

## **Perception of Job Stress Factors by Nurses of Abubakar Tafawa Balewa Teaching Hospital and Specialist Hospital, Bauchi, Nigeria**

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### **ABSTRACT**

*This study assessed the perception job stress factors by nurses of Abubakar Tafawa Balewa University Teaching Hospital (ATBUTH), and Specialist Hospital Bauchi, Nigeria. It examined the perception of five stress factors (work overload, work environment, overtime, work-family life balance, and inter-personal relationships at the work place) by the nurses and analyzed if nurses in the two hospitals differed in their perception of these stress factors. Multi-stage sampling technique was used to determine the sample size of 276 nurses who were the respondents. Data were collected using structured questionnaire and analyzed using descriptive statistics, and Mann-Whitney U-test. The findings of the study revealed that even though the nurses considered all the five stress factors as important, there was no significant difference statistically in the perception of the five stress factors between nurses of the two hospitals. It also recommended the provision of necessary clinical infrastructure and equipment, development and implementation of health sector policies that place premium on maintaining a balanced work-family life for nurses and other health workers so as to mitigate work-family role conflicts, and the promotion of healthy inter-personal relationship among nurses and other staff in the health sector.*

**Key Words:** Inter-personal relationship, Overtime, Perception, Stress factors, Work environment

### **INTRODUCTION**

Stress is a natural, widespread and lifelong phenomenon affecting human beings. It is a major individual and public health problem that is associated with a variety of physical, emotional, and mental health issues. Stress is a normal physical response by an individual to real or imagined threats. It is a state or condition of imbalance where demands or expectations made on individuals do not match the resources available to meet their needs and motivation (Sujaritha *et al.*, 2022; Sahoo, 2016). It is therefore a state of imbalance in an individual resulting from discrepancy between expectations and capacity or reality which has implications on his mental, physical, and emotional well-being.

Stress is attributed to work pressures, financial worries, time constraints, or the demands that come with being part of a family. It can be triggered by illness,

unemployment, a new baby, or how to settle a new mortgage (Durante & Laran, 2016; Elkin, 2013). People experience job-related stress, such as job overload, dissatisfaction, and insecurity, organizational conflict and change (Smollan, 2015); financial stress (Sturgeon, Zautra, & Okun, 2014); and retirement-related stress (Verne, 2015).

Nurses are workers in the health sector which is a very crucial sector of the economy. Stress diminishes the well-being of nurses and invariably their job performance or productivity. It exerts strain which has a direct bearing on their emotions, thought process and physical condition. This presupposes that stress affects both the physical and the psychological wellbeing of nurses and invariably their performance as employees (Jayashree, 2010). Nursing is a demanding profession that often exposes them to high levels of stress. But perception is very key component in an individual's understanding and adjustment to his/her environment.

This study is important because, research has shown that individuals' perception of stress can impact their physiological and psychological responses to stressors (Vallejo *et al.*, 2018; Lazarus & Folkman, 1984). Stress perception studies provide insights on how individuals interpret and react to stressors in their environment. This knowledge enables individuals and other stakeholders to develop interventions and strategies for managing and coping with stress more effectively (Park *et al.*, 2015). So, the way nurses perceive stress and stress factors is crucial for their manage stress management as well as their job performance.

Nurses as employees in the health sector perform their duties over long stretch of hours and mostly under unconducive working conditions. Nursing has consistently been ranked at the highest level of occupational stress among all healthcare professions (Bardhan *et al.*, 2019; Chen *et al.*, 2016). This makes nurses very vulnerable to stress which in turn constrains their capacity to perform their tasks and consequently low productivity.

While several studies have been conducted on nursing and stress (Jordan *et al.*, 2016; Glazer & Gyurak, 2008; LeSergent & Haney, 2005; Kirkcaldy & Martin, 2000) and locally in Nigeria (Ella *et al.*, 2021; Faremi *et al.*, 2019) which have churned out fantastic recommendations, the problem still persists. Studies on stress factors among nurses have not considered several at once but rather covered one or a combination of stress factors (or themes) like work overload, work environment, overtime, work-family life balance, and inter-personal relationships at the work place (Chinwuba, 2022; Shadare & Olaniyan, 2021). This represented a gap which this study addressed. To the best of the authors' knowledge, there is no documented empirical study that has been conducted in Bauchi State to examine the perception these stress factors (work overload, work environment, overtime, work-family life balance, and inter-personal relationships at the work place among nurses.

The aim of the study was to assess the perception of stress factors by nurses in the two hospitals. The specific objectives of the study are therefore to:

- i. describe the socio-economic characteristics of nurses in Abubakar Tafawa Balewa University Teaching Hospital (ATBUTH), Bauchi, and Specialist Hospital Bauchi (SHB);
- ii. assess the perception of job stress factors (work overload, work environment, overtime, work-family life balance, and inter-personal relationships at the work place) by nurses in ATBUTH and SHB; and
- iii. Compare the perception of job stress factors by nurses in the two hospitals.

## METHODOLOGY

*The study was conducted at the Abubakar Tafawa Balewa University Teaching Hospital (ATBUTH), Bauchi, and Specialist Hospital Bauchi (SHB) which are two tertiary health institutions located within Bauchi metropolis. Whereas Abubakar Tafawa Balewa University Teaching Hospital (ATBUTH), Bauchi has 320 nurses who work in twelve (12) different clinical departments, the Specialist Hospital Bauchi (SHB) has 110 nurses spread across eight (8) departments.*

Multi-stage sampling technique was used for the study. First, ATBUTH, and SHB were purposively selected for the study due to the relatively high number of departments they have and high population of nurses. Secondly, the number of nurses to be used in the study from all the thirteen (13) clinical departments of the two hospitals was proportionately determined. Finally, the nurses from each department who took part in the study as respondents were determined through simple random sampling.

The sample size was determined using the Yamane (1967) model which is given by:

$$n = \frac{N}{1 + Ne^2} \quad \dots (1)$$

Where, n = sample size

N = Population size

e = margin error (5%).

Based on the application of this to the sampling frame, the sample size distribution for the respondents was two hundred and seventy six (276) as shown on Table 1. The study used primary data. This was collected using structured questionnaires administered by the researcher. The head of departments and sectional heads of the various clinical departments facilitated the administration of the questionnaires.

Table 1. Sampling Size Distribution of Respondents.

S/No	Hospital	Population	Required Sample Size	Adopted Sample Size
1	ATBUTH	320	177	179
2	Specialist Hospital	110	86	97
<b>Total</b>		<b>430</b>	<b>263</b>	<b>276</b>

Source: Computation from sampling frame.

This study applied the Cronbach's alpha to test the reliability of the multiple-question (Likert scale) research questionnaire which was used to collect data on the perception of nurses on stress factors. The Cronbach's Alpha reliability test revealed varying values for the various job stress factors (work overload, work environment, overtime, work-family life balance, and inter-personal relationship) but the overall value for the twenty nine (29) items considered was 0.833 which is satisfactory given that any value from 0.7 falls within the acceptable threshold (Frost, 2023; Glen, 2023; Field, 2017).

Table 2: Reliability test for nurses' perception of stress factors

Stress Factor	Cronbach's Alpha ( $\alpha$ )	Number of Items
Work overload and job performance	0.691	6
Work environment and job performance	0.720	6
Overtime and job performance	0.737	6
Work-family life balance and job performance	0.685	6
Interpersonal relationships and job performance	0.708	5
<b>Overall</b>	<b>0.833</b>	<b>29</b>

Source: Field Survey (2023).

The data were analyzed using descriptive statistics (presented on frequency tables, bar and pie-charts). Descriptive statistics was applied to achieve objectives i and ii. The Mann-Whitney U-test was applied as an inferential statistic to achieve objectives iii. The statistical package for social sciences (SPSS v.22) was used for the analysis.

## RESULTS

### Socio-economic Characteristics

Socio-economic characteristics are important indicators of individual and group attributes which also influence latent variables. It connotes the position of individuals in the social hierarchy and their life chances. In other words, socio economic status indicates people's access to collectively desired resources, be they material goods, money, power, friendship networks, healthcare, leisure time, or educational opportunities. And it is access to such resources that enable individuals and/or groups to prosper in the society (Heaney & Hoppe, 2017).

The distribution of the respondents (Table 3) showed that the highest percentage (25.36%) of them were within the age range of 25-29 years. The mean age was 35 years, meaning that most of them were young and agile. This average was much lower than the 55 years reported by Akinwale and George (2020). Sixty five percent of the respondents were female nurses (Table 3) which is not unexpected since the nursing profession has traditionally been female-dominated (Akinwale & George, 2020; Faremi *et al.*, 2019). But the ratio between female and male nurses is much narrower compared to the 98%

reported by Ella *et al.* (2021). Gender analysis in job-related stress studies is important because differences in stress levels in some studies have been linked to gender. Yada *et al.* (2009) found that female nurses had significantly higher stress levels than their male counterparts.

There were more married (57%) than single nurse-respondents (Table 3). Marital status especially for women has implications on work-family life role conflict with repercussions on job performance (Cocchiara, 2017; Subramaniam, 2017; Annor 2016). Nurses with 1-5years working experience ranked first (with 39.86%) while the mean was about ten years (Table 3). Whereas those with 1-10 years constituted 68.12% in this study, a much lower proportion (22.5%) was reported for the same range by Akinwale and George (2020). This may be explained by the age distribution of the respondents which was largely young (Table 3). Working experience is important as it determines over time, an employee's level of skills, knowledge, resilience and job performance under stress-inducing working conditions as is the case with hospitals. Experienced nurses are better able to prioritize tasks, manage their time effectively, and make critical decisions under pressure (Lorenz *et al.*, 2019).

Majority (66%) of the respondents were of the senior cadre (Table 3). This may be explained by the entry position of fresh graduates of nursing. The higher the cadre, the higher the chances of a nurse assuming supervisory duties with its attendant implications for stress.

**Table 3: Distribution of Respondents based on some selected Socio-economic Characteristics**

Characteristic	Frequency	Percentage	Mean
<b>Age Range (years)</b>			
18-24	29	10.51	
25-29	70	25.36	
30-34	55	19.93	
35- 39	50	18.12	
40-44	37	13.41	
45-49	17	6.16	
50-54	16	5.79	
≥ 55	2	0.72	
<b>Total</b>	<b>276</b>	<b>100.00</b>	<b>33.5</b>
<b>Gender/Sex</b>			
Female	181	65.58	
Male	95	34.42	
<b>Total</b>	<b>276</b>	<b>100.00</b>	<b>-</b>
<b>Marital Status</b>			
Single	118	42.75	
Married	158	57.25	
<b>Total</b>	<b>276</b>	<b>100.00</b>	<b>-</b>

Working Experience (Years)			
1-5	110	39.86	
6-10	78	28.26	
11-15	39	14.13	
16-20	22	7.97	
21-25	14	5.07	
26-30	4	1.45	
31-35	9	3.26	
<b>Total</b>	<b>276</b>	<b>100.00</b>	<b>9.67</b>
<b>Staff Cadre</b>			
Junior	94	34.10	
Senior	182	65.90	
<b>Total</b>	<b>276</b>	<b>100.00</b>	<b>-</b>

Source: Field Survey (2023).

The distribution of respondents by highest educational qualification (Figure 1) revealed that majority (65%) of them had the entry qualification of registered nurse (RN) followed by Bachelor of Science, Nursing (BSN) degree holders (about 30%). Educational qualification is important in any profession as it determines the knowledge of practitioners, their preparedness and their performance capacity. Education has also been identified with a moderating effect on stress level as it improves coping mechanisms (Vallejo *et al.*, 2018).

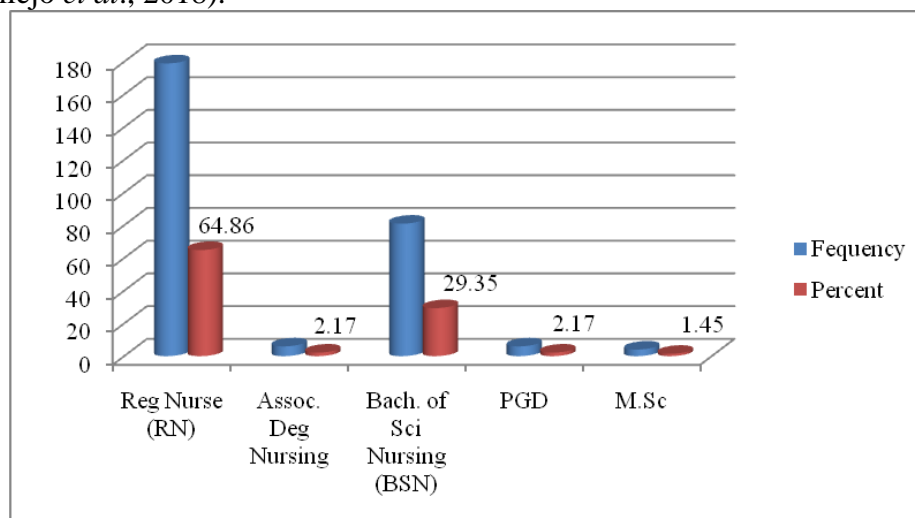


Figure 1: Distribution of Respondents according to highest Educational Qualification.

Source: Field Survey (2023)

The distribution of respondents according to rank showed that the entry level staff (Nursing Officer II) were more (34%) followed by those of senior staff grade (Figure 2). This distribution may be explained by the years of experience of the respondents (as

shown on Table 3). This distribution was similar but higher than what Akinwale and George (2020) reported as 24% and 23% for the Nursing Officer II and Senior Nursing Officer grades respectively.

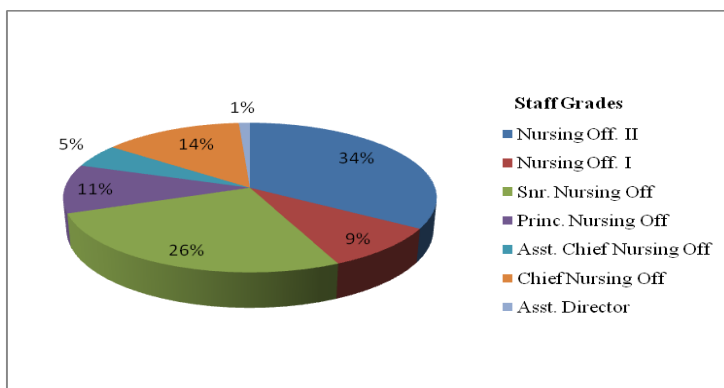


Figure 2. Distribution of Respondents according to Staff Grades.

Source: Field Survey (2023)

The two hospitals considered in this study (ATBUTH and SHB) cumulatively operated twelve (12) clinical departments (Figure 4). The Maternity and Paediatric departments ranked first (17.89%) and second (11.60%) respectively. Some studies on stress levels experienced by nurses have revealed that nurses differ in stress levels based on the departments where they work (Masa'Deh *et al.*, 2017).

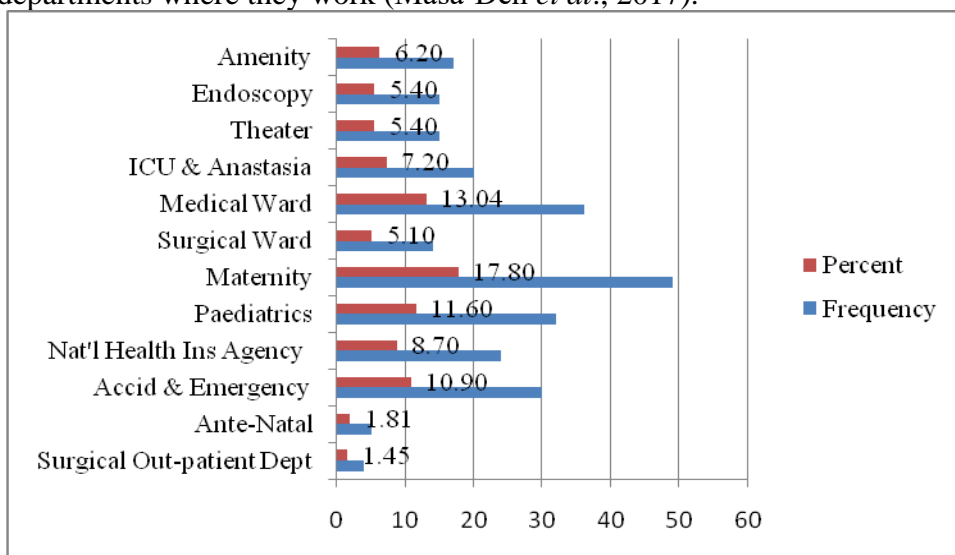


Figure 3. Distribution of Respondents according to Departments.

Source: Field Survey (2023)

## Perception of Job Stress Factors

Stress is a latent concept and variable hence, it is not measured directly but through its indicators. Stress factors are the causes of stress among nurses but the effects of these factors on nurses is a matter of perception. The perception of the effects of five stress factors: work overload, environment, overtime, work-family life balance, and inter-personal relationships are assessed here pursuant to Objective II of this research.

The perception of nurses generally on all questions about work overload was that they experience it (Table 4) given that the mean score was more than 3(which connoted undecided). They also agreed (mean=4.40) that measures to reduce work overload will improve their work performance. These findings are in tandem with those of Faremi *et al.* (2019) and Halpin *et al.* (2017) who reported that work overload was ranked topmost among stress factors.

The respondents were not satisfied (Table 4) with the conditions in their work environment (mean=2.89) which explained why they agreed that the working conditions may make them to leave their present jobs (mean= 3.86) for those with better working conditions. This implied dissatisfaction which usually reflects on poor job performance which is deleterious for service delivery in the health sector.

Overtime goes hand in hand with work overload which may be attributed to low staffing or poor job scheduling by supervisors. The respondents (Table 4) agreed that they worked overtime (mean= 3.39) and that while measures should be taken to reduce or mitigate it (mean=4.18), where inevitable, there should be adequate compensation (mean=4.40).

Eventhough the respondents (Table 4) stated that their work-family life balance was fair (mean=3.9). This corroborated the findings of Kurt *et al.* (2017) who reported that long weekly working hours negatively affected the social lives and domestic lives of nurses. The respondents however disagreed that the hospital management was supportive enough to enable them improve it (mean=2.83). This could be explained by the excess work load and hours of overtime they put into their work was observed earlier. They considered this low support in improving their work-family life balnce a disincentive to job retention (mean=3.8). This be may explained by their relative young age and the preponderance of married female nurses (as observed under the socio-economic characteristics in the previous section of this result discussion).

The respondents (Table 4) agreed that their inter-personal relationship with colleagues was good (mean=4.16). But few of them agreed that inter-personal conflict in the work-place can affect their job performance (mean= 3.08). This is in tune with benefits of positive strong relationships among healthcare staff which are multi-dimensional. The inherent benefits of collaboration and synergy are essential for improved patient care quality (Cummings and Estabrooks (2003) and promote a conducive environment for learning and professional growth through knowledge sharing, mentoring, and continuous learning, which contribute to improved skills and performance



(Duygulu *et al.*, 2018). The friendly workplace atmosphere has also been a source of higher job satisfaction (Zhang *et al.*, 2020).

**Table 4:** Nurses' Perception of Stress Factors

Perception of Stress Factor	Mean*	Std. Deviation
<b>Work Overload</b>		
Overwhelmed with excess work load	3.46	1.328
Experiences work overload daily	3.70	1.088
Work overload affects job performance negatively	3.89	1.053
Always cope with work overload to avoid decline in performance	3.68	1.150
Work overload affects quality of patient care	4.07	1.037
Measures to reduce work overload can improve job performance	4.40	0.987
<b>Work Environment</b>		
Work environ impacts job performance of a nurse	4.14	0.941
Work environ can positively or negative affect job performance	4.04	0.933
Satisfied with physical facilities & resources in my work place	2.89	1.270
Support by colleagues/superiors at workplace is satisfactory	3.95	1.096
Work environment improvements improves job performance	4.19	1.021
Work environment influences decision to job retain current job	3.86	1.065
<b>Overtime</b>		
Frequently works overtime	3.46	1.266
Works additional hours weekly due to overtime	3.47	1.263
Work overtime negatively affects job performance	3.97	1.077
Experiences physical &/mental issues due to work overtime	3.61	1.221
Mitigation measures can reduce negative effects of overtime on job performance	4.18	0.945
Nurses should be adequately compensated for overtime	4.40	1.009
<b>Work-Family Life Balance</b>		
Has a good work-family life balance	3.39	1.351
Work-family life balances greatly impacts job performance	3.86	1.047
Often experience conflicts between work & family responsibilities	3.36	1.211
Hospital mgt regularly provides work-family life balance support for job performance	2.83	1.405
Agrees that improvements can be made on work-family life balance	4.11	1.012
The quality of work-family life balance influences decision to job retain current job	3.84	1.119
<b>Workplace Inter-personal Relationships</b>		
The quality of your interpersonal relationship with colleagues is good	4.16	0.962
Interpersonal relationship can positively/negatively affect job performance	4.18	0.899
Experienced conflicts in interpersonal relationship that affected job performance	3.08	1.302
Good mgt of interpersonal relationship with colleagues improves job performance	4.14	0.929

Sought for superiors or Human Resource department support on interpersonal relationship issues	3.51	1.210
<b>n= 276</b>		

**Note:** \* Score rating was on a scale of 1-5: 1=Strongly disagree; 2=Disagree; 3=Undecided; 4=Agree; 5= Strongly agree.

**Source:** Field Survey (2023)

### Comparison of the Perception of stress Factors between Nurses of ATBUTH and SHB

Comparing stress perception among nurses is crucial for understanding the factors which contribute to their stress experiences and levels which is necessary for developing effective strategies or interventions to mitigate the negative effects of stress.

The Mann-Whitney U-test was used to test the null hypothesis that there is no difference in the perception of stress factors between nurses of ATBUTH and SHB (Table 5). The result validated the null hypothesis for all the five stress factors (work overload, work environment, overtime, work-family life balance and inter-personal relationship) because the z-values for the Mann-Whitney U-test were not statistically significant for all the factors.

This implied that even though the study examined job stress among nurses who worked in different hospitals, their perception of the stress factors were not statistically different. This finding was different from that of Arrogante and Aparicio-Zaldivar (2017) whose findings revealed significant differences in the perception of nurses on job-overload and inter-personal relationships.

**Table 5:** Comparison of Perception Job Stress Factors by Nurses in ATBUTH and SHB.

Stress Factor	Hospital	Sample Size(N)	Median	Mann-Whitney U	Z	Asymptotic Significance (2-tailed)	Effect Size Statistic (r = z/ $\sqrt{N}$ )
Work-overload	ATBUTH	79	2	7,629.00	-1.820	0.069	-0.109
	SHB	7	1				
	<b>Total</b>	<b>76</b>	<b>2</b>				
Work environment	ATBUTH	79	2	9,190.00	0.898	0.369	0.054
	SHB	7	2				
	<b>Total</b>	<b>76</b>	<b>2</b>				
Overtime	ATBUTH	79	1	9,563.50	1.509	0.131	0.009
	SHB	7	1				
	<b>Total</b>	<b>76</b>	<b>1</b>				
Work-family life balance	ATBUTH	79	2	7,614.50	-1.865	0.062	-0.112
	SHB	7	1				
	<b>Total</b>	<b>76</b>	<b>2</b>				
Inter-personal relationship	ATBUTH	79	2	8,441.50	-0.416	0.677	-0.025
	SHB	7	2				
	<b>Total</b>	<b>76</b>	<b>2</b>				

**Source:** Field Survey (2023)

## CONCLUSION

Nurses are a very crucial component of the healthcare delivery system. But imbalance between their job resources and job demands can be manifested job overload, unfavourable work environment, overtime, work-family life conflict, and unsavoury workplace inter-personal relationships. These lead to stress in nurses. The perception of these stress factors by nurses determines their behavioral responses and invariably their job performance. The study therefore recommends that the causes the five job stress factors in the hospital environment should be addressed so as to curb its negative effects on nurses' job performance. The prevalence of work overload and overtime can be ameliorated through proper work scheduling and adequate staffing.

## REFERENCES

- Akinwale, O. E and George, O. J. (2020). Work environment and job satisfaction among nurses in government tertiary hospitals in Nigeria. *Rajagiri Management Journal*, **14**(1):71-92. <https://www.emerald.com/insight/0972-9968.htm>
- Annor, F. (2016). Work–family demands and support: Examining direct and moderating influences on work–family conflict. *Journal of Workplace Behavioral Health*, **31**: 87-103.
- Bardhan, R., Heaton, K., Davis, M., Chen, P., Dickinson, D. A and Lungu, C. T. (2019). A Cross Sectional Study Evaluating Psychosocial Job Stress and Health Risk in Emergency Department Nurses. *International. Journal of Environmental Research and Public Health*, **16**:1-17.
- Chen, C.; Wang, J.; Yang, C.; Fan, J. (2016). Nurse practitioner job content and stress effects on anxiety and depressive symptoms, and self-perceived health status. *Journal of Nursing Management*, **24**: 695–704.
- Chinwuba, U. C. (2022). Role overload and work engagement among nurses: Moderating role of resilience. *Sapientia Global Journal of Arts, Humanities and Development Studies (SGOJAHDS)*, **5**(1): 221 – 235.
- Cummings, G. G and Estabrooks, C. A. (2003). The effects of hospital restructuring that included layoffs on individual nurses who remained employed: A systematic review of impact. *Journal of Nursing Management*, **11**(1):20-31.
- Durante, K. M and Laran, J. (2016). The effect of stress on consumer saving and spending. *Journal of Marketing Research*, **53**: 814-828.
- Duygulu, S., Kublay, G., Ozdemir, A., & Bilgin, H. (2018). The impact of workplace relationships on learning and professional development among nurses. *Journal of Advanced Nursing*, **74**(4):849-860.

- Elkin, A. (2013). *Stress Management for Dummies* (2nd Edition) Published by John Wiley & Sons, New Jersey, USA, 383pp.
- Ella, R. E., Agharandu, A. E., Osuchukwu, E and Samson-Akpan, P. (2021). Occupational stress and job performance among nurses in a teaching hospital, in South – South, Nigeria. *International Journal of Current Research and Review*, **13**(11):12-17
- Faremi, F. A., Olatubi, M. I., Adeniyi, K. G and Salau, O. R. (2019). Assessment of occupational related stress among nurses in two selected hospitals in a city southwestern Nigeria. *International Journal of Africa Nursing Sciences*, 10:68–73
- Frost, J. (2019). *Regression Analysis: Intuitive Guide for Using and Interpreting Linear Models*. <http://statisticsbyjim.com/>.
- Glazer, S and Gyurak, A. (2008). Sources of occupational stress among nurses in five countries. *International Journal of Intercultural Relations*, 32(1): 49–66.
- Glen, S. (2023). Cronbach's Alpha: Simple Definition, Use and Interpretation. Elementary Statistics for the rest of us. <https://www.statisticshowto.com/probability-and-statistics/statistics-definitions/cronbachs-alpha-spss/>
- Halpin, Y., Terry, L. M., & Curzio, J. (2017). A longitudinal, mixed methods investigation of newly qualified nurses' workplace stressors and stress experience, during transition. *Journal of Advanced Nursing*, 73(11): 124-152.
- Jayashree, R. (2010). Stress management with special reference to public sector bank employees in Chennai. *International Journal of Enterprise and Innovation Management Studies*, **1**(3): 34-39.
- Jordan, T. R., Khubchandani, J and Wiblishauser, M. (2016). The impact of perceived stress and coping adequacy on the health of nurses: A pilot investigation. *Nursing Research and Practice*: 1- 11.
- Kirkcaldy, B. D and Martin, T. (2000). Job stress and satisfaction among nurses: Individual differences. *Stress Medicine*, 16: 77-89.
- Kurt, S., Ozturk, H and Balik, T. (2017). Causes of stress experienced by nurses and its effects on nurses. *New Trends and Issues Proceedings on Humanities and Social Sciences*, 4(2):1-10.
- Lazarus, R and Folkman, S. (1984). *Stress, Appraisal and Coping*. New York, NY: Springer.
- LeSargent, C. M and Haney, C. J. (2005). Rural hospital nurse's stressors and coping strategies: A survey. *International Journal of Nursing Studies*, 42(3): 315–324.
- Masa'Deh, R., Alhalaiqa, F., Eid AbuRuzl, M., Al-Dweik, G and Al-Akash, H. Y. (2017). Perceived stress in nurses: A comparative study. *Global Journal of Health Science*, 9(6):195-203.

- Sahoo, S. R. (2016). Management of stress at workplace. *Global Journal of Management and Business Research*, 16 (6): 2249-4588
- Smollan, R. K. (2015). Causes of stress before, during and after organizational change: A qualitative study, *Journal of Organizational Change Management*, 28: 301–314.
- Sturgeon, J. A., Zautra, A. J., & Okun, M. A. (2014). Associations between financial stress and interpersonal events: A daily diary study of middle-aged adults and their life circumstances. *Psychology and Aging*, 29:803-813.
- Subramaniam, K.G. (2017). Strategies for Reducing Employee Stress and Increasing Employee Engagement. *Unpublished Ph. D Dissertation, Walden University*, 109pp.
- Sujaritha, J., Deepa N., Nandhini, J., Vandhana, V and Mahalakshmi, D. (2022). Stress and stress management: A review. *Indian Journal of Natural Sciences*, 13(73): 45558 – 45571.
- Vallejo, M.A, Vallejo-Slocker L., Fernández-Abascal, E. G and Mananes, G. (2018). Determining factors for stress perception assessed with the Perceived Stress Scale (PSS-4) in Spanish and other European Samples. *Frontiers in Psychology*. 9:37
- Verne, J. (2015). Financial wellness programs to reduce employee stress. *Compensation & Benefits Review*, 46, 304–308.
- Wahab, A. B. (2010). Stress Management among Artisans in Construction Industry in Nigeria. *Global Journal of Researches in Engineering*, 10(1): 93-103.
- Yada, H, A. H., Omori H., Ishida Y., & Katoh T. (2009). Stressor among nurses in a psychiatric department: Comparison between acute and recuperation wards. *Department of Public Health, Graduate School of Medical Sciences, Kumamoto University*, 31(3):293-303.
- Yamane, T. (1967). *Statistics: An Introductory Analysis* (2<sup>nd</sup> edition), Harper and Row, New York.
- Zhang, X., You, L., & Zhu, X. (2020). The impact of interpersonal relationships on teamwork and patient outcomes among nurses. *Journal of Nursing Management*, 28(3): 589-598.