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**RESEARCH ARTICLE** 

# Influence of Occupational Stress and Social Relationship at the Workplace on the Psychological Wellbeing of Nurses and Midwives in the Catholic Health Service of the Western Region of Ghana

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## **ABSTRACT**

This study investigated the influence of occupational stress and social relationship at the workplace on the psychological wellbeing of nurses and midwives in the Catholic Health Service of the Western Region of Ghana. A cross-sectional descriptive study was employed for the study. A sample of 300 nurses and midwives was used for the investigation. A questionnaire based on Nurses' Occupational Stress Scale was adopted to measure occupational stress among the nurses and midwives and Ryff's Psychological Wellbeing Scale (PWB 18 items) to measure psychological wellbeing among nurses and midwives and the Worker Relationship Scale developed by Biggs, Swailes and Baker was used to measure social relationships at the workplace. For statistical analysis, Linear Regression Analysis for statistical purposes. The study's result indicated that occupational stress explained 18.1% psychological wellbeing variances. It was also found that occupational stress predicted psychological wellbeing among nurses and midwives in the Catholic Health Service of the Western Region. The study's result further revealed that social interaction and experiences among health professionals (nurses and midwives) at the workplace significantly determine their psychological wellbeing. It was recommended that nurses and midwives should be trained on better ways of dealing with occupational stress in order to stay psychologically sound.

# INTRODUCTION

Occupational stress exists in all occupations. All employees experience some form of stress in one way or another, which happens in a wide variety of job circumstances [1]. However, excessive occupational stress has been considered a "toxic" part of the job environment and is often associated with psychological and physical health [2]. Against this backdrop [3] asserted that long-term excessive stress could lead to psychological problems like depression and anxiety. A couple of studies have shown that occupational stress significantly predicts pressure [4–6]. Furthermore, occupational stress inversely correlates with psychological wellbeing [7] and is positively associated with depressive symptoms [8,9]. We recognized that occupational stress is a meaningful cause for mental health worldwide [10].

They noted that positive relationships among health professionals serve as a source of motivation and higher job performance [11]. Asseting that favourable relationships among employees enhance a better work environment and foster

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- Social relationship at the workplace
- Psychological wellbeing

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higher job satisfaction and productivity levels [12]. Inversely, harmful or toxic relationships in the workplace can increase stress levels among employees, as well as feelings of isolation". Some studies have endorsed the essential role of positive working relationships on nurses' job performance, nurses and patients' satisfaction, employee retention, and organizational commitment [13,14]. Humans are inherently social creatures [15], and as such, the quality of their social relationship have a toll on their wellbeing. The quality of relationships hinges on how positively or negatively a person feels about their relationships [16,17]. An individual's social environment and social relationship have been known in the literature to play a massive role in building strong social networks that shape one's health and also prevent a cognitive decline [18]. On the other hand, pointed out that several research works have delved into the relationship between social support and the psychological wellbeing of an individual; however, few pieces of research show the negative side of social interactions [19]. According to [20], empirical reports of evidence suggest that negative interactions can potentially be more harmful to an individual than social support is helpful.

## STUDY OBJECTIVES

This study has two objectives. The first objective looked at the impact of occupational stress on the psychological wellbeing of nurses and midwives in the Catholic Health Service of the Western Region of Ghana. The second objective investigated the influence of social relationship at the workplace on the psychological wellbeing of nurses and midwives in the Catholic Health Service of the Western Region of Ghana.

# **METHODOLOGY**

# Study area

The research was carried out in Ghana's Western Region's Catholic Health Service. Holy Child Catholic Hospital in Sekondi-Takoradi Metropolitan Assembly, Jubilee Catholic Hospital in Ahanta West Municipal Assembly, St. Martin de Porres Hospital in Ellembelle District, and Father Thomas Alan Rooney Memorial Hospital in Amenfi West Municipality were the hospitals chosen for the study.

# Study design

The objectives of the study warranted the use of the quantitative approach. Quantitative research includes methodologies such as questionnaires, structured observations or experiments and stands in contrast to qualitative research, which involves collecting and analyzing narratives and open-ended observations through interviews, focus groups or ethnographies [21].

Specifically, this study employed a descriptive cross-section research design. This study employed a cross-

sectional survey because data were collected from the research participants at a particular time. Also, the study sought to observe, describe and document aspects of the phenomenon as they naturally occur [22].

### **Population**

The study's population included nurses and midwives from the four selected Catholic health facilities in the Western Region, Ghana. According to data from the four selected health facilities, a total of 501 nurses and midwives (398 nurses, 79% and 103 midwives, 21%) were available for the study.

# Sample and sampling procedure

A total of 300 people were included in the study. The Gill, Johnson, and Clark [23] sample size estimation table was used to determine the overall sample size. A 95 percent confidence level, 55 margins of error, and a population variance of 50% are all assumptions in this sample size estimation chart. A sample of 300 people was employed to boost the generalizability's power and reduce statistical mistakes. The 300 sample was used to calculate the percentage of health professionals in each facility.

The sample for the study was selected using a multistage selection procedure that included purposive sampling and stratified sampling. To begin, purposive sampling, a non-probability sample technique, was employed to identify the study's health institutions. Stratified sampling was utilized to divide nurses and midwives into two (2) strata before they were chosen for the study. Because the study population was divided into two subgroups — nurses and midwives — with distinct characteristics and work patterns, stratified sampling was adopted. As a result, the strata are created based on the research population's shared traits. To offer individuals of each stratum an equal chance to participate in the study, a random sampling procedure was utilized to pick samples from among nurses and midwives.

## **Data collection instrument**

For gathering information from participants, a questionnaire based on the Nurses' Occupational Stress Scale, Ryff's Psychological Wellbeing Scale (PWB 18 items),) and the Worker Relationship Scale developed by Biggs, Swailes and Baker were adopted.

#### **Ethical consideration**

Permission was sought from the Catholic Health Service's Diocesan Directorate of Health in Ghana's Western Region as a demand. Participants were also asked to give their informed consent. The study's voluntary character was properly adhered to. The anonymity of participants was also taken into consideration. Participants' names, addresses, email addresses, phone numbers, and other personally identifying information were not collected. During data

input, the responded questionnaires were assigned indexes and numbers.

# Study variables

The variables were occupational stress, social relationships at the workplace and psychological wellbeing. Other variables were demographic variables such as age, category of health professional and duration of service.

## Statistical analysis

A total of 300 people were surveyed for this study, however only 280 people responded, resulting in a response rate of 93.4 percent. After data was checked for accuracy and completeness, it was entered and analyzed using SPSS version 23 and Microsoft Excel 2016. The sociodemographic data of the study participants was presented using descriptive statistics such as frequencies, percentages, means, and standard deviations. For statistical purposes, Linear Regression Analysis was used.

#### **RESULTS**

#### **Objective 1**

Influence of occupational stress on the psychological wellbeing of Nurses and midwives in the catholic health service of the Western Region of Ghana: This objective determined the influence of occupational stress on psychological wellbeing of nurses and midwives in the Catholic Health Service of the Western Region of Ghana. It was assumed that the impact of occupational stress on psychological wellbeing was negative. Linear regression analysis was used to test if occupational stress significantly predicts respondents' psychological wellbeing. The regression analysis results indicated that occupational stress explained 18.1% psychological wellbeing variances  $(R^2 = .181, F(1,285) = 62.895, p = .000)$ . It was also found that occupational stress predicted psychological wellbeing among nurses and midwives in the Catholic Health Service of the Western Region ( $\beta$  = .426, p < 0.05). The results of the analysis are presented in tables 1 & 2.

### **Objective 2**

Influence of social relationships at the workplace on the psychological wellbeing of Nurses and midwives in the catholic health service of the Western Region of Ghana: The second objective was to determine the extent of the impact that social relationship at the workplace has on the psychological wellbeing of nurses and midwives. To test this hypothesis, linear regression analysis was conducted. As shown in tables 3 & 4, the regression analysis results indicated that Workplace social relationships explained 26.1% significant psychological wellbeing variances (R2 = .261, F(1, 285) = 100.473, p = .000). Further, it was noted that workplace social relationship is a significant predictor of psychological wellbeing among nurses and midwives of Catholic Health Service in the Western Region ( $\beta$  = .511, p < 0.05). The results indicate that social interaction and experiences among health professionals (nurses and midwives) at the workplace significantly determine their psychological wellbeing. It could be asserted that a favorable positive relationship at the workplace will promote better psychological wellbeing, while toxic social relations will breed negative psychological wellbeing.

# DISCUSSION

## **Objective 1**

Influence of occupational stress on the psychological wellbeing of Nurses and midwives in the catholic health service of the Western Region of Ghana: The study's objective was to determine the influence of occupational stress on the psychological wellbeing of nurses and midwives in the Catholic Health Service of the Western Region of Ghana. The study results indicated that occupational stress had a significant negative impact on the psychological wellbeing

Table 1: Regression analysis for occupational stress and psychological wellbeing

Variables	df	Sum of Squares	Mean square	F	Sig.	R	R²
Regression	1	10406.735	10406.735	62.895	.000	.462	.181
Residual	285	46991.184	165.462				
Total	286	57397.920					

Source: Field Survey (2021) Significant p < 0.05

Table 2: Coefficient results of influence of occupational stress on psychological wellbeing.

Model	Standardized Coefficients	Unstandardized Coefficients		t	Sig.
	Beta	В	Std. Err		
(Constant)		49.385	4.823	10.239	.000
Occupational Stress	.426	.664	.084	7.931	.000
Source: Field Survey (2021)					

Dependent variable = Psychological Wellbeing

Table 3: Regression analysis for workplace social relationship and psychological wellbeing

A	Variables	df	Sum of Squares	Mean Square	F	Sig.	R	R²
H	Regression	1	14999.633	14999.633	100.473	.000	.511	.261
	Residual	285	42398.287	149.290				
	Total	286	57397.920					

Source: Field Survey (2021) Significant p < 0.05

Table 4: coefficient results of influence of workplace social relationship on psychological wellbeing.

ר	Model	Standardized Coefficients	Unstandardized Coefficients		t	Sig.
a(s):		Beta	В	Std. Err		
t Are	(Constant)		42.981	4.466	9.624	.000
pjec	Workplace Social Relationship	.511	1.273	.127	10.024	.000

Source: Field Survey (2021)

Dependent variable = Psychological Wellbeing

of nurses and midwives in the Catholic Health Service of the Western Region of Ghana. This means that occupational stress was a significant predictor of psychological wellbeing among the nurses and midwives. The result of the study confirms the study by [24] that job stress had a direct negative effect on mental wellbeing among workers in Europe. The study also agrees with [25] that occupational stress has a toll on the overall wellbeing of employees. That occupational stress has a significant negative impact on the psychological wellbeing of nurses and midwives is supported by the work of [26] that occupational stress can have dire consequences for organizational growth and the psychological wellbeing of employees; Stress causes a lot of psychological trauma, such as anger, anxiety, depression, nervousness, irritability, aggressiveness, and a decline in workers self-worth, hatred to supervision, lack of concentration, difficulties in decisionmaking and job dissatisfaction. Also agree that occupational stress is a significant risk factor for mental health among the occupational population [27]. Agree that excessive occupational stress has been considered "toxic" parts of the job environment and is often associated with psychological and physical health. Empirical studies demonstrated that occupational stress is a significant predictor of anxiety [28-31].

They recognized that occupational stress is a meaningful cause for mental health worldwide. Furthermore, occupational stress inversely correlates with psychological wellbeing and is positively associated with depressive symptoms. These confirm the findings of this research study and give it credence.

#### **Objective 2**

Influence of social relationships at the workplace on the psychological wellbeing of Nurses and midwives in the catholic health service of the Western Region of Ghana: The second objective sought to determine the extent of the impact that social relationship at the workplace has on the psychological wellbeing of nurses and midwives in the Catholic Health Service of the Western Region of Ghana. The study results indicated that workplace social relationships are a significant predictor of psychological wellbeing levels among nurses and midwives of Catholic Health Service in the Western Region. The study thus showed that social interaction and experiences among health professionals (nurses and midwives) at the workplace are a significant determinant of their psychological wellbeing. Therefore, a favourable positive relationship at the workplace will promote better psychological wellbeing, while toxic social relations will breed negative psychological wellbeing. The results of the study that positive workplace relationship is a significant predictor of psychological wellbeing among nurses and midwives are corroborated by the research findings that endorsed the essential role of positive working relationship on nurses' job performance, nurses and patients' satisfaction, employee retention, and organizational commitment. This also affirms the study of that proved the importance of quality social relationships and their role in shaping the job satisfaction level of employees. The result of the study is also consistent with the findings from the study of that affirmed that high-quality workplace relationships have a positive impact on factors such as occupational stress among nurses. For, their findings were consistent with other research works, which have long proven that quality social relationships have a positive impact on the overall wellbeing of employees, and that is also consistent with the results of this study. The study by [31] that the presence of a social support group within the nursing profession provides nurses with the needed support confirms the result of this study. Also agrees that Positive social interaction leads to effectiveness, cooperation, improves organizational learning, and ensure employee loyalty. High-quality social connections are noted to empower employees to give their all for the success of an organization. These are consistent with the assertion that a healthy positive relationship is one of the five pillars of an individual's wellbeing.



# CONCLUSION

This study investigated occupational stress, social relationships at the workplace and psychological wellbeing of nurses and midwives in the Catholic Health Service of the Western Region of Ghana. The study's results indicated that occupational stress predicted psychological wellbeing among nurses and midwives in the Catholic Health Service of the Western Region of Ghana. The study further revealed that social interaction and experiences among health professionals (nurses and midwives) at the workplace significantly determine their psychological wellbeing. It was recommended that counseling psychologists be employed in all health facilities to take care of the psychological needs of health workers, most especially nurses and midwives. Nurses and midwives should also be trained in proper ways of dealing with occupational stress.

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#### References

- Murtaza M, Illzam EM, Muniandy RK, Hashmi MI, Sharifa AM, Nang MK. Causes and Prevention of Occupational Stress. J Dent Med Sci. 2015;14:98-104. https://tinyurl. com/yckpx5f4
- Wang Z, Liu H, Yu H, Wu Y, Chang S, Wang L. Associations between occupational stress, burnout and well-being among manufacturing workers: mediating roles of psychological capital and self-esteem. BMC Psychiatry. 2017 Nov 15;17(1):364. doi: 10.1186/s12888-017-1533-6. PMID: 29141601; PMCID: PMC5688661.
- International Labor Organization. Workplace Stress: A Collective Challenge; International Labor Office: Genève, Switzerland. 2016. https://tinyurl.com/2ba4uu28
- Mark G, Smith AP. Effects of occupational stress, job characteristics, coping, and attributional style on the mental health and job satisfaction of university employees. Anxiety Stress Coping. 2012 Jan;25(1):63-78. doi: 10.1080/10615806.2010.548088. Epub 2011 May 24. PMID: 21271408.
- DiGiacomo M, Adamson B. Coping with stress in the workplace: Implications for new health professionals. J Allied Health. 2001 Summer;30(2):106-111. PMID: 11398226.
- Mensah J, Amponsah K. Mitigating occupational stress: The role of psychological capital. 2016. https://tinyurl.com/tspbr9yx
- Suleman Q, Hussain I, Shehzad S, Syed MA, Raja SA. Relationship between perceived occupational stress and psychological well-being among secondary school heads in Khyber Pakhtunkhwa, Pakistan. PloS one. 2018;13(12):e0208143. https://tinyurl. com/2/8867swr
- Banerjee P. Relationship between perceived psychological stress and depression: Testing moderating effect of dispositional optimism. Journal of Workplace Behavioural Health. 2012;27:32–46. https://tinyurl.com/3rpzweva
- Chipeta E, Bradley S, Manda W, McAuliffe E. Working relationships between obstetric care staff and their managers: a critical incident analysis. BMC health services research. 2016;16(1):441. https://tinyurl.com/2zrcj8dz

- Nakao M. Work-related stress and psychosomatic medicine. Biopsychosoc Med. 2010
   May 26;4(1):4. doi: 10.1186/1751-0759-4-4. PMID: 20504368; PMCID: PMC2882896.
- Hellenbuyck M. Positive Relationships in the Workplace. Mental Health America. 2021. https://tinvurl.com/mv9t28ci
- Adams A, Bond S. Hospital nurses' job satisfaction, individual and organizational characteristics. J Adv Nurs. 2000 Sep;32(3):536-543. doi: 10.1046/j.1365-2648.2000.01513.x. PMID: 11012794.
- Force MV. The relationship between effective nurse managers and nursing retention. J Nurs Adm. 2005 Jul-Aug;35(7-8):336-341. PMID: 16077275.
- Seligman ME. Flourish: A visionary new understanding of happiness and well-being. New Y0rk, NY: Atria Paperback. 2012. https://tinyurl.com/2c96k76x
- Morry MM, Reich T, Kito M. How do I see you relative to myself? Relationship quality as a predictor of self- and partner-enhancement within cross-sex friendships, dating relationships, and marriages. J Soc Psychol. 2010 Jul-Aug;150(4):369-392. doi: 10.1080/00224540903365471. PMID: 20718222.
- Farooqi SR. The construct of relationship quality. Journal of Relationships Research. 2014;5(2):1–11. https://tinyurl.com/mryv8mn4
- Umberson D, Montez JK. Social relationships and health: A flashpoint for health policy.
   J Health Soc Behav. 2010;51 Suppl(Suppl):S54-66. doi: 10.1177/0022146510383501.
   PMID: 20943583; PMCID: PMC3150158.
- Lincoln KD. Social support, negative social interactions, and psychological well-being.
   Soc Serv Rev. 2000 Jun 1;74(2):231-252. doi: 10.1086/514478. PMID: 26594064;
   PMCID: PMC4651456.
- Coghlan D, Brydon M. Quantitative methods. In the sage encyclopedia of action research. 2014. https://tinyurl.com/2p98hj42
- Creswell JW. Educational research: Planning, conducting and evaluating quantitative and qualitative research. 4th edition. Pearson: London. 2012. https://tinyurl.com/ mvw37exf
- Gill J, Johnson P, Clark M. Research methods for mManagers. Sage Publications. 2010. https://tinyurl.com/2p89ysz9
- Mensah A. Job stress and mental well-being among working men and women in Europe: The mediating role of social support. Int J Environ Res Public Health. 2021 Mar 3;18(5):2494. doi: 10.3390/ijerph18052494. PMID: 33802439; PMCID: PMC7967617.
- Theme Filha MM, Costa MA, Guilam MC. Occupational stress and self-rated health among nurses. Rev Lat Am Enfermagem. 2013 Mar-Apr;21(2):475-483. doi: 10.1590/ s0104-11692013000200002. PMID: 23797539.
- Mark G, Smith AP. Occupational stress, job characteristics, coping, and the mental health of nurses. Br J Health Psychol. 2012 Sep;17(3):505-521. doi: 10.1111/j.2044-8287.2011.02051.x. Epub 2011 Sep 14. PMID: 22107162.
- Murtaza M, Illzam EM, Muniandy RK, Hashmi MI, Sharifa AM, Nang MK. Causes and prevention of occupational stress. J Dent Med Sci. 2015;14:98–104. https://tinyurl. com/4m6xfmad
- DiGiacomo, M. and Adamson, B.J. (2001). Coping with stress in the workplace: Implications for new health professionals. Journal of Allied Health 30(2):106-111.
- Tumen S, Zeydanli T. Social interactions in job satisfaction. International Journal of Manpower. 2016; 37(3):426-455. https://tinyurl.com/3wsmxure
- Tran KT, Nguyen PV, Dang TTU, Ton TNB. The impacts of the high-quality workplace relationships on job performance: A perspective on staff nurses in vietnam. Behav Sci (Basel). 2018 Nov 23;8(12):109. doi: 10.3390/bs8120109. PMID: 30477199; PMCID: PMC6316783.
- Mahmoudi F, Hosseini SM, Joonbakhsh F, Ajoodanian N. Effects of social support on nursing and midwifery. Journal of Critical Reviews. 2020;7(12):1065-1070. https:// tinyurl.com/km6yjkka
- Rosales RM. Energizing social interactions at work: An exploration of relationships
  that generate employee and organizational thriving. Master of Applied Positive
  Psychology (Mapp) Capstone Projects. 2015. https://tinyurl.com/ycy5kryw
- 31. Seligman M. Flourish: A visionary new understanding of happiness and well-being. Free Press. 2011. https://tinyurl.com/yebcrztv

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