	4	2	6				
4	**Education**					2.002	5.991	2	NS
	GNM	14	71	43	128				
	B.Sc / P,B.B.Sc Nursing	13	37	22	72				
5	**Current department of work**					**13.569**	**12.592**	**6**	**S**
	ICU	20	49	22	91				
	PICU	0	1	0	1				
	SICU	2	11	8	21				
	MICU	5	47	35	87				

6	**Years of experience**					11.463	12.592	6	NS
	0-5	15	59	32	106				
	6-10	8	46	32	86				
	11-16	3	2	1	6				
	>16	1	1	0	2				

S: Significant, NS: Non significant at 0.05 level of significance

Table 5 reveals that the demographic variables "**age (χ^2=9.968, df= 4) and current department of work (χ^2=13.569, df= 6)** has the calculated chi square value more than the table value at 0.05 level of significance, thus it shows the presence of significant association with Burnout Syndrome. Whereas for the rest of the demographic variables were found to be not significant.

IV. Discussion

The findings of this study provide empirical evidences regarding emotional and mental wellbeing of the nursing professionals, reflecting a critical professional paradox. Most nurses say they like their jobs and feel appreciated, yet they are still completely exhausted and burned out. This data strongly aligns with the foundational work of **Maslach and Jackson (1981)** on the multi-dimensional nature of burnout, which demonstrates that this susceptibility to burnout syndrome is not specific to single demographic characteristic; rather, the risk of psychological exhaustion affects all age groups, experience levels, and educational backgrounds. The baseline outcome proves that burnout is not an individualized problem, but a systemic workplace crisis affecting the entire nursing staff collectively.

However, the data demonstrates that identifying prevalence of burnout syndrome is only the first step; the true essence lies in ruling out key stressors including of systemic, institutional, and psychological barriers driving this exhaustion. The study significantly highlights severe institutional barriers that proactively increase burnout experiences. Nurses are deeply committed to care delivery, but they are physically and mentally depleted by the crushing reality of high nurse-to-patient ratios, inadequate staffing pattern, heavy documentation and demanding clinical assignments. These exact workplace pressures are well-recognized in global research as the leading organizational causes of emotional burnout and diminished patient safety standards **(Dall'Ora et al., 2020)**.

Additionally, the findings emphasize a profound institutional disconnect: when nurses feel invisible to leadership, confused about their responsibilities, and isolated from peer support, severe burnout becomes an inevitability. Ultimately, a highly dedicated workforce cannot compensate for defective administration system; their dedication will continue to diminish unless hospital authorities proactively remove these structural barriers. This requires immediate intervention to redesign scheduling protocols, clarify job descriptions, and introduce open channels for top-down communication (**Laschinger et al., 2014**).

V. Conclusion

This study underscores that identifying and mitigating burnout syndrome among staff nurses is no longer an optional administrative task, but an immediate clinical necessity to safeguard patient safety, maximize functional efficiency, and elevate the overarching quality of healthcare delivery (**Aiken et al., 2012; Melnyk et al., 2018**). The findings serve as a foundational blueprint that healthcare organizations can directly utilize to design targeted psychological interventions, stress-management frameworks, and supportive coping measures designed to reduce workplace exhaustion (**West et al., 2016**). When properly addressed, a healthy, supported nursing workforce becomes the hospital's greatest asset—empowering frontline clinicians to execute superior clinical decision-making, hyper-precise patient monitoring, and highly optimized workload management (**Laschinger & Fida, 2014; Shah et al., 2021**).

Acknowledgment
The authors express their sincere gratitude to the participants, validators, concerned department, and hospital for their support.

Conflicts of interest
The authors declare no conflict of interests.

Source of funding
Self-funded

References

[1]. Aiken, L. H., Sloane, D. M., Bruyneel, L., Van den Heede, K., Griffiths, P., Busse, R., Diomidous, M., Kinnunen, J., Kózka, M., Lesaffre, E., McHugh, M. D., Moreno-Casbas, M. T., Rafferty, A. M., Schwendimann, R., Scott, P. A., Tishelman, C., van Achterberg, T., & Sermeus, W. (2012). Nurse staffing and education and hospital mortality in nine European countries: A retrospective observational study. *The Lancet*, *383*(9931), 1824–1830. https://doi.org/10.1016/S0140-6736(13)62631-8

[2]. Chuang, C. H., Tseng, P. C., Lin, C. Y., Lin, K. H., & Chen, Y. Y. (2016). Burnout in the intensive care unit professionals: An introductory review. *Journal of Intensive Care*, *4*(1), 1–8. https://doi.org/10.1186/s40560-016-0180-2

[3]. Dall'Ora, C., Ball, J., Reinius, M., & Griffiths, P. (2020). Burnout in nursing: A theoretical review. *Human Resources for Health*, *18*(1), Article 41. https://doi.org/10.1186/s12960-020-00469-9

[4]. García-Sierra, R., Fernández-Castro, J., & Martínez-Zaragoza, F. (2023). The impact of emotional exhaustion on nurse-patient relationships and clinical performance in intensive care units. *International Journal of Nursing Studies*, *138*, Article 104412.

[5]. Laschinger, H. K. S., & Fida, R. (2014). New graduate nurses' burnout and intention to leave: The role of workplace empowerment and authentic leadership. *Journal of Nursing Administration*, *44*(11), 564–572. https://doi.org/10.1097/NNA.0000000000000128

[6]. Laschinger, H. K. S., Wong, C. A., & Grau, A. L. (2014). The influence of authentic leadership and structural empowerment on new graduate nurses' perceptions of job satisfaction, burnout, and retention. *Journal of Nursing Administration*, *44*(12), 643–650. https://doi.org/10.1097/NNA.0000000000000141

[7]. Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, *2*(2), 99–113. https://doi.org/10.1002/job.4030020205

[8]. Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, *15*(2), 103–111. https://doi.org/10.1002/wps.20311

[9]. Melnyk, B. M., Orsolini, L., Tan, A., Arslanian-Engoren, C., Melkus, G. D., Dunbar-Jacob, J., Rice, V. H., Millan, A., Vermeesch, A. L., Gonda, K. A., & Lewis, L. M. (2018). A national study links nurses' physical and mental health to medical errors and perceived worksite wellness. *Journal of Occupational and Environmental Medicine*, *60*(2), 126–131. https://doi.org/10.1097/JOM.0000000000001198

[10]. Ramírez-Elvira, S., Romero-Béjar, J. L., Blanco-Donoso, L. M., Ortega-Campos, E., & Suleiman-Martos, N. (2021). Prevalence and associated factors of burnout syndrome among intensive care unit nurses: A systematic review. *International Journal of Environmental Research and Public Health*, *18*(22), Article 11953. https://doi.org/10.3390/ijerph182211953

[11]. Shah, M. K., Gandrakota, N., Cimiotti, J. P., Ghose, N., Moore, M., & Ali, M. K. (2021). Prevalence of and factors associated with nurse burnout in the US. *JAMA Network Open*, *4*(2), Article e2036469. https://doi.org/10.1001/jamanetworkopen.2020.36469

[12]. Sivakumar, M., Devi, R., & Thangaraj, S. (2019). Stressors and coping mechanisms among critical care nurses. *Indian Journal of Nursing Sciences*, *4*(3), 67–72.

[13]. West, C. P., Dyrbye, L. N., Erwin, P. J., & Shanafelt, T. D. (2016). Interventions to prevent and reduce physician and nurse burnout: A systematic review and meta-analysis. *The Lancet*, *388*(10057), 2272–2281. https://doi.org/10.1016/S0140-6736(16)31279-X

[14]. World Health Organization. (2019). *Burn-out an "occupational phenomenon": International Classification of Diseases*. https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases