



DETERMINANTS OF JOB STRESS AMONG NURSE EDUCATORS IN DEPARTMENTS OF NURSING SCIENCE OF UNIVERSITIES IN SOUTH EAST NIGERIA.

Nwafor Ifeyinwa Eunice^{1*} and Makata Ngozi Eucharia²

¹College of Nursing Sciences, Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra state, Nigeria.

²Department of Nursing Sciences, Nnamdi Azikiwe University, Nnewi Campus, Nnewi, Anambra state, Nigeria.

*Corresponding Author's Email: ifeyinwanice@gmail.com

Cite this article:

Nwafor I. E., Makata N. E. (2024), Determinants of Job Stress Among Nurse Educators in Departments of Nursing Science of Universities in South East Nigeria. African Journal of Health, Nursing and Midwifery 7(1), 125-134. DOI: 10.52589/AJHNM-MHLIJWFF

Manuscript History

Received: 15 Nov 2023

Accepted: 13 Feb 2024

Published: 1 Mar 2024

Copyright © 2024 The Author(s). This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

ABSTRACT: *Stress is part of our normal functioning and integral to life. However, when the elastic limit is reached, its presence instigates a negative effect that could be detrimental to the individual's health, ability, and productivity. This cross-sectional survey is aimed at finding out the determinants of job stress among nurse educators working in the Departments of Nursing Science of Universities in South East Nigeria. A sample size of 176 nurse educators was purposefully recruited for the study. An adapted, modified and validated instrument was administered to the participants to elicit information based on the research objectives. The reliability of the instrument was established using the split-half method of Spearman's correlation at a 0.01 level of significance which showed a strong relationship ($r = 0.82$). Data were collated and analysed using a statistical package for social sciences (SPSS) software, version 26. The results were presented in tables using percentage mean, Pearson's correlation coefficient and chi-square were used to establish the relationship between the variables. The study findings showed that nurse educators experience job stress as a result of manpower shortage (82.95%), poor physical working environment (86.36%), and inadequate instructional materials (91.47%). There was a significant relationship between job stress and the job stress factors tested (shortage of manpower, physical working environment and inadequate instructional materials) with a p -value of < 0.001 . It was concluded that shortage of manpower, physical working environment, and inadequate instructional materials were major causes of job stress among Nurse educators in South East, Nigeria. Manpower recruitment should be organised, the overall quality of the physical working environment should be improved, and adequate instructional materials be provided for the nurse educators.*

KEYWORDS: Determinants, job, stress, nurse educators, Universities.



INTRODUCTION

Stress is a general phenomenon experienced by all humans in the course of life on Earth. Odeh (2016) stated that stress is part of our normal functioning and integral to life, however, when the elastic limit is reached, its presence instigates a negative effect that could be detrimental to the individual's ability and productivity. Stress is a psycho-physiological process which results from the interaction of the individual with the environment and results in disturbances to the physiological, psychological and social systems, depending on the individual's characteristics. Stress is one of the common challenges that employees experience in the workplace anywhere in the world. It influences employees' performance and efficiency. Thus, stress has become a burning issue that Institutions and firms have to consider for employees to perform their tasks with efficiency and effectiveness (Revenio, 2017). Every occupation carries with it what is generally referred to as job stress or occupational stress

Job stress refers to a mental and physical condition which affects an individual's productivity at the workplace, as well as his effectiveness, personal health and quality of work (Manabete *et al.*, 2016). Armon *et al.* (2015) opined that workers experience varied levels of stress every day as they come in contact with factors in their workplace that induce stress.

Determinants are influencing elements, causes or factors which decisively affect the nature or outcome of something (Hornby, 2021). Determinants of job stress are factors (physical or mental conditions) which decisively influence or affect an individual's productivity at the workplace, as well as her effectiveness, personal health and quality of work (Manabete *et al.*, 2016).

Nurse educators are registered nurses with advanced education who are also teachers. They take on important roles within an education facility or hospital. They teach and inform prospective nurses how they could excel in healthcare situations. They act as mentors and teachers, providing realistic expectations for newly registered nurses. Some of the most common responsibilities of a nurse educator include: Teaching clinical skills and patient care, Instituting hospital research Guiding students through clinical rotations. Designing and evaluating programs, curriculum Researching related topics, Maintaining clinical skills and certifications Demonstrating communication and collaboration, and Following legal and ethical teaching practices Nurse educators may also educate registered nurses working in hospitals who have already received their certification. Additionally, they may teach patients, school children, consumers, and communities about health and wellness (Brandy, 2022).

The Nurse educators' roles are numerous in their workplace and are associated with stress. When nurse educators are under stress, there will be poor teaching quality, low student's satisfaction, and low turnover in overall performance. Okoli (2015) also asserted that nurse educators' job stress decreases job satisfaction and reduces the quality of service. A stressed nurse educator might transmit stress indirectly to his/ her students through poor teaching quality and overall poor performance. Therefore, the researchers deemed it necessary to find out the determinants of job stress among this professional category of nurses.



Objectives of the study

1. To determine if shortage of manpower is a cause of Job stress among Nurse Educators in South East Nigeria.
2. To determine whether the physical working environment is a cause of job stress among Nurse Educators in South East Nigeria.
3. To determine if inadequate instructional materials is a cause of job stress among Nurse Educators in South East Nigeria.

Hypotheses

1. There is no significant relationship between shortage of manpower and job stress among nurse educators in South East Nigeria.
2. There is no significant relationship between working environment and job stress among Nurse Educators in South East Nigeria.
3. There is no significant relationship between inadequate instructional materials and job stress among Nurse Educators in South East Nigeria.

MATERIAL AND METHODS

A cross sectional survey research design was employed in the study, and a modified self-administered questionnaire was used for data collection. Purposive sampling technique was employed based on a stated criteria to select 10 out of 22 Universities in South East Nigeria with a total of 176 Nurse educators.

The inclusion criteria for the respondents were:

1. Universities that offer Bachelor of Nursing Science (BNSc) programme in South East Nigeria.
2. Universities whose department of Nursing Science have been in existence for up to three (3) years.
3. Subjects must be nurse educators working in the departments of nursing science of the universities in South East Nigeria.
4. Subjects must be available at the period of the study (between July and September, 2023).

The validated instrument employed for data collection has two sections (A and B). Section A elicited information on socio-demographic data of the respondents, while section B is a modified workplace stress evaluation tools by Shea and De-Cieri (2016) with 17 items which elicited information on determinants of job stress among the nurse educators in departments of Nursing Science of the Universities in South East Nigeria. Data collection lasted for eight weeks (between July and September 2023) and a total of 176 questionnaires were retrieved.



Data were collated and analysed using Statistical Package for Social Sciences (SPSS) software, version 26. Results were presented with frequency tables using the percentage mean. Pearson's correlation coefficient and chi-square were used to establish the relationship between the variables under study, and job stress at the <0.05 level of significance.

RESULT

The socio-demographic data of the 176 respondents is presented in Table 1. The majority, 65 (36.93%) were above 50 years, 62 (35.23%) were between 40 and 45 years, 40 (22.73%) were within the range of 30-39 years, while 9 (5.11%) were within the age range 20 – 29 years. The data also revealed that 144 (85.21%) respondents were females, while 32 (17.89%) were males.

Out of the 176 respondents, 9 (5.11%) were graduate assistants, 11 (6.25%) were assistant lecturers, 30 (17.05%) and 48 (27.27%) were lecturers 11 and 1 respectively. Senior lecturers constituted 47 (26.70%) of the respondents, while 27 (15.34%) and 4 (2.70%) were made up of Readers/Associate professors and Professors respectively.

Years of teaching experience showed that 74 (42.05%) of the respondents have worked for 1-10 years, 57 (32.39%) for 11-20 years, 31 (17.61%) for 21-30 years, while 14 (8.39%) have worked for 30 years and above.

Nurse educators working at Abia State University accounted for 23 (13.07%) of the respondents, Clifford University 20 (11.36%), Ebonyi State University 15 (8.52%), Evangel University 24 (13.64%), Gregory University 11 (6.25%), Imo state university 19 (10.80%), Nnamdi Azikiwe University Awka 15 (8.52%), Rhema university 13 (7.39%), while the number of nurse educators in Tansia university and University of Nigeria Enugu campus were 12 (6.82%) and 24 (13.64%) respectively.

Table 1 also revealed that 139 (79.43%) were on full-time permanent employment, 17 (10.14%) were on full-time temporary employment, and 20 (11.86%) were part-time permanent employees.

On shortage of manpower as a cause of job stress among nurse educators in Table 2. shows that the items: shortage of nurse lecturers in their department have a mean score response of 4.8, Being under a lot of pressure when at work (4.5), manpower shortage in their departments make the job to be very stressful (4.7), and conflicting demands placed on them as a result of manpower shortage (4.5). The respondents unanimously agreed that the shortage of manpower is a cause of stress among them with the highest and lowest mean scores of 4.8 and 4.5 respectively.

On physical working environment as a cause of job stress among Nurse educators in Table 3. It shows that 152 respondents representing 86.36% agreed that the overall quality of their physical working environment is a cause of stress to them with a mean score of 4.1; the level of air circulation in their working environment was not adequate (3.5); level of lighting makes their environment uncondusive (3.4), and their working environment exposing them to a high level of noise have a mean score of 3.3, which shows that all the items have a positive response and was accepted.



Responses on inadequate instructional materials as a cause of job stress among Nurse educators in Table 4. The items, inadequate available instructional materials have a mean score response of 4.0, inadequate instructional materials to do the job assigned (3.8), being imposed to stress as a result of inadequate available instructional materials (3.8), and shortage of equipment and poor facilities (4.2). Meaning that all the items have a positive mean score response of above 3 and were accepted.

The association between job stress factors and job stress in Table 5 shows that a shortage of manpower has a weak positive relationship with job stress with a correlation coefficient of 0.33. While physical working environment and inadequate instructional materials have a moderate positive relationship with job stress, with correlation coefficient scores of 0.69 and 0.58 respectively. Also, the calculated p-values of the job stress factors tested were < 0.001 respectively, which was less than the tabulated p-value at 0.05 level of significance, meaning that there is a significant relationship between the job stress factors listed and job stress among Nurse educators.

Table 1: Socio-Demographic Data of the Respondents

Variables	Frequency (n=176)	Percentage (%)
Age		
20-29 years	9	5.11
30-39 years	40	22.73
40-49 years	62	35.23
50 years and above	65	36.93
Sex		
Female	144	85.21
Male	32	17.89
Rank		
Graduate Assistant	9	5.11
Assistant Lecturer	11	6.25
Lecturer II	30	17.05
Lecturer I	48	27.27
Senior Lecturer	47	26.70
Reader/ Associate Professor	27	15.34
Professor	4	2.70
Years of teaching experience		
1-10 years	74	42.05
11-20 years	57	32.39
21-30 years	31	17.61
31 years and above	14	8.39
Location Or Placement		
Abia State University	23	13.07
Clifford University Owerrenta Abia State	20	11.36
Ebonyi State University	15	8.52
Evangel University Akaeze, Ebonyi State	24	13.64
Gregory University Uturu	11	6.25



Imo State University	19	10.80
Nnamdi Azikiwe University Awka	15	8.52
Rhema University Aba Abia State	13	7.39
Tansia University Oba, Anambra State	12	6.82
University of Nigeria Enugu Campus	24	13.64
Employment Type		
Full Time Permanent Employee	139	79.43
Full Time Temporary Employee	17	10.14
Part Time Permanent Employee	20	11.86

Table 2: Shortage of manpower as cause of job stress among Nurse educators

Items	Likert scale					Mean score	Remark
	Strongly Agree (5)	Agree (4)	Neutral or Uncertain (3)	Disagree (2)	Strongly Disagree (1)		
There is shortage of nurse lecturers in your department, and it is a cause of job stress to you.	146(82.95)	30(17.05)	0	0	0	4.8	Accept
Your are usually under a lot of pressure when you are at work.	106(60.23)	68(38.64)	1(0.57)	1(0.57)	0	4.5	Accept
Shortage of man power in your department makes job to be very stressful.	132(75.00)	44(25.00)	0	0	0	4.7	Accept
Conflicting demands are placed on you as results of manpower shortage.	111(63.07)	60(34.09)	4(2.27)	1(0.57)	0	4.5	Accept

**Table 3: Physical working environment as cause of job stress among Nurse educators**

Items	Likert scale					Mean score	Remark
	Strongly Agree (5)	Agree (4)	Neutral or Uncertain (3)	Disagree (2)	Strongly Disagree (1)		
Your work environment/department is not conducive (level of lighting).	24(13.64)	95(53.98)	6(3.41)	41(23.30)	10(5.68)	3.4	Accept
Working environment of your department is not conducive (level of air circulation).	28(15.91)	93(52.84)	6 (3.41)	41(23.30)	8(4.55)	3.5	Accept
Your working environment exposes you high levels of noise.	16(9.09)	96(54.55)	8 (4.55)	51(28.98)	5(2.84)	3.3	Accept
The overall quality of your physical working environment is a cause of stress to you and your job.	66(37.50)	86(48.86)	5 (2.84)	18(10.23)	1(0.57)	4.1	Accept

Table 4: Inadequate instructional material being a cause of job stress among Nurse educators

Items	Likert scale					Mean score	Remark
	Strongly Agree (5)	Agree (4)	Neutral or Uncertain (3)	Disagree (2)	Strongly Disagree (1)		
Available instruction materials in your department are not adequate for your job.	50(28.41)	105(59.66)	3(1.70)	14(7.95)	4(2.27)	4.0	Accept



You are asked to do work without adequate resources/instructional materials to complete your job.	24(13.64)	123(69.89)	6(3.41)	19(10.80)	4(2.27)	3.8	Accept
The available instructional materials in your department are inadequate and pose some stress on you.	34(19.32)	116(65.91)	3(1.70)	18(10.23)	5(2.84)	3.8	Accept
Shortage of equipment and poor facilities are causes of stress to your job.	75(42.61)	86(48.86)	4(2.27)	10(5.68)	1(0.57)	4.2	Accept

Table 5: Association between Job Stress factors and job stress among Nurse educators in South East Nigeria

Job stress vs	Correlation coefficient (r)	P-value
Shortage of manpower	0.332	<0.001*
Physical working environment	0.696	<0.001*
Inadequate instructional material	0.589	<0.001*

/=significant p-value<0.05/*

DISCUSSION

The findings from the study showed that the majority (82.95%) of the nurse educators reported that shortage of manpower is a cause of job stress to them with a positive mean score of 4.8 (Table 2). The result corroborated that the shortage of manpower is a challenge to nurse educators working in departments of nursing science at universities in South East Nigeria. This is in line with the report of Madu and Mamamane (2013) who identified the shortage of staff as one of the three top world stressors under poor working conditions. The finding is also supported by Mcvicar (2016) who reported that shortage of manpower is one of the factors that cause work-related stress. The similarities in the findings might be a result of manpower shortages across the globe or brain drain. There is generally a global nursing workforce shorted both in the clinicians and faculty. Nurses resign or retire from service, withdraw due to death and migrate without replacement. Brain drain could also increase the manpower ratio of nurse educators to students to above the standard stipulated by the Nursing and Midwifery Council of Nigeria which is 1: 10.



The study revealed that the majority of the nurse educators (86.36%) stated that the overall quality of their physical working environment as a cause of job stress to them (Table 3). This revealed that the physical working environment is a challenge and a cause of job stress among nurse educators in departments of nursing science of the Universities in South East Nigeria. The finding is similar to that of Sidihu *et al.* (2020) who reported that the physical working environment is one of the factors responsible for creating stress in employees. The report also conformed with the report of Nibusiness (2020) and Mcvicar (2016) who asserted that a poor physical working environment is one of the common causes of stress in the workplace. The similarity in the findings might be that the physical environmental factors like noise, lighting, and ventilation among others were not put into consideration at the point of location (siting), and the construction of the institutions' structures involved. Urbanisation and its attendant variables could be an issue. Similarities of findings might also be a result of the climate changes in areas of study which are tropical.

The findings from the study (Table 4) also showed that most of the respondents (91.47%) affirmed that inadequate instructional materials/ Shortage of equipment causes job stress among them. This means that inadequate instructional materials were generally accepted as a challenge to Nurse educators in departments of nursing science of the universities in South East Nigeria. The report agreed with that of Mcvicar (2016), and Madu and Mamamane (2013) who isolated major job stressors to include shortage of equipment/ work materials. The similarities in these reports might be that over the years, the equipping of most institutions has not been given adequate consideration, or might be as a result of hoarding most of the equipment/instructional materials to avoid "spoilage" and only to be presented during accreditation exercises. The effect might be that the students might not have the opportunity to learn with these instructional materials during their studies.

The association between job stress factors and job stress showed that a shortage of manpower has a weak positive relationship with job stress ($r = 0.33$). While physical working environment and inadequate instructional materials have a moderate positive relationship with job stress ($r = 0.69$ and 0.58 respectively). Also, the hypotheses testing revealed that the calculated p-values of the job stress factors tested were all < 0.001 , which was less than the tabulated p-value at 0.05 level of significance, meaning that all the job stress factors (variables) tested for relationship with job stress, ranging from: shortage of manpower, physical working environment and inadequate instructional materials, all have a significant relationship with job stress. The report agreed with Hassard and Cos (2020) who reported that the physical working environment, and shortage of manpower among others are greatly associated with job stress, and do have a marked and measurable impact on workers well-being and behaviour. The similarity might be that across the globe, when these job stress factors and job stress come into play, employees find it difficult to concentrate, meet deadlines, and utilise their creativity.

CONCLUSION

Shortage of manpower, poor physical working environment and inadequate instructional materials/equipment all have a significant relationship with job stress, and they were seen as major causes of job stress among Nurse educators in the Departments of Nursing Science of the Universities in South East Nigeria.



IMPLICATION OF THE STUDY TO NURSING

The primary goal of the nursing profession is to render quality education to nursing students and quality nursing care to the consumer of health services; this is the very reason why nursing exists. When the quality of education given to nursing students becomes compromised as a result of stress placed upon nurse educators, the students might not receive the requisite skills needed for practice. This could impact the quality of nursing services with its own implications. This will militate against the goal of nursing education, the image of the nursing profession and health consumers' satisfaction.

REFERENCES

- Armon, M.A., Lukpata, F.E., & Abong, V. (2015). Determinants of Nurses Job Stress in Critical Care Workplace. *International Professional Nursing Journal*. 10,(2), 2015. ISSN. 15954455.
- Brandy, G. (2022). *Who is a Nurse educator?* Retrieved from <https://www.wgu.edu> on 27 November 2023.
- Hassard, J. & Cos, T. (2020). *The physical work environment and work-related stress: Mechanisms and consequences*. Retrieved from <https://www.oshwiki.osha.europa.eu> On 10 January 2023.
- Hornby, A.S. (2021). *Oxford Advanced Learner's Dictionary of Current English. International Student's Edition*. New York: Oxford University Press,
- Madu, S & Mamamane, C. (2013). Stress among Nurses in Rural Hospitals in South Africa. *CF Social Sciences* 7 (3), 209-213.
- Mcvicar, C. (2016). *Work-related stress*. Retrieved from <https://www.betterhealth.vic.gov.au/healthy-living/work-related-stress> on 12 November 2020.
- Nibusiness (2020). How to deal with stress. Retrieved from <https://www.nibusinessinfo.co.uk/content/commoncauses-stress-work>. on 24 October 2020.
- Odeh, C. N. (2016). *Sources and pattern of occupational stress among Nurses*. A Seminar paper presented at the School of Nursing Nnamdi Azikiwe University Teaching Hospital Nnewi, Anambra State.
- Okoli, O. O. (2015). *Sources and pattern of manifestation of occupational stress among nurses*. Unpublished project presented to School of Nursing, NAUTH Nnewi, Anambra state..
- Revenio, J. (2017). Determinants of Job Stress and its Relationship on Employee Job Performance *American Journal of Management Science and Engineering*. 2 (1), Retrieved from <https://www.researchgate.net/pub>.
- Shea, T. & De-Cieri, H. (2016). *Workplace evaluation tools*, Australian Centre for Research in Employment and Work, Monash University.
- Sidhu, A.K., Singh, H., Viridi, S.S. & Kumar, R. (2020). Job stress and its impact on health of employees: A study among officers and supervisors. *Journal of Management Development* ISSN: 0262-1711. Retrieved from <https://www.emerald.com>.