

## **Coping Strategies Adopted by Nurses and Midwives to Mitigate the Impact of Occupational Stress in the Catholic Health Service of the Western Region of Ghana**

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### **Abstract**

*This study investigated the type of coping strategies nurses and midwives in the Catholic Health Service of the Western Region of Ghana adopted to mitigate the effects of occupational stress. The study also looked at the association between occupational stress and coping strategies among nurses and midwives. A quantitative research approach was adopted for the study. Specifically, the study adopted a descriptive cross-sectional survey. A sample size of 300 was used for the study. A questionnaire based on the Coping Strategies Inventory developed by Tobin, Holroyd, Reynolds, and Wigal was adopted. The short form of the inventory was used. For statistical purposes, One-Sample Kolmogorov-Smirnov test, mean and standard deviation, and Pearson Moment Correlation Coefficients were employed to analyze the data gathered. The results of the study revealed that nurses and midwives in the Catholic Health Service of the Western Region adopted both emotion-focused and problem-focused coping strategies but predominantly problem-focused coping strategies to mitigate the effects of occupational stress. The study's results also revealed that occupational stress has a weak positive significant relationship with coping strategies between nurses and midwives in the Catholic Health Service of the Western Region of Ghana. The study recommended that nurses and midwives be trained on the appropriate types of coping strategies to deal with occupational stress. It was also recommended that nurses and midwives be trained on stress management strategies.*

**Keywords:** *Coping Strategies, Occupational Stress, Stress.*

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### **Introduction**

Stress is a multidimensional concept and occurs when our physical and psychological strength cannot handle environmental threats [1]. A Study defined stress as the “*rubric for the causes (demands or stressors), consequences (distress and eustress), and modifiers of the psychophysiological phenomenon known as the stress response*” [2]. According to [3], stress refers to “*the bodily processes that result from circumstances that place physical or psychological demands on an individual*”. In its basic terms, stress refers to the body’s reaction to change that needs response. In the face of any adjustment, the body reacts with emotional, physical, and mental responses. A Study [4]

established that stress might be divided into positive (good stress or eustress) and negative stress (distress). While eustress aid in higher performance of activity, distress decreases the motivation to engage in quality work and is associated with health problems [5]. A Study [6] opines that the modern corporate environment has become so competitive that employees are experiencing several forms of stress at the workplace. The uncontrollable demands and pressure at the workplace, coupled with other factors, create stress for employees. Occupational stress received much importance to the extent that the United Nations declared it as the disease of the 20<sup>th</sup> Century, and the World Health Organization declared it as a global epidemic [7].

The interaction between a worker and the environment in which they work leads to stress. In the performance of their duties at the workplace, several factors such as gender, location, environment, among others, contribute largely to stress. In general, a mismatch between perceived employee effort and reward and the loss of control with job demands leads to stress. It is imperative to stress that stress is a state and not an illness. Exposure to several work demands can contribute to occupational stress, which may toll the employee's health [8]. [9] asserted that working conditions, workload, position in the workplace, extended working hours, financial factors, and sexual harassment are some of the causes of stress at the workplace.

Nurses and midwives face many stressors in discharging their duties. These stressors have catastrophic effects on their health and general wellbeing. In the face of occupational stress, nurses and midwives need coping mechanisms to deal with the effects of stress. [10] defined coping as the cognitive and problem-solving behaviours individuals adopt to tolerate, minimize, or eliminate stress. Coping is a complex interaction between behaviours and thoughts. Coping permits individuals to regulate their actions to a stressful event. The modes through which an individual copes with a stressor have a bearing on the impact outcome. Coping deals with the efforts and does not apply to the quality of the coping outcome.

It can be avoided Successfully, control or prevent individual distress, or it can also be ineffective. Individuals develop varied ways of coping with a stressful situation, and these differences can be linked to situational demands, personality, and available resources. Coping resources are those reserves an individual possess to manage a stressful situation [11]. When coping resources equal the stress event at hand, there will be a successful control outcome no matter the type of the resources. However, if the stressor at hand exceeds the available resources available to the individual, stress will manifest [12].

## **Research Objectives**

This study has two main objectives. The first objective was to look at the coping strategies nurses and midwives in the Catholic Health Service in the Western Region of Ghana adopted to mitigate the effects of occupational stress. The second objective was to look at the relationship between occupational stress and coping strategies among nurses and midwives in the Catholic Health Service in the Western Region of Ghana.

## **Methodology**

### **Study Area**

The study was conducted in four selected hospitals in the Catholic Health Service of the Western Region of Ghana. The selected hospitals were Father Thomas Alan Rooney Memorial Hospitals in the Amenfi West Municipal Assembly, St. Martin de Porres Hospital in the Ellembelle District, Holy Child Catholic Hospital in the Sekondi-Takoradi Metropolitan Assembly, and Jubilee Catholic Children Hospital in the Ahanta West Municipal Assembly.

### **Study Design**

The study objectives demanded the use of the quantitative research approach. The quantitative methodology is the dominant research framework in the social sciences. It refers to strategies, techniques, and assumptions used to study psychological, social, and economic processes by exploring numeric patterns [13].

Specifically, the study employed a descriptive cross-sectional study design. This was 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 [14]. These made the use of cross-sectional study design appropriate.

### **Population**

The population of the study included nurses and midwives from the four selected Catholic

health facilities in the Western Region, Ghana. Data from the facilities indicated a total of 501 nurses and midwives (398 nurses, 79% and 103 midwives, 21%) were available for the study. Nurses and midwives in the Catholic Health Service who were of sound mind and consented to be part of the study were included in the study.

### **Sample and Sampling Procedure**

The sample size for the study was 300. The sample size estimate table [15] was used to determine the total sample size. This sample size estimate table assumes a confidence level of 95%, 55 margins of error, and a population variance of 50%. For these sample formulas, given a population of 500, a sample of no fewer than 217 was used for the study. However, to increase generalizability and reduce statistical errors, a sample of 300 was used. The calculation of the representation of health professionals in each health facility was thus calculated based on the 300 samples. The multistage sampling process, which includes purposive sampling and stratified sampling, was used to select the sample for the study. First, purposive sampling, which is a non-probability sampling technique, was used to determine which healthcare facilities to include in the study. A stratified sample was used to select nurses and midwives for the study to divide nurses and midwives into two (2) strata. A simple random sampling method was then used to select samples from nurses and midwives to give members of each shift an equal chance to participate in the study.

### **Data Collection Instrument**

In gathering information from participants, a questionnaire based on the *Coping Strategies Inventory* developed by [16] was adopted. The short form of the inventory was used.

### **Ethical Consideration**

Permission to carry out the study was sought from the Diocesan Directorate of Health of the Catholic Diocese of Sekondi-Takoradi. The directorate ensured the study was harmless to participants. Information on the form for seeking

permission included the topic of the study, its significance, and the relevance of participants' involvement. Informed consent was sought from participants. With this, a discussion was held with participants to explain the purpose of the study to them. All personally identifying information of participants such as names, addresses, e-mail addresses, phone numbers, and other data were not collected. Indexes and numbers were assigned to the responded questionnaire during data entry. This was to ensure the anonymity of the participants.

### **Statistical Analysis**

300 participants were sampled for this study. However, a total of 280 responses were received, constituting a response rate of 93.4%. The data was entered and analyzed with SPSS version 23 and Microsoft Excel 2016 after the data was checked for correctness and completeness. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to present the socio-demographic information of the study participants. For statistical purposes, the One-Sample Kolmogorov-Smirnov test, mean and standard deviation, and Pearson Moment Correlation Coefficients were employed to analyze the data gathered.

## **Analysis of Results**

### **Objective 1**

#### **Type of Coping Strategies adopted by Nurses and Midwives to Mitigate the Effects of Occupational Stress in the Catholic Health Service of the Western Region of Ghana**

The first objective sought to determine the type of coping strategies adopted by nurses and midwives in the Catholic Health Service of the Western Region to mitigate the effects of occupational stress. First, the one-sample Kolmogorov-Smirnov test was conducted to estimate if the items of coping strategies are normally distributed. The result indicated that the items are normally distributed. The result is presented in Table 7.

**Table 1.** One Sample t Kolmogorov-Smirnov Test (n = 287)

Items		
Normal Parameters <sup>a, b</sup>	Mean	51.92
	SD	7.408
Most Extreme Differences	Absolute	.090
	Positive	.090
	Negative	-.079
Test Statistic	-	090
Asymp. Sig. (2 - Tailed)	-	.000
a. Test distribution id normal		
b. Calculated from data		

**Table 2.** Means and Standard Deviation for Coping Strategies of Nurses and Midwives (n=287)

Items	M	SD
Problem-Focused Engagement	13.02	2.58
Problem-Focused Disengagement	14.18	2.61
Emotional-Focused Engagement	12.71	2.71
Emotional-Focused Disengagement	12.02	2.34
<b>Total Problem-Focused</b>	<b>27.72</b>	<b>4.36</b>
<b>Total Emotional-Focused</b>	<b>24.73</b>	<b>4.19</b>

Source: Field Survey, (2021)

According to the analysis results in Table 2, participants significantly used all four coping strategies compared with the hypothesized value. This is evident because the means of the sub-scales are significantly above the hypothesized value (12.0). Comparing the means of the subscales indicated that the leading coping strategy used by nurses and midwives is the Problem-Focused Disengagement (M = 14.18, SD = 2.61), followed by Problem-Focused Engagement (m = 13.02, SD = 2.58). According to the analysis, the least used coping method is Emotional-Focused disengagement.

Further, the results showed that usually nurses and midwives adopted Problem-Focused coping (M = 27.72, SD = 4.36), then Emotional-Focused Coping (M = 24.73, SD = 4.19). This is

because the mean score of Problem-Focused Coping is significantly greater than Emotional-Focused Coping.

## Objective 2

### Relationship between Occupational Stress and Coping Strategies of Nurses and Midwives in the Catholic Health Service of the Western Region of Ghana

This hypothesis tested the association between occupational stress and coping strategies adopted by nurses and midwives. To test this hypothesis, the Pearson Moment Correlation Coefficients was run. The result of the analysis is presented in Table 15.

**Table 3.** Pearson Correlation among Occupational Stress and Coping Strategies

No.	Variables	1	2
1.	Occupational Stress	-	.176**
2.	Coping Strategies	-	-

\*\*Correlation is significant at the 0.01 level (2-tailed)

From Table 3, the results revealed that occupational stress has a weak positive significant relationship with coping strategies. The results imply that a significant increase in occupational stress is linked with the adoption of various coping responses. In contrast, lower work-related stress experiences are associated with less adoption of coping strategies. In other words, nurses and midwives are likely to adopt several coping strategies in the face of heightened stress levels. However, lesser stress experiences among these health professionals are related to the use of few coping methods.

## **Discussions**

### **Objective 1**

#### **Type of Coping Strategies adopted by Nurses and Midwives to Mitigate the Effects of Occupational Stress in the Catholic Health Service of the Western Region of Ghana**

The study's findings showed that regarding coping strategies to reduce occupational stress, nurses and midwives employed all four coping strategies – Problem-Focused Engagement, Problem-Focused Disengagement, Emotional-Focused Engagement, and Emotional-Focused Disengagement- in varying degrees. The study showed that the highest coping strategy employed by nurses and midwives was Problem-Focused Disengagement. The second highest strategy used was Problem-Focused Engagement. The least coping strategy employed by the nurses and midwives was Emotional-Focused Disengagement. The study revealed that nurses and midwives adopted the Problem-Focused coping strategy more than the Emotional-Focused coping strategy.

The results of the study that nurses and midwives in the Catholic Health Service of the Western Region predominantly adopted Problem-Focused coping strategy contradicts the study by [17] that most of the nurses in the study they conducted preferred emotional-focused coping strategies to Problem-focused approaches in coping with occupational stressors

at the hospital. The result also contradicts the work of [18], who also concluded that in dealing with occupational stressors, identifying the source of stress, and avoiding unnecessary stress, adjusting to standards and attitudes, engaging in hobbies, and expressing their feelings instead of bottling them up were some of the coping's strategies adopted by these nurses in coping with the occupational stressors and these are all emotional-focused. The results of the study that with regards to coping strategies to mitigate the effects of occupational stress, nurses and midwives employed all four coping strategies – Problem-Focused Engagement, Problem-Focused Disengagement, Emotional-Focused Engagement, and Emotional-Focused Disengagement- in varying degrees, confirmed by [19] that in dealing with an occupational stressor, midwives adopted acceptance, active coping and instrumental support which are both problem-focused and emotion-focused strategies as espoused by the Transactional Theory of Stress and Coping by [10].

A study by [20] also reveals that midwives adopted preventive monitoring of the situation, situational control of conditions, self-controlling, seeking help, avoidance, escape, and spiritual coping as coping strategies adopted by midwives in dealing with occupational stress. These strategies are both problem-focused and emotional-focused, confirming the study results from those nurses and midwives adopted all four coping strategies in varying degrees. This also supports the work of [21] that nurses adopted self-control, work management, cognitive, emotional, and spiritual coping strategies as primary forms of coping strategies, which also indicate a combination of problem-focused and emotional-focused strategies but in varying degrees. This study, therefore, agrees that nurses and midwives in the Catholic Health Service of the Western of Ghana adopted both problem-focused and emotional-focused coping strategies but predominantly employed problem-focused coping strategies in mitigating the effects of occupational stress.

## **Objective 2**

### **Relationship between Occupational Stress and Coping Strategies of Nurses and Midwives in the Catholic Health Service of the Western Region of Ghana**

The second objective was meant to test the association between occupational stress and coping strategies adopted by nurses and midwives in the Catholic Health Service of the Western Region of Ghana. The results of the study revealed that occupational stress has a weak positive significant relationship with coping strategies. This indicates that nurses and midwives are likely to adopt several coping strategies in the face of heightened stress levels. This revealed that a significant increase in occupational stress is linked with the adoption of various coping responses. In contrast, a lower experience of work-related stress is associated with less adoption of coping strategies. There is thus a somewhat positive relationship between coping strategies and occupational stress among nurses and midwives in the Catholic Health Service of the Western Region of Ghana.

The result of the study affirms the assertion of [22] that individuals develop varied ways of coping with a stressful situation, and these differences can be linked to situational demands, personality, and the resources available. This is true in light of [23] assertion that coping is an integral part of humans' survival and shows the degree to which individuals handle misfortunes in life. The findings are consistent with the Transactional Theory of Stress and Coping that stress occurs when an individual is faced with environmental demands. It also suggests that the individual's ability to cope with these demands largely rests on their cognitive appraisal [24]. The result of the study is also consistent with the findings of [25], which revealed that when coping resources adequately equal the stress event at hand, no matter the type of the resources, there will be a successful control outcome. This also ties in nicely with [26] findings that if the stressor at hand exceeds the

available resources available to the individual, stress will manifest. Stress, therefore, occurs when the interaction between an individual and the environment threatens the individuals' coping resources and burdens their physical and psychological wellbeing.

## **Conclusion**

This study investigated coping strategies adopted by nurses and midwives in the Catholic Health Service in the Western Region of Ghana to mitigate the effects of occupational stress. The study also looked at the association between occupational stress and coping strategies among nurses and midwives. The study found out that the nurses and midwives in the Catholic Health Service of the Western Region of Ghana adopted both emotional-focused and problem-focused coping strategies, but they predominantly adopted problem-focused coping strategies to mitigate the effects of occupational stress. On the relationship between occupational stress and coping strategies, the study's result indicated that occupational stress has a weak positive significant relationship with coping strategies. This means that nursing and midwives are more likely to adopt more coping strategies in the face of occupational stress. The study recommended that nurses and midwives be trained on the appropriate types of coping strategies to deal with occupational stress. It was also recommended that nurses and midwives be trained on stress management strategies.

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## **Conflict of Interest**

The researcher declares there is no conflict of interest in carrying out this study.

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