



## IMPACT OF JOB STRESS ON NURSES' PRODUCTIVITY AND COPING STRATEGIES AT THE STATE SPECIALIST HOSPITAL GOMBE, NIGERIA

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**ABSTRACT:** *Job stress and its negative effects have been shown to impact nurses' work output and reduce productivity. Given the demanding nature of nursing, it is crucial to assess how stress affects nurses' efficiency and their coping strategies. This study aimed to assess the impact of job stress on productivity and coping strategies among nurses at the State Specialist Hospital, Gombe, Nigeria. A cross-sectional descriptive survey was conducted using a simple random sampling technique to recruit 118 nurses. Bivariate analysis was performed using a T-test at a 5% level of significance. The survey revealed that the majority of the nurses are within the age bracket of less than 30 years, representing 43.20%, and the majority of the respondents were females, representing 69.50%. The findings indicate that job stress significantly impacts nurses' ability to attend to patients, as patient inflow was notably reduced. This reduction may be linked to attitudinal changes among nurses due to job stress, which also affects job efficiency and overall healthcare service delivery. Based on these findings, this study recommends practical workshops and training on stress management and professional efficiency for nurses at the State Specialist Hospital, Gombe. These interventions may help mitigate the effects of job stress and enhance patient care.*

**KEYWORDS:** Job Stress, Productivity, Nurses, Coping Strategies, Specialists Hospital.



## BACKGROUND TO THE STUDY

### Introduction

Nursing is widely acknowledged as a highly demanding profession, often associated with significant stress due to the nature of the work involved. Although nursing is a challenging profession that is not always fully appreciated by society, its importance in healthcare cannot be overstated (Betke et al., 2021). Nurses constitute the largest workforce in any healthcare institution and play a pivotal role as direct caregivers, providing continuous care in hospitals 24 hours a day, seven days a week. They are responsible for delivering holistic care, and addressing patients' diverse needs within their environmental context—from illness and prevention to end-of-life care (Fafa et al., 2023).

Due to their demanding roles, nurses are highly susceptible to workplace stressors such as high workloads, long working hours, income imbalances, critically ill patients, and emotionally distressed relatives (Rashidi et al., 2022). Job stress is an interaction between workplace conditions and an individual's response, leading to psychological and physiological changes that can negatively affect productivity (Babapour et al., 2023). Stress is widely recognized as a serious occupational hazard, with potential consequences on individual well-being and social life. Occupational stress is one of the most significant work-related health issues, often leading to mental exhaustion and psychological distress (Akpore et al., 2023).

Work-related stress arises when job demands exceed available resources, triggering mental and psychological responses that may contribute to illness. If not effectively managed, stress can negatively impact health, well-being, and job performance. The World Health Organization (WHO) identifies workplace stress as a pervasive global issue (Dantis et al., 2024; Babapour et al., 2022). Occupational stress is one of the most frequently reported health challenges worldwide, with an estimated financial impact of \$5.4 billion annually due to decreased productivity. Alarming, stress has been identified as a primary challenge in the nursing profession. A study conducted in the United States found that most nurses reported occupational stress as a major factor in reducing workplace productivity, leading to increased absenteeism. Similarly, a Nigeria-based study reported a 75% prevalence of occupational stress among nurses (Fafa et al., 2023).

Research consistently shows that nurses experience higher levels of stress compared to other professions due to factors such as excessive workload, job ambiguity, poor working conditions, inadequate salaries, workplace violence, and limited participation in decision-making. Job-related stressors can generally be categorized into four key areas: (1) job content (e.g., workload, responsibilities), (2) working conditions (e.g., safety, hygiene), (3) employment conditions (e.g., job security, pay), and (4) social relations (e.g., leadership, workplace support) (Fatukasi et al., 2024).

Job stress among nurses not only affects their quality of life but also compromises the quality of care they provide. The well-being of nurses is of particular importance, as they can deliver more effective healthcare services when their quality of life is optimal (Puto et al., 2021). Due to their direct and prolonged interaction with patients, nurses are exposed to additional stressors such as varying case severity and demanding work environments. If not addressed, stress can lead to emotional exhaustion, professional dissatisfaction, and even negative attitudes toward patient care.



Coping strategies serve as a stabilizing mechanism that enables individuals to adapt to stressful situations. These strategies can be categorized as active or reactive responses, which may have either positive or negative outcomes depending on the circumstances. When individuals respond appropriately to stress, its impact can be minimized. To manage stress, individuals may adopt various approaches, such as eliminating the stressor, developing targeted responses to address it, or finding alternative ways to divert their attention from it (Bolarinde et al., 2023; Aligunla et al., 2023).

## Hypothesis

**H0:** There is no significant relationship between job stress on nurses' productivity and coping strategies.

## METHOD

### Setting

This study was conducted at State Specialist Hospital Gombe, a tertiary healthcare facility with a 350-bed capacity. The hospital serves as a clinical and practical training centre for medical doctors, nurses, pharmacists, and other healthcare professionals. The Directorate of Nursing is led by the Director of Nursing Services, overseeing a total of 294 nurses across various departments. These include Accident and Emergency, Medical, Surgical, Pediatrics, Obstetrics and Gynecology, Outpatient Clinics (Filter Centre), Primary Health Services, Operating Theatres, and Special Clinics such as Ear, Nose, and Throat (ENT) and Ophthalmology. The nursing workforce comprises graduate nurses (BNSC), Registered Nurses (RN), Registered Midwives (RM), Registered Nurse/Midwives (RN/RM), and Registered Public Health Nurses (PHN).

### Study Design and Data Collection

A cross-sectional descriptive survey was employed, utilizing a quantitative approach for data collection. A self-structured questionnaire was developed to gather information on respondents' demographic characteristics, physiological impact of stress, emotional impact of stress, and psychological impact of stress. To ensure reliability, the instrument underwent empirical validation. A pre-test (Test-Retest) was conducted with a separate group of respondents outside the final study population, confirming the clarity and appropriateness of the questions.

### Sampling Technique and Sample Size Determination

The study adopted a simple random sampling technique to recruit full-time nurses who had been employed for at least six months at the hospital. The 118-sample size was determined by the assertion drawn from Osuala (2005), which states that one can use a documental prevalence of a particular disease/incidence in the calculation of a sample size or assume a certain percentage of those concerned with the issue under study. The study assumes a 40% proportion of interest.



That is,  $40/100\% \times 294 = 117.8 \approx 118$  nurses.

The data collected were analyzed using descriptive statistics and inferential statistics with SPSS version 26. The descriptive statistics of frequency and percentages were adopted for analyzing the respondents' demographic characteristics, while analysis of the Karl-Pearson moment of correlation was used for testing the research hypothesis at 0.05 alpha levels.

## RESULTS

*Table 1: Socio-demographic Characteristics of the Respondents*

S/NO	VARIABLE	FREQUENCIES	PERCENTAGE
<b>1.</b>	<b>AGE</b>		
	Less than 30 Years	51	43.20%
	31–40 Years	22	18.60%
	41–50 Years	19	15.30%
	51 and Above	26	22.04%
<b>2.</b>	<b>GENDER</b>		
	Males	36	30.50%
	Female	82	69.50%
<b>3.</b>	<b>MARITAL STATUS</b>		
	Married	91	77.12%
	Single	25	21.19%
	Widowed	2	1.69%
<b>4.</b>	<b>RELIGION</b>		
	Islam	60	50.80%
	Christianity	58	49.20%
<b>5.</b>	<b>EDUCATIONAL QUALIFICATION</b>		
	RN or RM	35	29.66%
	RN + (Other Specialties)	40	33.90%
	BNSc	33	27.97%
	MNSc	10	8.47%
	Ph.D Nursing	-	0.00%
	Others	-	0.00%
<b>6.</b>	<b>YEARS OF EXPERIENCE</b>		
	Less than 5 Years	9	7.63%
	6–10 Years	35	29.66%
	11–15 Years	34	28.81%
	16 and Above	40	33.90%
<b>7.</b>	<b>ETHNICITY</b>		
	Fulani	29	24.58%
	Tangale	26	22.04%
	Waja	16	13.56%
	Tula	14	11.86%
	Tera	15	12.71%
	Hausa	7	5.93%
	Yoruba	4	3.39%
	Others	7	5.93%



8.	DESIGNATION		
	DDNS	3	2.54%
	ADNS	7	5.93%
	CNO	18	15.26%
	ACNO	15	12.71%
	PNO	23	19.49%
	SNO	20	16.95%
	NOI	14	11.86%
	NOII	18	15.26%
9.	SHIFT PER WEEK		
	1-2	8	6.78%
	3-4	30	25.42%
	5-More	80	67.80%

Table 1 indicates the distribution of the respondents according to:

**Age:** The majority of the participants were within the age bracket of less than 30 years, representing 43.20%.

**Gender:** The majority of the respondents were females, representing 69.50%.

**Marital Status:** The majority of the nurses were married, representing 77.12%.

**Religion:** The respondents were majorly Muslims, representing 50.80%.

**Educational Level:** Most of the nurses who participated in the study were double qualification holders, representing 33.90%.

Based on their number of years of experience, the majority of the respondents had an average of 16 years in service, representing 33.90%.

**Designation:** The senior nursing officers formed the majority of the study, representing 19.49%.

**Shift per Week:** The majority of the nurses stated that they ran 5 and above shifts per week, representing 67.80%.

**Table 2: Analysis Showing the Impact of Job Productivity (N=118)**

VARIABLES		Frequency	Percentage (%)
A. Job stress can result in a lack of health and even hurting people	Agree (X)	108	91.53%
	Disagree (Y)	10	8.47%
B. Job stress results in tiredness, hash behaviour and anxiety	Agree (X)	113	95.76%
	Disagree (Y)	5	4.24%
C. Lack of self-confidence, lack of job satisfaction and decreased efficiency	Agree (X)	76	64.41%
	Disagree (Y)	42	35.59%
D. Stress reduces the number of patients attended to	Agree (X)	93	78.81%
	Disagree (Y)	25	21.19%
E. Stress affects my critical thinking and decision-making	Agree (X)	101	85.59%
	Disagree (Y)	17	14.41%
F. Stress affects patients' inflow	Agree (X)	63	53.39%
	Disagree (Y)	55	46.61%
G. Are you happy in this profession	Agree (X)	28	23.73%
	Disagree (Y)	90	76.27%

**Table 3: Analysis of Coping Strategies for Job Stress Management among Nurses (N=118)**

VARIABLES		Frequency	Percentage (%)
H. Social support or workgroup	Agree (X)	104	88.14%
	Disagree (Y)	14	11.86%
I. Physical exercises	Agree (X)	95	80.51%
	Disagree (Y)	23	19.49%
J. Psychological therapies	Agree (X)	90	76.27%
	Disagree (Y)	28	23.73%
K. Change in work approach	Agree (X)	100	84.75%
	Disagree (Y)	18	15.25%
L. Medication	Agree (X)	68	57.63%
	Disagree (Y)	50	42.37%
M. Effective communication strategies during end-of-life care	Agree (X)	98	83.05%
	Disagree (Y)	20	16.95%
N. Prevention of management conflict	Agree (X)	106	89.83%
	Disagree (Y)	12	10.17%
O. Eating excessively	Agree (X)	35	29.66%
	Disagree (Y)	83	70.34%
P. Adjustment of standards and attitudes	Agree (X)	102	86.44%
	Disagree (Y)	16	13.56%





## DISCUSSION

This study aimed to assess the impact of job stress on productivity and coping strategies among nurses, providing empirical evidence on the existence of stress management strategies among nurses. Following the findings of this study, it was discovered that the majority of the nurses were within the age bracket of less than 30 years, the majority of the respondents were dominantly females, and the majority of these respondents were married. The facility was dominated by Muslims and most of the nurses were double qualification holders. Based on the number of years of experience, the majority of the nurses had an average of 16 years in service. Based on ethnicity, the facility was dominated by the Fulanis while by designation the facility was dominated by the Senior Nursing Officers and ran 5 and above shifts per week.

The researcher tested the hypothesis that there is a relationship between job stress on nurses' productivity and coping strategies; the hypothesis was tested at a 0.05 level of significance. (X) is the category of the nurses that agreed, while (Y) represents the total number of nurses that disagreed based on Table 2 (A–G) and Table 2 (H–P). Based on the results of the computed Pearson Product moment correlation coefficient, the null hypothesis was rejected, and it was concluded that there is a significant relationship between job stress on nurses' productivity and coping strategies.

More so, the study identified that job stress significantly impacts nurses' ability to attend to patients, leading to a reduction in patient inflow and dissatisfaction in service provided, which is attributed to attitudinal dispositions of nurses, resulting from stress accumulated during the discharge of their services of care, hence negatively affecting their critical thinking, decision-making, and overall job efficiency. Thus, the findings from the study aligned with the work of Bolarinde et al. (2023) who reported that job stress can lead to depression, detachment from patients, absenteeism, reduced organizational productivity, and the development of physical and psychological complications among healthcare workers.

Interestingly, the study also identified various coping strategies employed by nurses to manage job stress, which included social support, teamwork, physical exercise, psychological therapies, modifications in work approach, effective communication, conflict prevention, and adjustments in work standards and attitudes. These findings are in line with the study findings by Aligungla et al. (2023) and Puto et al. (2021), in which they suggested that an increased professional training opportunity for nurses enabled them to develop coping strategies that enhanced their confidence, productivity, proficiency and job efficiency.

## LIMITATIONS

The study had some limitations. First, due to practical constraints, the findings may not be generalizable to all healthcare settings, as the study was conducted in only one hospital within the state. Additionally, the study's methodology, particularly the sample size, may have reduced its statistical power, limiting the ability to generalize the findings beyond the sampled hospital nurses. The dominance of female respondents further restricted the opportunity to analyze gender-related influences on job stress and coping mechanisms. Moreover, data collection was conducted using a self-structured questionnaire, which may have introduced response bias due to individual interpretation of survey items and the potential influence of organizational



perceptions. Nevertheless, the findings of this study provide valuable insights that can aid decision-making, policy formulation, and the development of clinical guidelines to support nurses in managing job stress effectively. Implementing appropriate coping strategies can enhance nurses' productivity and overall well-being, leading to improved healthcare service delivery.

## CONCLUSION

In conclusion, this study highlights the following:

- Significant impact of job stress on nurses' productivity which signaled the need for effective coping strategies to mitigate its effects.
- The need to employ more staff to ease the impact of job-related stress.
- The need for opportunities in continuous education as a large number of nurses are yet to be enrolled on their baccalaureate degree program, which will enable them to acquire more skills.
- Many staff are worn out as a result of the compounded stress which manifested in the high number of shifts run per week.

To address these challenges, continuous workshops and seminars on stress management and productivity should be organized in the State Specialist Hospital, Gombe. Additionally, the hospital administration should consider implementing break hours and recreational activities for nurses to relieve them from stress, thereby promoting a healthier and more efficient work environment.

## DECLARATION

### Ethical Approval and Consent to Participate

Protection of human subjects was evaluated by the state research ethical committee of the State Ministry of Health and the ethical approval to conduct the study was obtained from the Gombe State Ministry of Health headquarters – MOH/ADM/S/658/Vol.11/38. Permission was sought from the hospital's administrator to conduct the research in a state specialist hospital in Gombe State based on the research ethical committee's approval. Consent was also sought from the nurses who volunteered to fill the questionnaires. A form, explaining the purpose of the study and the rights of the participants to withdraw from the study at any time without penalty, was attached to the questionnaires to ensure voluntary participation. Furthermore, the questionnaires had no identifiers to ensure anonymity and confidentiality. Only aggregate data were reported; individual data were kept in strict confidence and used only for research purposes.

### Consent for Publication

Not applicable





## Competing Interests

None declared

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N/A

## REFERENCES

- Aligungla J, Angouziia P. L, Boli Z. V, Koyu C, Chorei D, Lyngdoh D. E, Ao B (2023) level of stress among nurses and their adopted coping strategies, journal of integrative nursing vol 5 issue 3, p-161-166 [https://doi.org/10.4103/jin.jin\\_59\\_23](https://doi.org/10.4103/jin.jin_59_23)
- Betke K, Basinska M. A, Andruszkiewicz (2021) sense of coherence and strategies for coping with stress among nurses BMC Nursing 20 Issue 107 <https://doi.org/10.1186/s/2912-022-00632-1>
- Bolarinde S.O, Aiyeyemi T.H, Ashawo T.E (2023) occupational stress and coping strategies among healthcare workers j comm med and public health Rep. Vol 4 issue 09 <https://doi.org/10.38207/JCMPHR/2023/OCT040905131>
- Dantis J. M, Calibara M. F, Bulawit A, Garcia H. K, Gulapo M. D, Erudite A. M, Foronda A, Diaz J, Congzom M, Loilo E (2023) work related stressors and coping strategies of Nurses in a selected tertiary hospital, European modern studies journal Vol. 8, No 1, [https://doi.org/10.59573/emsj.8\(1\).2023.9](https://doi.org/10.59573/emsj.8(1).2023.9)
- Fafa A. D, Tackie V, Worba C. L, Dziwornu E, Affirm D, Delanyo D. R. A (2023) occupational stress and its effects on nurses at a health facility, sage open nursing vol 5, issue 9 <https://doi.org/10.1177/23779608231186044>
- Fatukasi A, Kolade O. A, Oyeleye D. I, Fatukasi B. M, Agbetayo K. O, Adeniyi Y. E, Ayanbeku J. K (2024) effects of stress on work performance and coping strategies among nurses, international journal of health and psychology research Vol 12, No. 3, pp 78-88 <https://doi.org/10.37745/ijhpr.13/vo/12n37388>
- Rashidi N, Beigom-bigdeli M. S, Kalani L (2022) correlation between stress and coping strategies among nurses caring for covid-19 patient, journal of advanced immunopathology vol 2, issue 3 [https://doi.org/10.5812/tms\\_127413](https://doi.org/10.5812/tms_127413)
- Puto G, Jurzec M, Leja-szpak A, Bonior J, Musazalik M, Gniadek A (2021) stress and coping strategies of Nurses working with patients infected with and not infected with SARs\_CoV\_2 virus, international journal of environ. Res. Public health vol 24, 19 (1): 195 <https://doi.org/10.3390/ijerph19010195>