

Original Article

A Qualitative Study on the Causes and Effects of Occupational Stress: The Case of Nurses at the Trauma and Specialist Hospital, Winneba-Central Region

Juliet Sam-Wiah¹, Papa Dampitse Johnson², Prince Laryea³

¹SDA College of Education, Agona –Ashanti

²Methodist High School, Saltpond

³Komenda College of Education, Komenda

Received: 16 January 2022

Revised: 17 February 2022

Accepted: 27 February 2022

Published: 28 February 2022

Abstract - This study set out to explore the causes and effects of occupational stress among nurses at the Trauma and Specialist Hospital in Winneba, Ghana. The study was qualitative in nature, adopting a phenomenological study approach. Thirteen nurses (general, community, enrolled, health assistants, midwives and a psychiatry nurse) were sampled through stratified and convenience techniques. An interview guide was employed to collect qualitative data. The qualitative data was thematically analyzed. The findings are presented in the succeeding section. The results revealed that the nurses identified various factors that caused stress within the hospital setting. Five key themes emerged from the fieldwork. These occupational stressors were shift work, work overload, inadequate staff, experiences of "death and dying", and shortage of equipment. Nurses at the Trauma and Specialist Hospital in Winneba, Ghana, were also found to be experiencing some significant consequences, not only on their health and well-being but also on their working relationships at the hospital. The nurses had headaches and body aches as the physical effects; behavioural responses included being pettish and aggressive and expressing outbursts towards patients, especially uncooperative and difficult ones. Conclusively, nurses at the Trauma and Specialist hospital faced several occupational stressors, including shift work, work overload, lack of staff and lack of equipment. However, loss of concentration, feelings of frustration and de-motivation were commonly reported among the nurses. Therefore, the study recommends that hospital management should explore the possibility of recruiting more nurses to revamp the provision of nursing care at the hospital.

Keywords - Occupational Stress, Nurses, Trauma and Specialist Hospital.

1. Introduction

Stress is the body's way of rising to a challenge and preparing to meet a tough situation with focus, strength, stamina and heightened alertness [10]. Feelings of pressure at the workplace are commonly referred to as occupational stress. [30] Occupational stress is "the harmful physical and emotional responses that occur when the job requirements do not match the capabilities, resources, or needs of the worker." Occupational stress can be defined as a situation wherein job-related factors interact with an employee, changing his/her psychological and physiological condition so that the person is forced to deviate from normal functioning [34]. Occupational stress occurs when job requirements mismatch workers' capabilities, resources, or needs.

Stress and its antecedent issues are smart of utmost bad faith. The effects of stress are numerous and, in many cases, devastating [23]. Nursing is perceived as a strenuous job with high and complicated demands. The high job demands and the combination of too much responsibility and too little

authority has been identified as some of the primary sources of occupational stress among nursing staff [26].

The issue of burnout and stress among nurses is familiar. Nursing is inevitably a stressful profession [20]. High levels of burnout and stress among nurses are reported in Europe, Asia and North America [32]. The emotional state of nurses is a key factor in determining the quality of care provided. Emotional exhaustion, cynicism, and depersonalization associated with burnout and stress affect patient safety and job performance, as evidenced by a study carried out among 263 nurses working in Taiwan.

According to [14], Ghana is one of the sub-Saharan African countries making considerable progress in many health outcome indicators. In total, an estimated 68% of the health workforce work in urban areas, where more than 50% of the Ghanaian population lives and 32% in rural areas [15]. Despite these estimates of staffing in the Ghana health sector, the workload of health workers still seems to be an issue in proper and effective healthcare delivery to patients [15].



Ghanaian nurses regularly confront emotionally charged situations and encounter intense interpersonal and inter-professional situations and conflicts in the workplace while trying to make appropriate and safe decisions for their patients [27].

1.1. Causes of Occupational Stress among Nurses

Several stressors have been identified among nurses. However, these stressors vary between countries due to the different operating systems within the healthcare systems. In line with this, several studies have been conducted to investigate the causes of occupational stress among nurses. The sources of stress experienced by nurses may differ from country to country and from each individual or group of nurses, depending on the specific complex interaction between their personality, values, skills, and circumstances [19].

[2], investigated occupational stress and its management among nurses at St. Dominic hospital in Akwatia, Ghana. A purposive sampling technique and a self-administered questionnaire were used to select 73 nurses from the nursing and midwifery departments in the hospital. Descriptive and inferential statistics were used to analyze the data. The study found that the major causes of stress identified by the nurses were inadequate motivation (98.6%), inadequate staffing levels (91.8%), handling a large number of patients alone (83.6%), lack of breaks during shifts (82.2%) and nursing difficult patients (71.3%). This study indicated that occupational stress is present among nurses because of the hectic daily activities they undergo (Adzapkah et al., 2016). They avowed that there is a need to recruit more nursing staff to augment the current number to help reduce workload and the number of working hours of nurses.

Also, [11] carried out a descriptive study to assess the causes of stress among nurses in the Greater Accra Region of Ghana. She employed a descriptive survey design, and 369 nurses working in government facilities within the Greater Accra Region were sampled. The major factor contributing to workplace stress among the nurses in the study was the number of hours spent at work ($M=3.890$, $SD= 1.158$). This was then followed by financial difficulties ($M=3.863$, $SD=1.184$). The study revealed that the third source of workplace stress among nurses was the death of patients ($M=3.855$, $SD=1.202$). However, the least source of workplace stress among the nurses in the study was a lack of control over their work ($M=2.965$, $SD=1.271$). From the above, it can be noted that nurses experience a variety of occupational stressors.

[36] carried out an empirical analysis on the determinants of workplace stress among healthcare professionals at the Komfo Anokye Teaching Hospital in Ghana. An examination of the relationships between 6 main organizational factors (demand, control, support,

relationships, change, and role conditions) and the stress level among healthcare professionals was conducted in a teaching hospital. A total of 453 healthcare professionals at the Komfo Anokye Teaching Hospital participated in the study. [36] found that all 6 elements (thus demand factors, control factors, support factors, relationships factors, change factors and role factors) that were assessed had a significant impact on the stress levels of employees. According to them, most of the employees believed that stress is caused by the load of work they handle each day, the pattern of work and its design, as well as the work environment. This seems to suggest how work factors can negatively disturb nurses who help secure patients' well-being.

1.2. Effects of Occupational Stress on Nurses

In recent years, nursing studies have found that the causes and consequences of occupational stress phenomenon are the results of an imbalance between the individual and the work environment. Nursing is extremely stressful, and high levels of occupational stress are believed to affect nurses and organizations [4] negatively. Jex and Beehr's theory includes three types of individual consequences: psychological, physical, and behavioural (Glazer & Gyurak as cited in [4]). Physiological can include elevated cortisol levels, increased heart rate, blood pressure, cardiovascular symptoms, and back pain; psychological can include depression, anxiety, and burnout; and behavioural can include workplace violence and reduced mortality [18]. Chronic health problems such as cardiovascular disease, musculoskeletal disorders, physical injuries and cancers have also been associated with occupational stress [5]. Mental illness and serious health-compromising behaviours such as the increased risk for suicide, substance abuse (such as smoking and alcohol consumption), poor diet, and lack of exercise was also associated with occupational stress [1; 31].

[4] conducted a qualitative study that aimed to identify the main sources and effects of occupational stress among medical and surgical ward nurses in Saudi Arabian public hospitals. The study involved semi-structured interviews with a sample of ($N = 15$) medical-surgical ward nurses from three Ministry of Health hospitals in Riyadh city, Saudi Arabia. From the findings, most nurses stated that occupational stress significantly negatively impacted their mental health (anxiety) and increased their intention to leave their job. The study revealed that in terms of anxiety, the number of interviewees ($n=11$) specified that the stress sources they suffered directly impacted their feeling of anxiety. A large proportion of them ($n=10$) seriously considered leaving the job. In a study of burnout among nurses in Germany, the nurses who experienced effort-reward imbalance reported higher levels on two of the three core dimensions of burnout [7]. They found that the nurses who identified a negative imbalance between efforts spent on their job and the reward they felt from the job reported feeling more emotionally drained than those who did not.

The feelings of personal accomplishment were lowest among nurses who had a mismatch between demands and rewards and who had a high intrinsic effort in their jobs.

Emotional exhaustion and burnout have been recognized as occupational hazards for people-oriented professions such as nursing. [9], examined demanding work schedules and mental health in nursing assistants working in nursing homes and reported that working two or more double shifts per month was associated with an increased risk for all negative mental health indicators. Furthermore, working 6-7 days per week was associated with depression and somatization. Inconsistent with a study of stress, coping and managerial support and work demand among nurses, consistent relationships between work stress and depression, anxiety and job satisfaction were identified [8]. Occupational stress negatively affects individuals' health and well-being. Individual effort-reward imbalance has been associated with burnout resulting from prolonged intense stress.

At Trauma and Specialist Hospital, Winneba, where the researcher conducted the study, one major problem facing the hospital is the lack of human resources. It was reported that the human resource was inadequate to provide the health care needed, resulting in poor hospital attendance [17]. The report suggests that the hospital, built specially to cater for Abidjan Togo International Highways and emergency cases that may be referred to the hospital, is battling with less than 200 nurses, which is woefully inadequate for its clients. Hence, the stress and heavy workload on nurses affect the quality of care provided [16]. It could be argued that the increased pressure and stress being placed on nurses at the hospital further contributes to their state of vulnerability. Such repeated exposure is significant, as it has the potential to disturb, alter or harm the emotional health and well-being of the nurses and hence impede personal and professional growth.

Despite the fact that there are apparent indications of occupational stress among nurses at the hospital, these indications are not well defined by evidence. Based on this, the study aimed to explore the causes and effects of occupational stress among nurses at Trauma and Specialist Hospital in Winneba. The study sought to answer the following questions:

1. What causes occupational stress among nurses at Trauma and Specialist Hospital in Winneba?
2. How does occupational stress affect Trauma and Specialist Hospital nurses in Winneba?

2. Methods and Material

A descriptive phenomenological method of inquiry was employed for this study. According to [13], a descriptive phenomenological method focuses on describing and

interpreting human experience credibly and insightfully. The use of phenomenology in this study was a significant step in contributing qualitative data to increase the body of knowledge on occupational stress since most of the research conducted in Ghana on stress regarding nurses was quantitative in nature.

The population for the study, which comprises general, community, midwives, enrolled health assistants and psychiatric nurses, is estimated at 150, and a sample of 13 nurses was used. This number consisted of three (3) general nurses, three (3) community nurses, two (2) midwives, two (2) enrolled, two (2) health assistants and one psychiatric nurse. The sample was deemed appropriate because [25] explains that a study aiming at exploring a phenomenon is best achieved using a sample size of 5-20 participants. Stratified and convenience sampling techniques were utilized.

The study adopted a researcher-developed semi-structured interview guide because the researcher was informed by the interpretive paradigm, which argues that knowledge is created through the interaction between the researcher and the participants.

The findings were presented in themes to discuss occupational stress's meaning, causes, and effects on the participants. Finally, validation of the findings was sought from the research participants to compare the researcher's descriptive results with their experiences.

3. Results and Discussions

The themes of meaning that emerged were as follows:

Theme No. 1: Causes of Occupational Stress among Nurses

The participants expressed the causes of occupational stress at the Trauma and Specialist hospital in the Effutu municipality. Four (4) subthemes emerged out of this theme.

3.1. Shift Work

Nurses at Trauma and Specialist Hospital in Winneba, Ghana, are exposed to varied occupational stressors. An interview with one of the participants revealed that shift work is one of the causes of occupational stress among the nurses at the hospital. This is evident in the following excerpt:

"Coming for the Afternoon shift, closing at 8:00 pm and coming back to work at 7:30 am for the morning shift. It is very stressful and very tiresome". (N -12)

Similarly, another participant stated:

"...just imagine you will have to come in the evening and work throughout the night, and sometimes, due to work, you

have to wait and leave for the house at 9:00 am or even some time at 10:am. You would be so exhausted by that time". (N-7)

Another participant also remarked:

"...I do not leave work when I finish my shift. I have to sometimes stay behind, run some errands before I go back home. It is hectic. All these make the work more stressful". (N-3)

One of the participants also commented:

"I feel more pressured and tired when I come for the afternoon shift and have to come for the morning shift the next day..." (N-6)

In conclusion, it was revealed that shift work was one of the major causes of occupational stress for the nurses working at the Trauma and Specialist hospital in the Effutu municipality. The nurses had irregular shift patterns and long working hours. Other sources of occupational stress include working long hours [36]. According to [35], there is growing evidence of the effects of long and non-standard working hours on a variety of health outcomes, including occupational stress. Studies identified that working long hours leads to exhaustion and fatigue, which have an adverse impact not only on the health and well-being of nurses but also on the care and safety of patients. [21], affirmed that the majority of the nurses who work long-hour shifts experience more stress. The shift work, having to work afternoon shifts and then return the next day for a morning shift.

3.2. Work Overload

Specifically, most of the nurses identified work overload as one of the major causes of occupational stress. The participants' responses revealed that the nurses always had too many tasks to perform. One participant recounted in the following excerpt:

"...when there is too much load due to the nature of work, most of the time the work to be done is too heavy that you cannot help yourself out. This actually makes me too stressful, I mean very, very stressful.." (N-1)

This was reiterated by the majority of the nurses who described similar situations.

"what I even find more stressful at work is attending to the patient more than usually a number of times. The work is too much for one person. Attending to one patient is not even an easy task". (N-13)

Again, the participant stated that:

"the work is just too loaded, one person attending to several patients, it is just unbearable and very stressful. You just become too exhausted and tired that you cannot just help yourself out" (N-13)

Similarly, another participant said:

"The work alone is too much and very demanding. Especially when there are many patients to be taken care of by one or two nurses. We have to do all the work on the ward. It is not easy. It is too much work for one person" (N-8)

This finding is consistent with that of [33], who conducted a cross-sectional study using questionnaires to assess the coping strategies of 87 UK ICU nurses. The most frequently reported job stressor as measured by NSS was Workload. Similarly, [12] conducted a cross-sectional design study to examine the relationship between psychosocial job stressors and burnout in emergency departments in 3 hospitals in Spain.

3.3. Inadequate Staff

The participants recounted the ways by which inadequate staff contributes to their occupational stress. These are illustrated by some comments made:

"...when demand is too high especially, less staff on duty. For example, two (2) staff managing twenty (20) patients, especially at accidents and emergencies. Or two nurses are checking vitals at the outpatient department of over fifty (50) clients. This causes a lot of emotional discomfort. In fact, making us feel so weak that...." (N-10)

One of the participants also stated:

"I find it more stressful when the number of patients on the wards exceeds that of nurses. In some cases, one nurse is to seven patients. In a case like this, how can u effectively focus? Ehh! (N-9)

One of the participants narrated:

"...to the extent that I feel pressured when there are enough tasks to perform, I mean a lot of work to be done, but there is an inadequate staff. ".(N-4)

Another also commented:

"...you feel very stressed and tired. Pains all over. When there is a lot to do, and staff are inadequate. Too demanding." (N-5).

Consistent with this finding, [24] conducted the first major study to include the largest nursing workforce in a

general hospital in Nigeria using the MBI and the GHQ 12 tools. A major source of occupational stress identified was the inadequate staff-to-patient ratio. Similarly, a study conducted by [6] used a self-administered questionnaire with 273 nurses from different federal and state hospital wards and reported poor staffing levels and role conflict, among others, as sources of stress. Hart and Warren (2015) interviewed nurses and found a clear connection between staff shortages and work intensification.

3.4. Inadequate Resources

It was revealed that inadequate resources were one of the occupational stressors they encountered. This is illustrated by the following comments made by the participants:

"...the equipment we use is not adequate....it is not sufficient at all us to work with. Our work tools are not enough. It is not enough at all, at all..." (N-2).

Another participant confirmed:

"... another instance that changed my attitude and put me off is working with improvised instruments..." "it places a lot of demands on you at work. It is really stressful when it comes to using improvised instruments just because there is a shortage" (N-4)

One of the participants during the interview revealed that:

"... what is even more stressful and competing is when there are no logistics to work with. It is just not helpful. You would feel so stranded as to what to do. You there have to improvise since there is no equipment to aid you in carrying out your work successfully. In fact, it is so stressful. Most of the instruments are not functioning well because they are not in good shape" (N-1)

The nurses identified a lack of resources as a major source of occupational stress. Likewise, [19] conducted a cross-cultural study among nurses from five different countries: Hungary, Israel, Italy, the U.K. and the USA. The findings from this study revealed that lack of resources is a major cause of stress among nurses in the five countries. Similar findings were reported by [28]. It is argued that the issue of lack of resources included the limited availability of equipment and the lack of precautions to minimize staff's exposure to infections or diseases while caring for patients [22].

Theme No. 2: Effects of Occupational Stress

The study's objective was to explore how occupational stress affects trauma and specialist hospital nurses in Winneba, Ghana. Three (3) subthemes were found within the data.

3.4.1. Emotional and Psychological Effects

The nurses often felt overwhelmed by their lack of control over their work, which contributed to the different emotional reactions they experienced at work. This is evident in the following excerpt:

"especially when I see a patient dying, I just cannot bear it. It really hurts my feelings and mood. I become too down and worried. When this happens, my mood towards work changes. And these feelings can continue throughout the whole and even the next day. Sometimes, even throughout the whole week. Sometimes you even become afraid when attending to the next patient because the previous thought would be running through your mind. It is just worrisome." (N-4)

Another participant noted:

"...the thought that set in of coming to work again, that kind of thought affects my emotions. Because you begin to imagine the kind of stress you are going to put yourself in. The workload alone." (N-1).

Another said:

"The situation of one nurse attending to more than six patients alone. You become very worried when you come to work and experience such a situation". (N-13).

Other contributing factors included inadequate equipment and work overload. For instance, a participant remarked:

"There are times that I will be so frustrated, especially when you are not getting the right instruments to work with. You would be left with using an improvised one." (N-10).

Another also said:

".....and I become really frustrated because of the work. How? one person, I will be attending to an excessive number of patients. Sometimes I lose concentration which affects my work" (N-5)

Some of the nurses also made some carve remarks. This is captured in the comment below:

"I feel less motivated to do anything again.... because I am too tired. I feel so out of energy, exhausted and downcast. The nature of my shift renders me unable to concentrate on my work adequately. I am not able to rest well, and in the morning, I have to come to work." (N-8).

This was consistent with [4], who found that occupational stress significantly negatively impacted their mental health (anxiety) and increased their intention to leave

their job. [9], examined demanding work schedules and mental health in nursing assistants working in nursing homes and reported that working two or more double shifts per month was associated with an increased risk for all negative mental health indicators.

3.4.2. Behavioural Effect

The impact of occupational stress was not limited to the physical and psychological aspects of the nurses' lives but also included behavioural reactions, especially to patients. The nurses described their unfriendly behaviours of feeling cranky when stressed at work. For instance, a participant reported:

"...especially when very tired and the demands are overwhelming, at a point in time, you find it difficult to get enough time for patients who are uncooperative during nursing interventions. In such a case, you either attend to them late or hand them over." (N-11).

Another also remarked:

"....and I become so stressed that communication between myself and the patients even is affected. You do not engage with the patients much, just yes or No ...no further questions, and this does not allow. The patients to freely express themselves." (N-7).

These findings were consistent with [4]. The majority of these behaviours were due to the nurse's inability to cope adequately with work pressures, including heavy workload. Various studies have described several behavioural consequences due to exposure to occupational stress among health professionals [18] and [3]. It was also suggested that these behaviours were adopted as a result of their occupational stress.

3.4.3. Physical Effects

Body aches and pains were sometimes exacerbated due to work overload as a result of prolonged standing and constant exposure to occupational stressors, including inadequate staff and shift work within the hospital. A participant said:

"...standing and working too much, sometimes your (nurse's) body will just be weak, you cannot do Anything." (N-12).

Another remarked:

"I cannot sleep too well because I am too tired, and after coming home late, I have to wake up too and come to work early the next morning due to my shift." (N-13).

Similarly, one of the participants reported:

"....it is all my body that will be aching. I will be having serious body pain. You know, attending to more patients at a time is too much walking through the whole place (hospital), under my feet will be aching me seriously everything will be aching." (N-10).

One of them noted:

"When the stress is so much on some days that all my body will be aching with a serious headache too..." (N-2).

Another also said:

"....and most of the time I have a headache, my forehead will be aching almost every day with this work, the head will be as if it wants to drop".(N-9)

Additionally, another remarked:

"I had little rest yesterday, and I am back to work again as I am talking to you. My whole body is aching. So it is not as if it is from one pain to another. If my head starts to ache me like this,...the stress from this work affects every area of my body".(N-4).

The findings within this study confirmed that the ways nurses physically reacted to occupational stress were largely consistent with previous research. The physical outcomes of occupational stress ranged from several symptoms. Several studies have highlighted the physical effects of stress on healthcare workers, especially nurses [6]; [29]. Nurses within this study reported high rates of headaches, body aches and pains, and insomnia. Consistent with this present study, [29] identified several physical illnesses associated with stress, including migraines and back and joint pain.

4. Conclusion

The study concluded that nurses at the Trauma and Specialist hospital faced several occupational stressors, including shift work, work overload, lack of staff and lack of equipment. The study also concluded that the impact of occupational stress was not limited to the physical and psychological aspects of the nurses' lives but also included behavioural reactions, especially to patients. Most nurses described common behavioural reactions towards patients in the hospital setting. A common behavioural reaction among the nurses was a tendency to be pettish (unfriendly) towards patients, especially when attending to uncooperative patients at the hospital. When nurses can manage their occupational stress effectively, it ensures the stability of the workforce and quality productivity. Nurses' emotions are contagious, and stress impacts the quality of their interactions and relationship with others. The more nurses can manage their own stress, the better they will positively affect those around them, and the less others' stress will negatively affect them.

5. Recommendations

The following recommendations based on the findings from this study are made for consideration:

1. It was evident that shift work, work overload as a result of a shortage of nurses and lack of working equipment caused occupational stress among nurses at the Trauma and Specialist Hospital in Winneba. Therefore, the study recommends that hospital management should explore the possibility of recruiting more nurses to revamp the provision of nursing care at the hospital.
2. Finally, the tutorial session organized by the hospital management for nurses should involve more sessions

with guidance programs by professional counsellors and stress specialists on increasing awareness among nurses of sources and potential effects of stress on their health and well-being.

Acknowledgements

Our gratitude goes to all the Trauma hospital nurses, Winneba, who avail themselves of the study to share experiences. Additionally, our heartfelt gratitude to the hospital management for the opportunity to carry out the study. We cannot be grateful without acknowledging the researchers' institutions for the continuous motivation to publish and the chance to undertake this project.

References

- [1] Dr Jhilla Adeb-Saeedi, "Stress amongst Emergency Nurses," *Australian Emergency Nursing Journal*, vol. 5, no. 2, pp. 19-24, 2002. *Crossref*, [https://doi.org/10.1016/S1328-2743\(02\)80015-3](https://doi.org/10.1016/S1328-2743(02)80015-3)
- [2] Adzakpah Godwin, Laar Alexander Suuk, and Fiadjoe Harrison Selorm, "Occupational Stress and its Management Among Nurse at St. Dominic Hospital, Akwatia, Ghana," *Health Science Journal*, vol. 10, no. 6, p. 467, 2016.
- [3] Linda H Aiken et al., "Hospital Nurse Staffing and Patient Mortality, Nurse Burnout, and Job Dissatisfaction," *JAMA*, vol. 288, no. 16, 1987- 1993, 2002. *Crossref*, <https://doi.org/10.1001/jama.288.16.1987>
- [4] Qamra Alomani, "Causes and Effects of Occupational Stress in Nursing," *17th LASTEM International Conference*, Istanbul, Turkey, 2016.
- [5] Steve L. Alves, "A Study of Occupational Stress, Scope of Practice, and Collaboration in Nurse Anesthetists Practicing in Anesthesia Care Team Settings," *American Association of Nurse Anesthetists Journal*, vol. 73, no. 6, pp. 443-452, 2005.
- [6] E. E Anyebe et al., "An Assessment of Stress amongst Nurses in Zaria Metropolis, Northwest Nigeria," *West African Journal of Nursing*, vol. 25, no. 1, pp. 53-70, 2014.
- [7] A B Bakker et al., "Effort– Reward Imbalance and Burnout among Nurses," *Journal of Advanced Nursing*, vol. 31, no. 4, pp. 884-891, 2000. *Crossref*, <https://doi.org/10.1046/j.1365-2648.2000.01361.x>
- [8] Paul Bennett et al., "Stress in Nurses: Coping, Managerial Support and work Demand," *Stress & Health: Journal of the International Society for the Investigation of Stress*, vol. 17, no. 1, pp. 55-63, 2001. *Crossref*, [https://doi.org/10.1002/1532-2998\(200101\)17:1<55::AID-SMI879>3.0.CO;2-2](https://doi.org/10.1002/1532-2998(200101)17:1<55::AID-SMI879>3.0.CO;2-2)
- [9] Hilary Brown, Fred Zijlstra, and Evanthia Lyons, "The Psychological Effects of Organizational Restructuring on Nurses," *Journal of Advanced Nursing*, vol. 53, no. 3, pp. 344-357, 2006. *Crossref*, <https://doi.org/10.1111/j.1365-2648.2006.03723.x>
- [10] D'Arcy, L. Stress, 2007. [Online]. Available: <http://www.kidshealth.org>
- [11] Abena Kyreah Dapaah, "Causes of Stress Among Nurses in the Greater Accra Region," *International Journal of Research in Social Sciences*, vol. 3, no. 8, pp. 74-81, 2014.
- [12] Mariano García-Izquierdo, and María Isabel Ríos-Rísquez, "The Relationship between Psychosocial Job Stress and Burnout in Emergency Department: An Exploratory Study," *Nursing Outlook*, vol. 60, no. 5, pp. 322-329, 2012. *Crossref*, <https://doi.org/10.1016/j.outlook.2012.02.002>
- [13] Gerrish, K., and Lacey, A., *The Research Process in Nursing*, 6th Edition, Chichester: Wiley Blackwell, 2010.
- [14] Ghana Health Service, Annual Report, Ministry of Health, Ghana Health Service, Accra, 2011.
- [15] Ghana Health Workers Observatory, Human Resources for Health Country, 2011.
- [16] Ghana News Agency, Government to Employ 27,000 Health Professionals, 2018. [Online]. Available: <http://www.ghananewsagency.org/health/government-to-employ-27-000health-professionals-in2018-d-g-130558>.
- [17] Ghana Web, Winneba Trauma/Specialist Hospital Underutilized, 2013. [Online]. Available: <https://www.ghanaweb.com/GhanaHomePage/health/artikel.php?ID=292699>
- [18] Sharon Glazer, and Terry A. Beehr, "Consistency of Implications of Three Role Stressors Across four Countries," *Journal of Organizational Behavior*, vol. 26, no. 467-487, 2005.
- [19] Sharon Glazer, and Anett Gyurak, "Sources of Occupational Stress among Nurses in Five Countries," *International Journal of Intercultural Relations*, vol. 32, no. 1, pp. 49-66, 2008. *Crossref*, <https://doi.org/10.1016/j.ijintrel.2007.10.003>
- [20] P. L Grubb, and J. W Grosch, Alleviating Job Stress in Nurses: Approaches to Reducing Job Stress in Nurses, 2012. [Online]. Available: <http://www.cdc.gov/niosh/nioshtic-2/20042107.html>

- [21] Amy J Hoffman, and Linda D Scott, "Role Stress and Career Satisfaction among Registered Nurses by Work Shift Patterns," *Journal of Nursing Administration*, vol. 33, no. 6, pp. 337-342, 2003.
- [22] C Jones, "Stress and Coping Strategies in Renal Staff," *Nursing Times*, vol. 110, no. 10, pp. 22-25, 2014.
- [23] Kyreaa D. A., "Causes of Stress among Nurses in the Greater Accra Region," *International Journal Research Social Science*, vol. 3, no. 8, pp. 74-81, 2014.
- [24] Victor Olufolahan Lasebikan, and Modupe Olusola Oyetunde, "Burnout among Nurses in a Nigerian General Hospital: Prevalence and Associated Factors," *International Scholarly Research Network*, pp. 1-6, 2012. *Crossref*, <https://doi.org/10.5402/2012/402157>
- [25] Kirsti Malterud, Volkert Dirk Siersma, and Ann Dorrit Guassora, "Sample Size in Qualitative Interview Studies: Guided by Information Power," *Qualitative Health Research*, vol. 26, no. 3, pp. 1753-1760, 2016. *Crossref*, <https://doi.org/10.1177/10497323155617444>
- [26] G Mark, and A P Smith, "Occupational Stress, Job Characteristics, Coping, and the Mental Health of Nurses," *British Journal of Health Psychology*, vol. 17, no. 3, pp. 505-521, 2012. *Crossref*, <https://doi.org/10.1111/j.2044-8287.2011.02051.x>
- [27] B McGowan, "Self-Reported Stress and Its Effects on Nurses," *Nursing Standard*, vol. 15, no. 42, pp. 33-38, 2001. *Crossref*, <https://doi.org/10.7748/ns2001.07.15.42.33.c3050>
- [28] Ali Mohammad Mosadeghrad, "Occupational Stress and Turnover Intention: Implications for Nursing Management," *International Journal of Health Policy and Management*, vol. 1, no. 2, pp. 169-176, 2013. *Crossref*, <https://doi.org/10.15171/ijhpm.2013.30>
- [29] Eleni Moustaka, and Theodoros C Constantinidis, "Sources and Effects of Work-Related Stress in Nursing," *Health Science Journal*, vol. 4, no. 4, pp. 210-216, 2010.
- [30] NIOSH, Exposure to Stress: Occupational Hazards in Hospitals. Cincinnati OH: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS, 2008.
- [31] Nina Ogińska-Bulik, "Occupational Stress and its Consequences in Healthcare Professionals: The Role of Type D Personality," *International Journal of Occupational Medicine & Environmental Health*, vol. 19, no. 2, pp.113-122, 2006. *Crossref*, <https://doi.org/10.2478/v10001-006-0016-7>
- [32] Lusine Poghosyan et al., "Nurse Burnout and Quality of Care: Cross-National Investigation in Six Countries," *National Institutes of Health*, vol. 33, no. 4, pp. 288-298, 2010. *Crossref*, <https://doi.org/10.1002/nur.20383>
- [33] Anna Regan, Ruth A Howard, and Jan R Oyeboade, "Emotional Exhaustion and Defence Mechanisms in Intensive Therapy Unit Nurses," *The Journal of Nervous and Mental Disease*, vol. 197, no. 5, pp. 330-336, 2009. *Crossref*, <https://doi.org/10.1097/NMD.0b013e3181a20807>
- [34] Katherine M Richardson, and Hannah R Rothstein, "Effects of Occupational Stress Management Intervention Programs: A Meta-Analysis," *Journal of Occupational Health Psychology*, vol. 13, no. 1, pp. 69-93, 2008. *Crossref*, <https://doi.org/10.1037/1076-8998.13.1.69>
- [35] Nizar B. Said, Filipe Nave, and Filomena Matos, "The Quality of Working Life among Nurses in Pediatric Setting," *Social and Behaviour Sciences, Future Academy*, pp. 5-14, 2015. *Crossref*, <https://doi.org/10.15405/epsbs.2015.01.3>
- [36] Mary Ann Yeboah et al., "Determinants of Workplace Stress among Healthcare Professionals in Ghana: An Empirical Analysis," *International Journal of Business and Social Science*, vol. 5, no. 4, pp. 140-151, 2014.