International Journal of Applied Home Science
(An International Double Blind Peer Reviewed / Refereed Research Journal of Home Science)
Volume 12 (1 & 2), January & February (2025) : 1-8
Received : 01.12.2024; Revised : 15.12.2024; Accepted : 01.01.2025

RESEARCH PAPER
ISSN : 2394-1413 (Print)
DOI: 10.36537/IJAHS/12.1&2/1-8

Impact of Burnout on Quality of Life of Female Nurses

KOMAL*[1], MANJU MEHTA[2] AND RENU[3]
[1&3]M.Sc. Student and [2]Director of Human Resources Management
Department of Resource Management and Consumer Science, I.C. College of Community Science
Chaudhary Charan Singh Haryana Agricultural University, Hisar (Haryana) India

*Corresponding Author

ABSTRACT

Burnout is a widely recognized occupational phenomenon that affects individuals across various professions. Among healthcare professionals, nurses are particularly susceptible to burnout due to the demanding nature of their work and the numerous challenges they face daily. Burnout can lead to increased fatigue, musculoskeletal problems, and decreased overall well-being. The purpose of the study was to assess the impact of burnout on quality of life of female nurses. The study was conducted in two districts of Haryana state having medical college / hospitals were selected randomly. Female nurses were the sample of study. Lists of female nurses of each medical colleges / hospitals were obtained and out of the list 45 nurses were randomly selected from each medical college/hospitals thus maintaining a total sample of 90 nurses. For collection of primary data, a questionnaire was prepared in accordance with the objectives of the study. Results showed that majority of the respondent's fall within the age range 21-28 years and were married. Most of the nurses belonged to urban areas and had diplomas as their educational qualification. The family types varied, with joint families being the most common. The annual family income was mainly in the range of 1-6 lakh. A huge number of nurses who had 1-5 years of job experience and the socio economic status were pre dominantly upper middle. The study found that emotional exhaustion, depersonalization and personal achievement were more prevalent among nurses in Rohtak compared to Hisar. The majority of nurses experienced moderate stress levels, which were associated with average overall quality of life and general health status.

Keywords: Burnout, Quality of life, Nurses

INTRODUCTION

The term burnout was coined by Freudenberger in 1974 when he observed a declining motivation and dedication among volunteers in a medical institution. (Freudenberge, 1974). Burnout, a state of emotional, physical, and mental exhaustion caused by chronic work-related stress, has become a significant concern within the nursing profession (Khamisa *et al*., 2015). Burnout can have detrimental effects on the physical health of female nurses. Prolonged stress and exhaustion can lead to arrange of physical symptoms such as fatigue, sleep disturbances, headaches, and musculoskeletal pain. (McFarlane, 2007). These physical symptoms not only diminish their overall well-being but also impede their ability to provide optimal patient care. Burnout significantly affects the emotional well-being of female nurses. Chronic stress and emotional exhaustion can lead to feelings of depersonalization, cynicism, and a diminished sense of personal accomplishment. As a result, nurses may experience increased irritability, mood swings, anxiety, and even depression. These emotional challenges not only affect their personal lives but also impact their interactions with patients, colleagues, and families, potentially compromising the quality of patient care. It may originate because of work overwork, lack of resources, control, and justice, value conflicts. It includes 3 key aspects - *viz.,* emotional exhaustion (EE), depersonalization (DP), low personal accomplishment (PA) (Maslach *et al*., 1996). Emotional Exhaustion (EE) is the state of being physically and emotionally exhausted by work stress, which is characterized by low-level energy, despair,

How to cite this Article: Komal, Mehta, Manju and Renu (2025). Impact of Burnout on Quality of Life of Female Nurses. *Internat. J. Appl. Home Sci.,* **12** (1 & 2) : 1-8.

fatigue, depression, and helplessness. Depersonalization (DP) is the interpersonal component of burnout that shows up as emotionlessness, rude behavior towards others, and disinterest in direction and caring. Low Personal Accomplishment (PA) is the state of negative perception of self as incapable, unsuccessful, and inadequate; therefore, the employee's contribution to work is reduced (Maslach *et al*., 1996).

Burnout among nursing staff is a significant problem in the healthcare industry (Ilhan *et al*, 2008). Nursing is a demanding profession that requires long hours, intense emotional labor, and a high degree of responsibility. Nurses often work in high-stress environments and are exposed to trauma, illness, and death on a regular basis. This can lead to burnout, which is a state of emotional, physical, and mental exhaustion caused by prolonged stress. Burnout among nursing staff can have serious consequences for both the nurses and their patients (Poncet *et al.,* 2007). When nurses are burnout, they are more likely to make errors, provide sub optimal care, and experience job dissatisfaction. This can lead to high turnover rates, which can negatively impact the quality of care provided to patients. Burnout can also have negative effects on nurses' mental and physical health, including depression, anxiety, and physical health problems.

According to World Health Organization, Quality of life (QOL) is defined as "an individual's perception of their positions in life within the context of the culture and value system in which they live and in relation with its goals, expectations, standards and concerns". Job satisfaction significantly contributes to the quality of life of female nurses. Satisfaction in one's work is influenced by factors such as work environment, relationships with colleagues and supervisors, recognition for their contributions, and opportunities for professional growth. A supportive work environment that values and respects female nurses can enhance job satisfaction, leading to improved quality of life and higher retention rates within the nursing profession (Lu *et al.*, 2019). In the light of above the study was planned with following objectives:

1. To study the personal profile of female nurses.
2. To explore the burnout and its impact on quality of life.

Review of Literature:

Koivula *et al.* (2000) studied burnout among 723 nurses in two Finnish hospitals, finding that half experienced burnout, job dissatisfaction, and frustration. Psychiatric ward nurses, secondary-level nurses, and older nurses faced higher burnout levels.

Lasebikan *et al.* (2012) reported high burnout levels among 270 nurses in an urban hospital, especially older nurses. Factors like hierarchy, bullying, poor doctor-nurse relationships, and frequent night shifts were linked to burnout.

Anchu *et al*. (2021) observed high burnout rates among nurses and urged administrators to reduce burnout to enhance nurses' professional lives and care quality.

Babapour *et al*. (2022) highlighted job stress's negative impact on nurses' health-related quality of life, reducing performance and patient outcomes.

Orszulak *et al.* (2022) found better quality of life improved health behaviors, while obesity negatively affected physical and psychological well-being. Financial stability positively influenced nurses' quality of life.

Seul-Ki Park (2023) reported that better subjective health, lower stress, and fewer sleep disturbances improved clinical nurses' quality of life, emphasizing the need to address these factors.

METHODOLOGY

Two districts of Haryana state having medical colleges / hospitals were selected randomly. Female nurses were the sample of study. A list of female nurses of each medical colleges / hospitals was obtained and out of the list 45 nurses was randomly selected from each medical college / hospitals thus maintaining a total sample of 90 nurses. For collection of primary data, a questionnaire was prepared in accordance with the objective of the study. The developed questionnaire was pretested before finalizing it for collects the data

Independent variables and their measurements

Sr. No	Independent Variables	Measurements
1.	Age	Chronological age
2.	Marital status	Schedule was developed
3.	Place of living	
4.	Type of family	
5.	Size of family	
6.	Family income	
7.	Education	
8.	Type of employment	
9.	No. of years of job	
10.	SES	Kuppuswamy Scale (2021)

Dependant variables and their measurements		
Sr. No	Dependant Variables	Measurements
1.	Burnout	Maslach burnout inventory (1983)
2.	Quality of life	WHO Quality of Life Scale (1970)

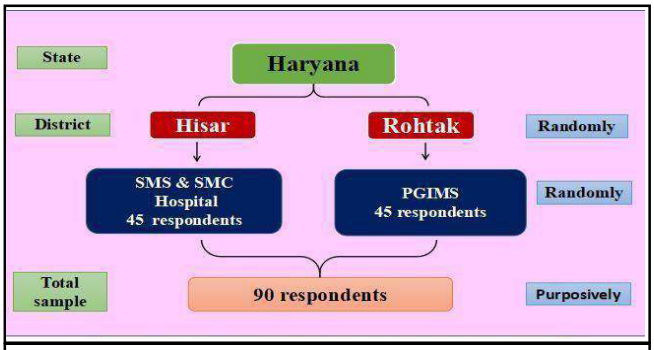

Fig. 1 : Sample procedure (Survey work)

RESULTS AND DISCUSSION

Personal profile of respondents:

Age:

The data shown in Table 1 depict that the majority of the respondents (53.3%) in Rohtak belonged to 29-36 years of age, followed by 21-28 years (26.6%) and 37-44 years (20.0%). The majority of respondents (73.3%) in Hisar belonged to 21-28 years of age, followed by 29-36 years (24.4%) and 27-44 years (2.2%). In total sample half of the respondents (50.0%) belonged to 21- 28 years of age followed by 29-36 years of age (24.4%) and 37-44 years of age (11.1%).

Marital status:

Table 1 depicts that majority of respondents in Rohtak were married (91.1%) and rest were unmarried (8.8%). The majority of the respondents (53.3%) in Hisar were also married and 46.6% were unmarried. In total sample majority of the respondents (72.2%) were married and 27.7% were unmarried.

Education:

Maximum of the respondents in Rohtak were graduate (53.3%) followed by post- graduate (33.3%). The majority of respondents in Hisar were diploma holder (75.5%) followed by graduate (22.0%) and postgraduate (2.2%). In total sample maximum of the respondents

Table 1 : Personal profile of respondents

Sr. No.	Variables	Category	Rohtak (n=45) Frequency (%)	Hisar (n=45) Frequency (%)	Total (N=90) Frequency (%)
1.	Age(years)	21-28	12(26.6)	33(73.3)	45(50.0)
		29-36	24(53.3)	11(24.4)	35(38.8)
		37-44	9(20)	1(2.2)	10(11.1)
2.	Marital status	Unmarried	4(8.8)	21(466)	25(27.7)
		Married	41(91.1)	24(533)	65(72.2)
3.	Place of living	Rural	16(35.5)	19(422)	35(38.8)
		Urban	29(64.4)	26(577)	55(61.1)
4.	Family type	Nuclear	29(64.4)	5(11.1)	34(37.7)
		Joint	15(33.3)	33(333)	48(53.3)
		Extended	1(2.2)	7(15.5)	8(8.8)
5.	Family members	2-6	29(64.4)	5(11.1)	34(37.7)
		7-11	15(33.3)	33(333)	48(53.3)
		12-16	1(2.2)	7(15.5)	8(8.8)
6.	Annual Family income(Rs.)	1 lakh-6lakh	26(57.7)	45(100)	71(78.8)
		7 lakh-11lakh	17(37.7)	0(0.0)	17(18.8)
		12 lakh-16 lakh	2(4.4)	0(0.0)	2(2.2)
7.	Education	Diploma	6(13.3)	34(75.5)	40(44.4)
		UG	24(53.3)	10(22.2)	34(37.7)
		PG	15(33.3)	1(2.2)	16(17.7)
8.	Type of employment	Temporary	0(0.0)	34(75.5)	34(37.7)
		Permanent	45(100.0)	11(24.4)	56(62.2)
9.	Number of year of job	1-5	24(53.3)	41(91.1)	65(72.2)
		6-10	16(35.5)	4(8.8)	20(22.2)
		11-15	5(11.1)	0(0.0)	5(5.5)

Plate 1 : Pictures of data collection

(44.4%) were diploma holder, followed by graduate (33.7%) and postgraduate (17.7%).

Place of living:

Table 1 revealed that maximum of the respondents in Rohtak belonged to urban area (64.4) rest of the respondents belonged to rural area (35.5). Maximum of the respondents in Hisar belonged to urban area (57.7%) followed by rural area (42.2%). In total sample maximum of the respondents (61.1%) belonged to urban area and followed by 38.8% to rural area.

Annual family income:

In Rohtak maximum of the respondent's (57.7%) annual family income lays between 1-6 lakh, followed by 7-11 lakh (37.7%) and 12-16 lakh (4.4%). In Hisar cent percent of the respondent's annual family income lies between 1-6 lakh (100.0%).

Family type:

Table 1 reveled that maximum of the respondents (64.4%) in Rohtak were having nuclear family, followed by joint family (33.3%)and extended family (2.2%). Maximum of the respondents in Hisar were having joint family (33.3%) followed by extended family (15.5%) and joint family (11.1%). In total sample maximum of the respondents (53.3%) were having joint family, rest 37.7% were having nuclear family and only 8.8% were having extended family.

Type of employment:

Cent of the respondents in Rohtak were having permanent job (100.0%). In Hisar majority of the respondent (75.5%) were having temporary job and rest 24.4% were having permanent job.

Number of year of job:

Table 1 shows that maximum of the respondents (53.3%) in Rohtak had 1-5 year of experience followed by 35.5% who had 6-10 year and 11.1% had 11-15 year experience. In Hisar maximum of the respondents (91.1%) had 1-5 year of experience followed by 8.8% who had 6-10 year of experience.

Burnout among female nurses:

Table 2 indicates that in Section- A (Emotional exhaustion) maximum of respondents in Rohtak (62.2%) had low level burnout followed by (35.5%) moderate burnout and 2.2% had high level burnout. Weighted mean score of emotional exhaustion in Rohtak was 1.4. In Hisar maximum of respondents (73.3%) had low level burnout and rest 26.6% had moderate burnout. Weighted mean score was 1.2. In total sample maximum of the respondent (67.7%) had low level burnout and rest 31.1% had moderate burnout and remaining 1.1% had high level burnout. Weighted mean score was 1.3. These findings were in line with previous literature. Koivula *et al.* (2000) also found that more than half of the nurses experienced burnout, job dissatisfaction and frustration. The prevalence of burnout in nursing is a real issue and a real threat to the health care system. Studies showed that high rates of burnout among nurses, more especially in staff nurses working in hospitals. High levels of burnout among nurses were reported by Aiken *et al.* (2001). Similarly, Jain *et al.* (2019) studied that there was a high prevalence of burnout among nurses. Burnout among nurses can be dealt with support from official bodies and organizations, by maintaining a good work-life balance and obtaining an understanding from the patients of their problems. Data in Section -B (Depersonalisation) of Table 2 revels that maximum of respondents in Rohtak (42.2%) had moderate burnout followed by 28.8% with low level

burnout and 28.8% had high level burnout. Weighted mean score of depersonalisation was 2.1. In Hisar maximum of respondents (60.0%) had moderate burnout and rest 20.0% had low level burnout and 20.0% had high level burnout. Weighted mean score was 2.0. Maximum of total respondent (51.1%) had moderate burnout and rest 24.4% each had low level burnout and high level of burnout. Weighted mean score of depersonalization was 2.0. Weighted mean score of depersonalization was 2.0. Further data in Section-C (Personal Achievement) of Table 2 revels that maximum of respondents in Rohtak (42.2%) had low level of burnout followed by 37.7% with moderate burnout and 20.0% with high level of burnout. Weighted mean score of personal achievement was 2.3. In Hisar maximum of respondents (48.8%) had low level of burnout and rest 28.8% had moderate burnout and 22.2% had high level of burnout. Weighted mean score of personal achievement was 2.2. Maximum of total respondent (45.5%) had low level of burnout and rest 33.3% was having moderate burnout and 21.1% were having high level of burnout. Weighted mean score of personal achievement was 2.2.

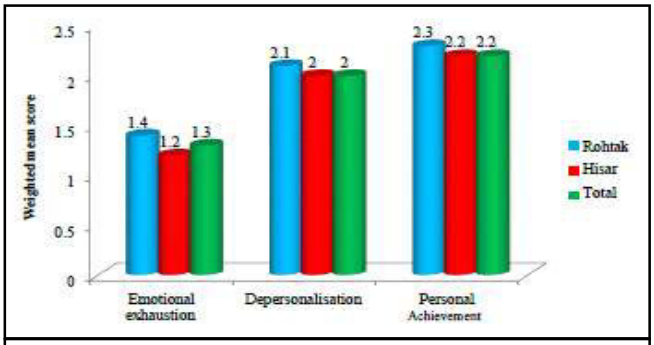

Fig. 1 : Comparative analysis of developed sketches

Correlation between independent variables and burnout:

Table 3 indicates correlation between independent variables and burnout. It was found that place of living was significantly correlated with emotional exhaustion (r = 0.215*). Age, marital status, family type, family members, annual family income, education, type of employment, number of year of job were not significantly correlated with any variables. Similar result were also found by Sondhi *et al.* (2019) who found that nurses who have less experience had more stress. Conflict with physicians and supervisors, colleagues significantly increased the stress level. Death and dying scenarios, work overload, lack of time for social life and less social interactions made nurses more stressful.

WHO quality of life scales of the respondents:

Table 4 indicates that in Rohtak, the maximum number of respondents (86.6%) reported of having an average overall quality of life and general health. Following this, a smaller percentage of respondents (8.8%) considered it above average and a minority of respondents (4.4%) rated it as below average. Weighted mean score was 2.0. In Hisar, a higher proportion of respondents (93.3%) reported having an average health. A smaller percentage of respondents (4.4%) rated as

Table 2 : Burnout among female nurses

Sr. No.	Category	Rohtak (n=45)	Hisar (n=45)	Total (N=90)
		Frequency(%)	Frequency (%)	Frequency(%)
Section-A (Emotional exhaustion)				
1.	Low level burnout	28(62.2)	33(73.3)	61(67.7)
2.	Moderate burnout	16(35.5)	12(26.6)	28(31.1)
3.	High level burnout	1(2.2)	0(0.0)	1(1.1)
WMS		**1.4**	**1.2**	**1.3**
Section-B (Depersonalisation)				
1.	Low level burnout	13(28.8)	9(20)	22(24.4)
2.	Moderate burnout	19(42.2)	27(60)	46(51.1)
3.	High level burnout	13(28.8)	9(20)	22(24.4)
WMS		**2.1**	**2.0**	**2.0**
Section-C (Personal Achievement)				
1.	Low level burnout	9(20)	10(22.2)	19(21.1)
2.	Moderate burnout	17(37.7)	13(28.8)	30(33.3)
3.	High level burnout	19(42.2)	22(48.8)	41(45.5)
WMS		2.3	2.2	2.2

below average. Furthermore, an even smaller percentage of respondents (2.2%) considered it above average. Weighted mean score was 2.0. When considering the overall sample of respondents from both cities, the majority (90.0%) reported of having an average overall quality of life and general health, rest respondents (5.5%) rated their overall quality of life and general health as above average, and minority of respondents (4.4%) considered their overall quality of life and general health to be below average. Weighted mean score of general health was 2.0.

Physical health *:*

In Rohtak maximum number of respondent (73.3%) reported of having an average physical health, and rest of the respondents 15.5% and 11.1% reported above average and below average, respectively. Weighted mean score of physical health was 2.0. In Hisar maximum of the respondent (73.3%) rated their physical health as average, followed by 20.0% respondents who rated above

Table 3 : Correlation between independent variables and burnout

Sr. No.	Independent scale	Maslach inventory scale		
		Emotional exhaustion	Depression	Personal achievement
1.	Age	0.055	0.141	-0.30
2.	Marital status	-0.067	0.071	0.035
3.	Place of living	0.215*	0.065	0.042
4.	Family type	0.083	0.059	-0.07
5.	Family members	0.194	0.026	0.015
6.	Annual family income	0.048	0.168	0.087
7.	Education	0.061.	0.107	0.060
8.	Type of employment	0.155	0.098	0.079
9.	No. of year of job	0.156	0.055	0.082

Table 4 : WHO quality of life scale

Sr. No.	Level	Rohtak(n=45)	Hisar (n=45)	Total (N=90)
		Frequency (%)	Frequency(%)	Frequency (%)
Quality of life and general health				
1.	Below average	2(4.4)	2(4.4)	4(4.4)
2.	Average	39(86.6)	42(93.3)	81(90.0)
3.	Above average	4(8.8)	1(2.2)	5(5.5)
WMS		2.0	2.0	2.0
Physical health				
1.	Below average	5(11.1)	3(6.7)	8(8.8)
2.	Average	33(73.3)	33(73.3)	66(73.3)
3.	Above average	7(15.5)	9(20.0)	16(17.7)
WMS		2.0	2.1	2.2
Psychological health				
1.	Below average	1(2.2)	1(2.2)	2(2.2)
2.	Average	24(53.3)	29(64.4)	53(58.8)
3.	Above average	20(44.4)	15(33.3)	35(38.8)
WMS		2.4	2.3	2.3
Social relationships				
1.	Below average	1(2.2)	1(2.2)	2(2.2)
2.	Average	25(55.5)	24(53.3)	49(54.4)
3.	Above average	19(42.2)	20(44.4)	39(43.3)
WMS		2.4	2.4	2.4
Environment				
1.	Below average	28(62.2)	2(4.4)	30(33.3)
2.	Average	13(28.8)	19(42.2)	32(35.5)
3.	Above average	4(8.8)	24(53.3)	28(31.1)
WMS		1.5	2.5	1.9

Table 5 : Correlation between independent variables and WHO quality of life

Sr. No.	Independent variables	WHO quality of life		
		Physical health	Psychological health	Environment
1.	Age	-0.307*	0.042	0.153
2.	Marital status	-0.269*	-0.091	-0.228*
3.	Place of living	0.35*	0.212*	0.263*
4.	Family type	-0.44	-0.091	-0.043
5.	Family members	0.96	0.009	-0.114
6.	Annual family income	-0.218*	-.0218*	-0.124
7.	Education	-0.013	0.043	0.287**
8.	Type of employment	0.001	0.019	0.290**

average and (6.7%) rated below average. Weighted mean score of physical health was 2.1. Maximum of total respondent (73.3%) reported having an average physical health and rest of the 17.7% respondents reported above average and 8.8% as below average. Weighted mean score of physical health was 2.0.

Psychological health :

In Rohtak maximum number of respondent (53.3%) reported of having an average psychological health status, followed by 44.4% with above average and 2.2% with below average. Weighted mean score was 2.4. In Hisar maximum of the respondent 64.4% reported having an average psychological health, followed by 33.3% with above average and 2.2% below average. Weighted mean score was 2.3. Maximum of total respondent (58.8%) reported having an average and rest 38.8% reported above average and 2.2% as below average. Weighted mean score of psychological health of respondents was 2.3.

Social relationship:

Average social relationship was found in 55.5% respondent in Rohtak, followed by 42.2% with above average and (2.2%) below average. Weighted mean score was 1.5. In Hisar maximum of the respondent (53.3%) had an average social relationship, followed by above average (44.4%) and below average (2.2%). Weighted mean score was 2.4. Maximum of total respondent (54.4%) had average and rest (43.3%) above average and (2.2%) below average. In total sample weighted mean score of social relationship was 2.4.

Environment:

In Rohtak maximum number of respondent (62.2%) were found with average environment, followed by 28.8% with average and 8.8% with above average environment. Weighted mean score was 1.5. In Hisar maximum of the respondent (53.3%) had above average environment, rest 42.2% had average and 4.4% respondent had below average environment. Weighted mean score was 2.5. Maximum of total respondent (35.5%) had average environment and rest 33.3% had below average and 31.1% had above average environment. Weighted mean score was 1.9.

Correlation between independent variables and WHO quality of life:

Table 5 displayed correlation between independent variables and WHO quality of life. It was found that age was negatively correlated with physical health. Marital status was negatively significantly correlated with physical health and environment, respectively. Place of living was significantly correlated with psychological health and environment. Annual family income was significantly negatively correlated with physical and psychological health. Education was significantly correlated with environment and type of employment was significantly correlated with environment. Family type and family members were not significantly correlated with any variable. Similarly Rastogi *et al.* (2019) examined the correlation matrix analysis demonstrated a positive association between work engagement and both independent variables: family-to-work enrichment ($R = 0.287$, $p < 0.01$) and supervisor support ($R = 0.522$, $p < 0.01$). Additionally, the independent variables were significantly correlated with each other ($R = 0.425$, $p < 0.01$). Adali and Priami (2002) also reported several personaland environmental factors associated with burnout among nurses. World Health Organization (WHO) 2006 reported the lack of trained nurses, in particular, and how it may affect national and international efforts to improve the health and well-being of the worldwide population. Burnout among nursing staff was

a significant problem in the healthcare industry.

Conclusion:

Emotional exhaustion, depersonalization, and personal achievement were more prevalent among nurses in Rohtak as compared to Hisar. The majority of nurses (76.6%) experienced moderate stress levels, which were associated with average overall quality of life and general health status. The prevalence of burnout among nurses was a significant issue, and reported high rates of burnout among nurses in hospitals. The correlation analysis indicated that several factors *viz.,* age, marital status, place of living, annual family income, education, and type of employment were (r = -0.30, r = - 0.269, r = 0.212, r = 0.263, r = -0.218, r = 0.287, r = 0.290) significantly correlated to the quality of life of nurses.

REFERENCES

Aiken, L.H., Clarke, S.P., Sloane, D.M. and Sochalski, J. (2001). Cause for concern: Nurses' reports of hospital care in five countries. *LDI Issue Brief,* **6** : 1–4.

Anchu, R., Emmanual, A., Shaji, D., Faizal, M. and Aranha, P. (2021). Burnout among nurses at a tertiary care hospital of South India. *Indian J. Health Sci. & Biomedical Res.*, **14** (1) : 80.

Babapour, A.R., Gahassab-Mozaffari, N. and Fathnezhad-Kazemi, A. (2022). Nurses' job stress and its impact on quality of life and caring behaviors: a cross-sectional study. *BMC Nurs*., **21** (1) : 75.

Freuden Berger, H.J. (1974). Staff burn-out. *J. Soc. Issues*, **30** (1) : 159–165

Ilhan, M. N., Durukan, E., Taner, E., Maral, I. and Bumin, M.A. (2008). Burnout and its correlates among nursing staff: questionnaire survey. *J. Advanced Nursing*, **61**(1) : 100-106.

Jain, M., Patlia, M., Thakare, V. and Langade, D. (2019). Professional Burnout in Nurses across India: A Cross - Sectional Study. *Internat. J. Sci. & Res. (IJSR)*, **2**(10):7.583.

Khamisa, N., Oldenburg, B., Peltzer, K. and Ilic, D. (2015). Work related stress, burnout, job satisfaction and general health of nurses. *Internat. J. Environ. Res. & Public Health*, **12**(1) : 652-666.

Koivula, Paunonen, Laippala (2000). Burnout among staff in two Finnish hospitals. *J. Nursing Mgmt.,* **8**(3):149-158.

Kowalczuk, Krystyna, Krajewska-Kulak, Elzbieta and Sobolewski, Marek (2020). Working Excessively and Burnout among Nurses in the Context of Sick Leaves. *Front Psychol*., **11**: 285.

Lasebikan, V.O. and Oyetunde, M.O. (2012). Burnout among Nurses in a Nigerian General Hospital: Prevalence and Associated Factors. *ISRN Nurs.*, 402157.

Lu, H., Zhao, Y. and While, A. (2019). Job satisfaction among hospital nurses: A literature review. *Internat. J. Nursing Studies*, **94** : 21-31.

Maslach, C., Jackson, S.E. and Leiter, M.P. (1996). Maslach Burnout Inventory Manual 3rd edn. *Palo Alto,CA Consulting Psychologists Press.*

McFarlane, A.C. (2007). Stress-related musculoskeletal pain. *Best Practice & Research Clinical Rheumatology*, **21**(3) : 549-565.

Orszulak, N., Kubiak, K., Kowal, A., Czapla, M. and Uchmanowicz, I. (2022). Nurses' Quality of Life and Healthy Behaviors. *Internat. J. Environmental Res. & Public Health*, **19**(19) :12927.

Park, S.K. and Lee, K.S. (2023). Factors Associated with Quality of Life of Clinical Nurses: A Cross- Sectional Survey. *Internat. J. Environ. Res. Public Health*, **20**(3):1752.

Poncet, M.C., Toullic, P., Papazian, L., Kentish-Barnes, N., Timsit, J. F., Pochard, F., ... and Azoulay, E. (2007). Burnout syndrome in critical care nursing staff. *American J. Respiratory & Critical Care Medicine*, **175**(7) : 698-704.

Rastogi, M. and Saikia, A. (2019). Determinants of Work Engagement among Nurses in Northeast India. *J. Health Mgmt*., **21**:(4) 559–570.

Sondhi, S.K, Sharma, T. and Babu, C. (2019). Study on the level of Stress, among nurses working in Intensive-care Unit, New Delhi, India.

****