

Occupational Stress and Coping Strategies Among Healthcare Workers at Federal Medical Center, Owo, Ondo State, Nigeria.

Samuel O. Bolarinde*, Titilayo H. Aiyeyemi, Temidayo E. Ashawe

Department of Physiotherapy, Federal Medical Centre, Owo, Ondo state, Nigeria

*Corresponding Author: Samuel O. Bolarinde, Department of Physiotherapy, Federal Medical Centre, Owo, Ondo state, Nigeria.

Received date: 26 September 2023; Accepted date: 27 October 2023; Published date: 31 October 2023

Citation: Bolarinde SO, Aiyeyemi TH, Ashawe TE (2023) Occupational Stress and Coping Strategies Among Healthcare Workers at Federal Medical Center, Owo, Ondo State, Nigeria. J Comm Med and Pub Health Rep 4(09): <https://doi.org/10.38207/JCMPHR/2023/OCT040905131>

Copyright: © 2023 Samuel O. Bolarinde. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

Occupational stress is a concern for both employees and employers. The harmful and costly consequences of stress demonstrate the need for strategies to limit organizational stressors. The study investigated occupational stress and coping strategies adopted by Nigerian healthcare workers. The cross-sectional study recruited 150 healthcare workers from a Tertiary health facility in Nigeria. Ethical approval for this study was sought and obtained from the institutional Health Research and Ethical Committee (HREC), while participants' informed consent was sought and obtained. Self-administered questionnaires using the Work Stress Questionnaire and Brief COPE Inventory were used to assess the participants' occupational stress and coping strategies. Data was analyzed using Statistical Package for Social Science (SPSS20.0). Descriptive frequency distribution and percentage were used to summarise the data.

Results revealed that 107(71.3%) of the respondents reported indistinct organization and conflict as the major cause of occupational stress, followed by individual demands and commitment (42.7%), while the least cause of stress was identified as an influence at work (24.0%). 24(16.0%) adopts a lot of positive reframing followed by 17(11.3%) of religion, 16(10.7%) of informational support and 13(8.7%) of acceptance as coping strategy.

Furthermore, 44.7% of the respondents adopt a little bit of emotional support, followed by self-distraction (44.0%), humor (42.0%) and informational support (38.0%). However, the least adopted coping strategies among the respondents were substance use (92.0%) and self-blame (58%). Therefore, Occupational stress appears to be high among healthcare professionals while most adopt positive coping strategies.

Keywords: Occupational stress, health care workers, coping strategies

Introduction

Occupational stress is defined as psychological stress related to one's job. Occupational stress can be managed by understanding what the stressful conditions at work are and taking steps to remediate those conditions [1]. Occupational stress can occur when workers do not feel supported by supervisors or coworkers, feel as if they have little control over the work they perform, or find that their efforts on the job are incommensurate with the job's rewards.

Occupational stress is a concern for both employees and employers because stressful job conditions are related to employees' emotional well-being, physical health, and job performance [2]. A landmark study conducted by the World Health Organization and the International Labour Organization found that exposure to long working hours, which are theorized to operate through increased psycho-social occupational stress, is the occupational risk factor with the largest attributable burden of disease, according to these official estimates causing an estimated 745,000 workers to die from ischemic heart disease and stroke events in 2016 [3].

Occupational stress is commonly acknowledged to be a critical issue for managers of organizations as occupational stressors tend to contribute to organizational inefficiency, employees are under a great

deal of stress related to a variety of occupational stressors. Occupational stressors contribute to organizational inefficiency, high staff turnover, absenteeism due to sickness, decreased quality, and quantity of practice, increased costs of health care, and decreased job satisfaction. One of the organizational outcomes that were affected by occupational stress is performance. Job stress is a mental and physical condition, which affects an individual's productivity, effectiveness, personal health and quality of work. Job stress victims experience lowered quality of work life and performance. The harmful and costly consequences of stress demonstrate the need for strategies to limit stressors within the organization. Organizations that do not adopt strategies to alleviate stress may find their employees looking elsewhere for better opportunities. The impact of stress from overwork, long hours at work and work intensification has had major and often devastating effects on organizations of developed nations [4].

Coping strategies is a stabilizing factor that may result in individuals adapting to stressful events [5]. Active or reactive coping responses can be positive or negative depending on the situation and the response [6]. With an appropriate response to a stressful situation, the

impact on the individual may be limited. The individual may deal with stress through several methods including removing the stressor, developing a specific response to deal with it or alternatively seeking diversion from the stressor [7]. It has also been reported that ethnic, cultural and socioeconomic characteristics influence coping behavior [8]. Hospital work requires coping with some of the most stressful situations found in any workplace [9].

The study therefore determined what constitutes stress at work and coping strategies adopted by health care workers.

Materials and Methods

This cross-sectional study involved 150 consenting healthcare professionals working at Federal Medical Centre, Owo, Ondo state, Nigeria. The sample included physicians, nurses, physiotherapists, and other health professionals who have everyday contact with the patients. Employees who were on sick leave during the study were excluded. The study center was Federal Medical Centre, Owo, and the participants were selected using a purposive sampling technique. Ethical approval was sought and obtained from the Ethical Review Committee of Federal Medical Centre, Owo, Ondo State, before the commencement of this study. Informed consent was obtained from all participants after ensuring anonymity and confidentiality of their information. Self-administered questionnaires using the Work Stress Questionnaire and Brief COPE Inventory were used to assess the participants' occupational stress and coping strategies. The Work stress questionnaire consists of 21 items covering 4 main themes: Indistinct organization and conflicts, Individual demands and commitment, Influence at Work, and Work to leisure time interference. The questions of the first two themes can be answered: Yes, Partly, or No. To determine the level of stressfulness in the items of the first two themes, the questions are followed by the question: Do you perceive it as stressful? The respondent grades the level of

stressfulness by answering: Not stressful, less stressful, Stressful, or Very stressful. The items of the second two themes can be answered: Yes, always, yes, often, No, rarely, or no, never. The Brief-COPE is a 28-item self-report questionnaire designed to measure effective and ineffective coping responses. The scale can determine someone's primary coping styles with scores on the following two subscales: Approach coping and Avoidant Coping. It is rated on a 4-point Likert scale from 1 to 4, with 1 I haven't been doing this at all, 2 little bit, 3 medium amount, and 4= I've been doing this a lot.

The responses on each item were coded numerically to generate data for statistical analysis. Data was analyzed using Statistical Package for Social Science (SPSS20.0). Descriptive statistics mean, standard deviation frequency distribution and percentage were used to summarise the data. The alpha level was set at 0.05.

Result

Sociodemographic data of respondents.

The result of sociodemographic data for respondents in this study is presented in [Table 1]. 150 healthcare professionals from the Federal Medical Centre, Owo, participated in this study. Respondents aged 21-30 had the highest percentage (50%), while those aged 51-60 had the lowest percentage (8%). The male gender had the highest proportion (50.7%). The greater proportion of the respondents are Yorubas (75.3%), while the Hausa tribe had the lowest proportion (0.7%). 76(50.7%) of the respondents are married and 2(1.3%) are widowed. The result also shows that Doctors are the professionals with the highest number of participants, 36(24%), followed by Nurses, 34(22.7%), Dentists, 22(14.7%), while the profession with the least number of participants was Optometrist 2(1.3%). More than half of the respondents, 90(60%), have worked in the hospital for less than 5 years, 26 (17.3%) for 11-15 years, while 4 (2.7%) worked for 26-30 years.

Table 1: Table of Demographic Characteristics of Respondent (N=150)

Variable		N	%
Age	21-30	75	50.0
	31-40	30	24.0
	41-50	31	20.7
	51-60	8	5.3
Gender	Male	76	50.7
	Female	74	49.3
Ethnic group	Yoruba	113	75.3
	Igbo	29	19.3
	Hausa	1	0.7
	Others	7	4.7
Marital status	Married	76	50.7
	Single	72	48.0
	Widowed	2	1.3
Profession	Doctor	36	24.0
	Nurse	34	22.7
	Pharmacist	16	10.7
	Physiotherapist	8	5.3

	Radiographer	16	10.7
	Dentist	22	14.7
	Medical laboratory science	16	10.7
	Optometrist	2	1.3
Years of experience	Less than 5 years	90	60.0
	5-10 years	22	14.7
	11-15 years	26	17.3
	16-20 years	3	2.0
	21-25 years	5	3.3
	26-30 years	4	2.7

Occupational stress of the respondents.

The occupational stress questionnaire revealed that out of the 150 respondents who participated in this study, 107(71.3%) [Table 2] reported that indistinct organization and conflict was the primary

cause of occupational stress, followed by individual demands and commitment (42.7%). In contrast, the most minor cause of stress was influence at work (24.0%).

Table 2: Occupational stress questionnaire of the respondents. (N= 150)

Domain of Occupational stress	Stressful		No stress	
	N	%	N	%
Indistinct organization and conflict	107	71.3	43	28.7
Individual demands and commitment	64	42.7	86	57.3
Influence at work	36	24.0	114	76.0
Work interference with leisure time	48	32.0	102	68.0

Coping strategy of the respondents.

The result of the analysis shows that 24(16.0%) of the respondents adopted much positive reframing, followed by 17(11.3%) of religion, 16(10.7%) of informational support, and 13(8.7%) of acceptance. The result also showed that 44.7% of the respondents adopted a little bit

of emotional support, followed by self-distraction (44.0%), humor (42.0%), and informational support (38.0%). However, the least adopted coping strategies among the respondents were substance use (92.0%) and self-blame (58%) [Table 3].

Table 3: brief-COPE INVENTORY questionnaire of the respondents (N=150)

Variables	Not doing it at all	A little bit	A medium amount	Doing this a lot
Active coping	52(34.6%)	56(37.3%)	34(22.7%)	8(5.3%)
Use of informational support	53(35.3%)	57(38.0%)	24(16.0%)	16(10.7%)
Positive reframing	50(33.3%)	44(29.3%)	32(21.4%)	24(16.0%)
Planning	54(36.0%)	45(30.0%)	39(26.0%)	12(8.0%)
Emotional support	53(35.3%)	67(44.7%)	26(17.3%)	4(2.7%)
Venting	69(46.0%)	55(36.7%)	24(16.0%)	2(1.3%)
Humour	62(41.3)	63(42.0%)	20(13.3%)	5(3.3%)
Acceptance	49(32.6%)	56(34.6%)	36(24.0%)	13(8.7%)
Religion	47(31.3%)	51(34.0%)	35(23.4%)	17(11.3%)
Self-blame	88(58.7%)	51(34.0%)	9(6.0%)	2(1.3%)
Self-distraction	51(34.0%)	66(44.0%)	12(8.0%)	8(5.3%)
Denial	76(50.7%)	53(35.4%)	19(12.7%)	2(1.3%)
Substance use	138(92.0%)	9(6.0%)	3(2.0%)	0
Behavioural disengagement	81(54.0%)	49(32.6%)	19(12.6%)	1(0.7%)

Discussion

This study was aimed at determining the level of occupational stress and coping strategies among health care professionals using Federal Medical Centre Owo, Ondo State as a case study. The study recruited 150 participants from different health care professions in the hospital. Result from this study revealed that majority of the respondents had less than 5 years' work experience, respondents with work experience greater than 16 years are in the minority. This observation probably could be attributed to the fact that the respondents with less than 5 years' work experience showed more interest in the study compared to the respondents with higher years of work experience furthermore, those with higher work experience were more involved in administrative work compared to those with less than 5 years' work experience that were at the forefront of clinical practice.

Observation from the present study revealed that the majority of the respondent identifies indistinct organization and conflict as their major stressor. This finding opposes the report of Srikuma, et al [10], that reported only 10% of employed Swedish women to have experienced occupational stress owing to indistinct organization and conflicts.

Individual demands and commitment such as high work pressure, demand, responsibility and thinking about work after work hours was also found to be another stressor among the health care professionals in this study. The finding from the present study however supported the work of Shobana, et al [11], that reported higher work pressure on employees. Studies conducted in Ethiopia among health care professionals also showed that 37.8% to 68.2% of health care professionals identified occupational demands and work overload as a major stressor [12,13]. Further studies conducted in different countries showed factors like; work overload, working unit, work experience, sex, conflict at workplace, marital status, educational status, job satisfaction, working environment and not being rewarded were significantly associated with occupational stress among health care professionals [14-16]. However, the reason for the finding of the present study could be attributed to role overload, role conflict and strenuous working condition in addition to brain drain among health care professionals which has led increased workload of the remaining health care workers.

References

1. Quick JC, Wright TA, Adkins JA, Nelson DL, Quick JD (2013) Preventive Stress Management in Organizations. 2nd ed. American Psychological Association; Washington, DC, USA.
2. Smith LA, Roman A, Dollard MF, Winefield AH, Siegrist J (2005) Effort–reward imbalance at work: the effects of work stress on anger and cardiovascular disease symptoms in a community sample. *Stress and Health*. 21(2): 113-128.
3. Frank E, Zhao Z, Fang Y, Rotenstein LS, Sen S, et al. (2021) Experiences of Work-Family Conflict and Mental Health Symptoms by Gender Among Physician Parents During the COVID-19 Pandemic. *JAMA Netw Open*. 4(11): e2134315.
4. Reese CD (2017) Occupational Safety and Health; Fire Prevention and Life Safety. CRC Press.
5. Seyedfatemi N, Tafreshi, M, Hagani H (2007) Experienced stressors and coping strategies among Iranian nursing students. *BMC Nurs*. 6: 11.
6. Noorafshan A, Pourahmad S, Sagheb MM, Dehghani Nazhvani A, Dehshahri A, et al. (2014) The students' intentions and

The result from stress coping strategies adopted by the health care professionals revealed that positive coping strategies such as active coping, positive reframing, religion, acceptance humour and informational support were the most common coping strategies significantly used by the participants in this study while avoidant coping strategies such as self-distraction, denial, substance use, behavioural disengagement, and self-blame were the least coping strategy used. This finding supported the work of Aryal, et al [17], that reported use of positive coping strategies such as active coping, positive reframing and humor to manage their stress among community health workers.

Other studies conducted by Godifay, et al [15], and Koinis, et al [18], in Nigeria and Greece respectively, reported that health workers use positive re-appraisal, quitting, and looking for social support as coping strategies to manage their emotions as well as physical health. Similarly, Gellis et al [19], conducted a study among social workers and found out that adopting a positive coping strategy leads to low occupational stress whereas negative coping strategy leads to more occupational stress.

Conclusion

The findings from this study have shown that occupational stress in the form of indistinct organization and conflict is rated high among healthcare professionals, although adopting positive coping strategies among professionals seems commendable. However, administrators of health institutions should put structures in place to address organizational policies that promote stressful conflict. A worker with a stressful mind cannot deliver effective patient care.

Declarations: All authors with this declare no conflict of interest in any form, be it financial, personal, or other relationships with other people or organizations, that could inappropriately influence, or be perceived to influence, the work being reported.

Source of Funding: This study was fully funded by the authors.

Acknowledgement: The authors acknowledge all the staff of Federal Medical Centre, Owo, Ondo State, Nigeria, who were involved in the study.

- satisfaction with the field of study and university. *J Adv Med Educ Prof.* 2(4): 176-82.
7. Heinonen K, Räikkönen K, Keltikangas-Järvinen L (2005) Self-esteem in early and late adolescence predicts dispositional optimism–pessimism in adulthood: A 21-year longitudinal study. *Personality and Individual Differences.* 39(3): 511-521.
 8. Ingledew DK, Hardy L, Cooper CL, Jemal H (2011) Health behaviours reported as coping strategies: A factor analytical study. *British Journal of Health Psychology.* 1(3): 263 - 281.
 9. Spickard A, Swiggart W, Pichert, JW, Dodd D, Elasy TA, et al. (2002) Changes Made By Physicians Who Misprescribed Controlled Substances. *Journal of Medical Regulation.* 88(3): 110-115.
 10. Srikuma A, Vijayashri Ravi. 2015. A Study of Occupational Stress Among Women Professionals. *International journal of scientific research.* 4(7).
 11. Chacko N, Verma R, cko, Mathur A (2016) A comparative study on occupational stress among women working in government and private sector. *International Journal of Recent Scientific Research.* 7.
 12. Salilih SZ, Abajobir AA (2014) Work-related stress and associated factors among nurses working in public hospitals of Addis Ababa, Ethiopia: a cross-sectional study. *Workplace Health Saf.* 62(8): 326-32.
 13. Birhanu M, Gebrekidan B, Tesefa G, Tareke M (2018) "Workload Determines Workplace Stress among Health Professionals Working in Felege-Hiwot Referral Hospital, Bahir Dar, Northwest Ethiopia. *Journal of Environmental and Public Health.* 2018: 6286010.
 14. Dagget T, Molla A, Belachew T (2016) Job related stress among nurses working in Jimma Zone public hospitals, South West Ethiopia: a cross sectional study. *BMC Nurs.* 15: 39.
 15. Godifay G, Worku W, Kebede G, Tafese A, Gondar E (2018) Work related stress among health care workers in Mekelle City administration public hospitals, North Ethiopia. *Work.* 46: 189-195.
 16. Moustaka L, Constantinidis TC (2010) Sources and effects of Work-related stress in nursing.. *Health Science Journal.* 4(4): 210-216.
 17. Aryal S, D'mello MK (2020) Occupational stress and coping strategy among community health workers of Mangalore Taluk, Karnataka. *Indian J Public Health.* 64(4): 351-356.
 18. Koinis A, Giannou V, Drantaki V, Angelaina S, Stratou E, Saridi M. (2015) The Impact of Healthcare Workers Job Environment on Their Mental-emotional Health. Coping Strategies: The Case of a Local General Hospital. *Health Psychol Res.* 3(1): 1984.
 19. Gellis, Z.D. 2002. Coping with Occupational Stress in Healthcare: A Comparison of Social Workers and Nurses. *Administration in Social Work.* 26(3): 37-52.