

The Impact of Stress on the Quality of Work of Nurses (SQWN)

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ABSTRACT

The research examined how continuing medical education affects healthcare workers' job performance. Nurses' perspectives on continuing formal education were investigated using a quantitative method, and the influence of work and continuing medical education on job performance experienced by (health professionals) practicing nurses. The study also explored how the transactional stress model negatively impacts health professionals who combine work and schooling without official approval. The findings indicate that health professionals who continue education without approval are less likely to improvise available logistics than their colleagues who continue medical education with approval.

Keywords: Job performance, nurses, quality work, stress.

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I. INTRODUCTION

The impact of continuing medical education on job performance among health professionals is the subject of this study, which explains how health professionals pursuing continuing education without study leave or official approval from their employers can deal with psychological challenges and issues. Creating a healthy work environment for health professionals and academic pursuits is a top concern for retaining a sufficient nursing workforce and ensuring patient care quality and safety.

According to Learning (2008), continuing medical education (CME) for health professionals is critical for the overall health of all Americans. Given the rapid expansion in health information and technology, physicians, nurses, and other health professionals must continue to enhance their knowledge and skills throughout their careers to deliver safe, effective, and high-quality health care for their patients. On the other hand, continuing medical education in the health professions is in shambles (Learning, 2008). Professional and lay reports have found multiple issues in the last decade. In its current form, CME does not sufficiently focus on enhancing physician performance and patient health. There is far too much focus on lectures and far too little on assisting health professionals in improving their competence and performance in their everyday practice. Josiah Macy, Jr. is a character in the film *Josiah Macy, Jr.* According to Learning (2008), high-quality scientific research is scarce on CE. As a result, the ability of health professionals to make autonomous decisions about how to best care for patients is jeopardized. Bias has become woven into the fundamental fabric of

continuing medical education, whether by appearance or reality.

Also, Olson and Tooman (2012) were of the view that formal, didactic CME can play an essential role in bringing about transformation in clinical practice, though not as the dominant CME modality, but rather as an element in a strategic program of action, "in which a portfolio of methods and activities is deployed, each designed to serve specific purposes as part of a larger plan for improving clinical practice, patient outcomes, and population health".

Makoul and Clayman (2006) concluded that good patient-physician communication is linked to greater adherence to treatment regimens, better decision-making, fewer malpractice claims, and enhanced satisfaction with the patient-physician relationship. Furthermore, Zachariae *et al.* (2003) found that "higher patient-physician relationship inventory (PPRI) scores of physician attentiveness and empathy were associated with greater patient satisfaction, increased self-efficacy, and reduced emotional distress following the consultation" (Zachariae *et al.*, 2003, p. 658).

Thistlethwaite and Spencer (2008) also realized that effective patient care was the essence of the work in this view and how professionalism was perceived. Competency was defined as having the knowledge, skills, and ability to perform the job, adhering to procedures and protocols, prioritizing the patient's needs, and maintaining high standards of care at all times. Awareness of constraints, knowledge, and abilities and responding appropriately were all connected to good practice.

A. Problem Statement

One professional who needs to enhance their performance through continuous education is the health professional. CME would provide health professionals with skills in their everyday operations, and it would be necessary for them to participate in CME to be effective. However, many of them experience stress, which is the focus of this study, and it is necessary to investigate.

In addition, every health professional, including the nurse, is expected to engage in continuing medical education. However, hospitals have fewer resources to sponsor these nurses (Rosseter, 2014). Therefore, these nurses need CME to be promoted and have increased remuneration. Due to the desire to be promoted and have increased remuneration, nurses would engage in CME even without official approval or study leave (Adjei & Kagbetor, 2019).

Health professionals are under pressure to have continuing medical education. Moreover, as they pursue continuing medical education, other factors, including stress, impact their performance. As a result, this study aims to investigate the impact of stress on the performance of nurses enrolled in continuing medical education programmes with or without official approval (Adjei & Kagbetor, 2019).

Aiken *et al.* (2005) discovered that hospitals with more significant numbers of nurses trained at the bachelor level or higher had reduced surgical patient death rates. The researchers analyzed hospitals with varying nurse experiences and educational backgrounds and discovered a link between nursing education and patient outcomes. The research was done after the nurses had finished their continuing medical education. However, it is vital to investigate whether nurses enrolled in continuing medical education but not on official approval are evaluated on their job performance and are more likely to have comparable, similar outcomes.

Continuing education for professionals, particularly nurses, provides information that can help with healthcare delivery by providing small, convenient, current, and cheap seminars on various healthcare issues (Weerakoon & Fernando, 1991). Whether seasoned or fresh graduates, nurses must participate in continuing education programmes to realize their full potential. Professionals in the healthcare field require ongoing education to develop new skills and improve old ones (Weerakoon & Fernando, 1991).

In other fields, studies have looked into the influence of education on job performance. However, none have looked into the impact of continuing medical education on nurses who are not on study leave. This study is crucial to conduct among nurses because health concerns are vital to the citizens of every nation and their governments, particularly in developing nations, so that no compromise can be made (Adjei & Kagbetor, 2019).

Also, because practising nurses are the largest group in the healthcare system, they were chosen for this study (Calder, 1986). What effect does their stress have on their work performance?

On the other hand, previous research looked at how well nurses performed after receiving CME and put it into practice on the job. However, they did not look at the performance of health professionals during their studies and how it influenced their performance (Adjei & Kagbetor, 2019).

As a result, the subject that has to be addressed is the effect of continuing medical education on job performance among these nurses and the link between the transactional theory of stress and health professionals who work and go to school without official clearance.

The void was created because the research is theoretical and a practical issue in developing countries like Ghana.

B. Objective

The aim is to examine the impact of stress-induced continuing medical education on the quality of work by health professionals with or without official approval.

C. Purpose

The study aims to explore the relationship between continuing medical education and the quality of work by nurses engaged in it.

Even though policies for continuing medical education seem to add more stress to those not officially approved and engaged in continuing medical education, the study's goal is to serve as a reference point for policymakers to formulate a critical policy to help strengthen continuing medical education. The research also looks at how the physiological effects of stress (cardiovascular illnesses) on nurses who participate in CME without formal authorization impact their performance.

II. LITERATURE REVIEW

A. Phenomenon of Stress

According to Aspinwall and Taylor (1992), while it was unavoidable for first-year students to avoid stress, their capacity to cope with the many pressures would contribute to their university performance. Folkman *et al.* (1986) define stress as a relationship between an individual and a circumstance beyond the individual's ability to control. However, how a person assesses a difficult situation determines whether it is stressful. As a result, people react differently to the same frightening experience depending on their assessment and personality type. As a result, more stressful events might be managed, especially if stressors are detected and avoided.

According to Folkman and Lazarus (1988), health and energy are among the most all-encompassing resources people utilize since they are relevant to coping with many, if not all, stressful situations. A sick or unwell person who is weak, worn out, or otherwise handicapped does not have more energy to cope than a fit and healthy person. Although there is a hint that people may cope remarkably well despite their diminished well-being and drained vitality, we are warned and reminded that managing coping efforts is much simpler when we are at our best.

Students must maintain a good attitude about their academics. According to research by Struthers *et al.* (2000), more students have bad experiences. They are distressed, but those who believe they can cope successfully feel motivated to achieve their goals. This is consistent with Lazarus and Folkman's (1984) findings that positive experiences, exemplified by positive feelings, help people cope more effectively by giving them the option to escape a stressful event in a short amount of time and also to experience

happiness, which helps to replenish exhausted resources and preserve coping mechanisms.

Furthermore, according to Newton *et al.* (2009b), healthcare contexts can be highly demanding even for the most experienced health professional. High workloads, low levels of control, high levels of role ambiguity and conflict, problematic working relationships, lack of supervisor and coworker support, poorly managed change, perceived organizational injustice, and low levels of recognition and reward are all too common and frequently reported themes in health service delivery environments. Many students' first contact with life-or-death decisions will likely occur in this setting.

According to Newton *et al.* (2009b), healthcare providers often have ambivalent reactions during their first encounter with professional culture experiencing both positive and negative aspects. In contrast to the more physical or cognitive positions those students have faced, clinical work is emotionally taxing. As a result, clinical education is stressful for students (Anthony & Yastik, 2011; Chapman, 2009; Lincoln *et al.*, 2004; Moscaritolo, 2009). The following is a list of frequent stressors mentioned by students and the impact of stress on the person and stress management methods in the placement setting.

III. METHODOLOGY

A. Design of the Survey

This section focuses on the study's research strategy, population sample, and instruments utilized. This researcher conducted a descriptive survey to gather information from a specific demographic in the field to complete a questionnaire.

B. Sample Size and Sampling Technique

A sample size of 8 nurse categories was chosen. The research was restricted to different types of practising nurses. These nurses were chosen because they are directly involved in health care delivery while pursuing continuing medical education, either with or without formal sanction. The Korle-Bu Teaching Hospital was chosen since it is Ghana's most important health centre. Korle-Bu also serves as a teaching and referral hospital. Furthermore, the facility is located in the metropolis of Accra, Ghana's capital city. The institution was an excellent choice for the study since it allowed practitioners from all backgrounds to participate. As a result, it was an excellent venue for debating various points of view.

These nurses were chosen at random from a variety of categories. A total of 400 participants took part in the survey. See Table I for the distribution of nurses selected across different categories.

C. An Instrument for Data Collection

The instrument for the data collection comprised a questionnaire for the various categories of nurses to establish the impact of CME on the performance of nurses engaged in CME, either officially approved or not officially approved. The writer developed the questionnaire in consultation with a measurement expert, and it considered the methodology of evaluating nurses in Ghana. The measurement expert approved this.

TABLE I: CATEGORIES OF PARTICIPANTS

Name of the Facility	Category of Nurses	Sample Size
Korle-Bu	Clinical Nurses	250
Korle-Bu	Mid-Wife	13
Korle-Bu	E&T	18
Korle-Bu	Anaesthesia	24
Korle-Bu	Ophthalmic Nurses	4
Korle-Bu	Paediatric	12
Korle-Bu	Public Health Nurses	11
Korle-Bu	State if not listed	65
Total		397

To ensure the instrument's validity, it was pre-tested using 30 practising nurses engaged in CME, either approved or not, at the clinical department of Korle-Bu Teaching Hospital. A pilot study was conducted to check the validity and reliability of the questionnaire. Based on the intensive literature search, a pool of 30 questions was constructed. After the pre-test questionnaire, participants were asked to mark the items they thought would measure identification. Based on those outcomes, a pool of 23 questions was remaining. The 23-item scale shows adequate internal reliability with Cronbach's coefficient alpha of 0.867. According to Pallant and Tennant (2007), for adequate internal reliability, Cronbach's coefficient alpha should be above 0.7. This helped determine the time frame used to respond to the instrument. Adjustments and corrections were made to suit respondents' understanding.

IV. RESULTS

The test of the effect of continuing education on improvised available Logistics was also determined. The model coefficients are presented in Table II.

Testing for the significance of the model predictors is a necessary step in using the prediction model. From Table 3, Wald tests the hypothesis, $H_0: \beta_1 = \beta_2 = \beta_3 = \dots = 0$. That is, the coefficient of predictor variables is non-significant. When $p\text{-value} < 0.05$, the null hypothesis is to be rejected, implying that the coefficients of x are non-zero; hence, predictors are established to be significant in predicting the occurrence of conflict.

The Wald test shows that the coefficient for continuing medical education without approval was non-zero (Wald = 8.200, $p = 0.004$); hence, it significantly affects the ability to improvise available Logistics. The model shows that the odds of being able to improvise available Logistics is negatively related to continuing medical education ($\beta_1 = -1.159$, $p < 0.05$). The finding suggests that health professionals who continue education without approval are less likely to improvise available logistics than their colleagues who continue medical education with approval.

The test of the effect of continuing education on relationships with clients was also determined. The model coefficients are presented in Table III. Testing for the significance of the model predictors is a necessary step in using the prediction model. From Table III, Wald tests the hypothesis, $H_0: \beta_1 = \beta_2 = \beta_3 = \dots = 0$. That is, the coefficient of predictor variables is non-significant. When $p < 0.05$, the null hypothesis is to be rejected, implying that the coefficients of x are non-zero; hence, predictors are

established to be significant in predicting the occurrence of conflict.

TABLE II: EFFECT OF CONTINUING EDUCATION ON IMPROVISED AVAILABLE LOGISTICS

Variable	B	Standard Error	Wald	df	Sig.	Exp(B)
Improvise available logistics (Q7)			20.541	2	<0.001	
Q7(1)	-1.159	0.405	8.200	1	0.004	0.314
Q7(2)	0.644	0.607	1.126	1	0.289	1.905
Constant	1.658	0.386	18.478	1	<0.001	5.250

TABLE III: LOGISTIC REGRESSION ANALYSIS OF CONTINUING MEDICAL EDUCATION WITHOUT APPROVAL

Variable	B	Standard Error	Wald	df	Sig.	Exp(B)
q7aa		0.403	5.643	1	0.018	0.384
Constant	1.658	0.386	18.478	1	<0.001	5.250

TABLE IV: LOGISTIC REGRESSION ANALYSIS OF HEALTH PROFESSIONALS CONTINUING EDUCATION AND WORK PERFORMANCE

Variable	B	Standard Error	Wald	df	Sig.	Exp(B)
Improvise available logistics (Q7)			19.253	2	<0.001	
Q7(1)	-0.634	0.311	4.154	1	0.042	0.530
Q7(2)	0.642	0.397	2.618	1	0.106	1.901
Constant	-0.160	0.284	0.319	1	0.572	0.852

The Wald test shows that the coefficient for continuing medical education without approval (Wald = 7.075, $p = 0.008$) and completed without approval (Wald = 29.949, $p < 0.001$) was non-zero; hence, they both had a significant effect on the ability to improvise available Logistics.

The test of the effect of continuing education on work under pressure was also determined. The model coefficients are presented in Table IV. Testing for the significance of the model predictors is a necessary step in using the prediction model. The Wald test the hypothesis, $H_0: \beta_1 = \beta_2 = \beta_3 = \dots = 0$. That is, the coefficient of predictor variables is non-significant. When $p < 0.05$, the null hypothesis is to be rejected, implying that the coefficients of x are non-zero; hence, predictors are established to be significant in predicting the occurrence of conflict.

Results from the Wald test reveal that the coefficient for continuing medical education without approval (Wald = 4.154, $p = 0.042$) was non-zero; hence, they both significantly affected the ability to improvise available Logistics.

The model shows that the odds of being able to relate better with patients are negatively related to continuing medical education ($\beta_1 = -0.634$). The result implies that health professionals who were continuing their education without approval are less likely to work under pressure than those who were continuing education with approval. The non-significant effect ($\beta_1 = 0.642$, $p = 0.106$) for those who had completed their education although without approval compared to those who were continuing their education with approval, suggests that there was not much difference between the two groups.

This implies that more health professionals who undergo continuing medical education will improve the quality of work. However, health professionals who undergo continuing medical education without official approval will not be able to improve the quality of work compared to those engaged in continuing medical education with official approval.

V. DISCUSSION

The findings of this research question indicate that those engaged in continuing medical education performed better on

the job under pressure than those engaged in continuing medical education without official approval.

Health professionals who undergo continuing medical education exhibit quality work in discharging their duties, and this study's findings support this assertion.

Thistlethwaite and Spencer (2008) have indicated that professional behaviours express professional attitudes – and significant work in medical professionalism. This could be seen through interaction with their patients.

Health professionals exhibit the quality of work by having good patient care and the competencies to be innovative at every given time when the need arises. This finding supports (Thistlethwaite & Spencer, 2008) the realization that effective patient care was, in this way, the essence of the work and, as a result, how professionalism was seen. Competency was defined as having the knowledge, skills, and ability to perform the job, adhering to procedures and protocols, prioritizing the patient's needs, and maintaining high standards of care at all times. Awareness of constraints, knowledge, and abilities and responding appropriately were all connected to good practice.

Furthermore, findings indicate that continuing medical education has increased their knowledge of health care delivery as a profession. All health professionals (100%) agreed that continuing medical education had improved the standard of health care. About the subsequent impact, item results indicate that a minority of participants (47.7%) also agreed that continuing medical education has helped them develop leadership skills. The finding means that 189 out of 397 participants believed that continuing education significantly impacted their leadership skills. This finding provides better evidence of the professionalism of the health professional engaged in continuing medical education, which is more likely to lead to quality work. In addition, this finding considers those engaged in continuing medical education without official approval and practising on the job.

The finding indicates that health professionals who continue education without approval are less likely to improvise available logistics than their colleagues who continue medical education with approval. This result could be because when there is an overload of work on the health

professional, it negatively affects him or her to work under pressure and, therefore, is more likely to precipitate stress.

These findings confirm that health professionals' job performance in continuing medical education without official approval is compromised due to stress.

VI. CONCLUSION

This study examined how continuing medical education affects health professionals' ability to work under pressure with or without official approval. The study indicated that health professionals engaged in CME without official approval could not work under pressure and improvise due to a lack of logistics. This happens while they are engaged in CME without official approval.

Therefore, there is a need for health facility managers to reduce external stressors in order to get the best out of health professionals engaged in CME, either officially approved or not officially approved.

VII. RECOMMENDATIONS

Managers of health facilities and health professionals take collaborative steps in developing and implementing medical and educational policies to guarantee some level of standardized quality continuing medical education. Also, policymakers should reduce external stressors for those engaged in CME without official approval to improve their performance. Continuing medical education inures to the benefit of all and improves health delivery.

CONFLICT OF INTEREST

The authors declare that they do not have any conflict of interest.

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APPENDIX

A. Research Instrument

Nurses who engage in Continuing Medical Education (CME) provide high-quality work. Continuing education is one of the most contemporary ways for maintaining and improving nurses' knowledge and professional abilities, which in turn improves society's health. Because numerous factors influence the job performance of nurses who engage in continuing education, it's critical to understand the impact of CME on work quality among nurses who work under pressure (practicing nurses).

Read each question carefully and select the right response that best expresses your viewpoint. Add a quick and concise answer if you need to give explanations or remarks. If you don't understand a question, you can either ignore it or ask for clarification.

RESPONDENT BIO DATA

1. Age (Select one option)

- a. [20-30]
- b. [30-40]
- c. [40-50]
- d. [50-60]

2. Qualification (State):

3. Type of Medical Institution (Select one option):

- a. [Private]
- b. [Public]

4. District (State):
.....
5.Department (state):
.....
6. Your specialty (Area of operation or current designation)
Choose one option:
a. Clinical nurses
b. Midwife
c. E & T. nurses
d. Nurses anaesthesia
e. Dental nurses
f. Psychiatric nurses
g. Ophthalmic nurses
h. Paediatric nurses
i. Public health nurse
State if not listed:

12 d) I was in school before taking up my current job
12 e) It is Personal
13. Is the current course of study related to the area of work? (Select One Option)
a. [Yes]
14. To what extent has continuing medical education affected your effectiveness? (Select multiple options)
14 a) It has improved the effectiveness of educating patients on their health issues
14 b) It has helped health personnel to provide quality health care

RESPONDENT DATA

	Strongly Agree	Agree	Disagree	Strongly Disagree
7. As a health professional which of the answers best describes you currently? (Select one option)				
7a) Working and continuing medical education				
7b) Completed a continuing medical education course/program				
8. As a health professional, do you have study leave facilities that support staff or workers who want to pursue further education to enhance their professional work?				
9. Did you apply for a study leave to further your education?				
10. If NO, why did you not apply for the study leave? (select multiple options)				
10 a) Because I was not due to apply for study leave				
10 b) The process takes a longer period				
10 c) Only few people qualify at a time				
10 d) You must serve a number of years to qualify for study leave				
11. Are you furthering your education with the consent of your employer? (Select one option)				
12. If NO, what is your reason? (Select Multiple Options)				
12 a) There would be no support from employer				
12 b) I need further knowledge to improve myself				
12 c) No reason				