



## Experiences of Nurses Managing Patients with Spinal Cord Injury at a Teaching Hospital in Ghana

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### Abstract

**Background:** Nurses encounter several challenges in managing patients with spinal cord injury. However, little is known about this area of nursing care in Ghana.

**Aim:** The purpose of this study was to explore the experiences of nurses managing patients with spinal cord injury at a Teaching Hospital in Ghana.

**Methods:** An exploratory descriptive qualitative design was employed for this study. A purposive sampling method was used to recruit sixteen (16) nurses who were eligible for the study. Respondents were interviewed face-to-face using a semi structured interview guide designed based on the research objectives and their accounts audio-taped and transcribed verbatim. Data were analyzed using thematic and content analysis.

**Findings:** The study revealed that the experiences of nurses' span from physical injury to body aches and pains, limited logistic, verbal abuse and emotional stress. Participants also lamented about not having a social life at all because they spend all their time caring for their patients at the ward and sometimes to the detriment of their family responsibilities. Again, the study revealed that nurses employ coping strategies such as obtaining patient and family cooperation, teamwork, and maintaining good health practices in adjusting to the stressors of the care.

**Conclusion:** The results of the study show that nurses encounter a lot of challenges in their line of duty, especially in caring for patients with spinal cord injuries. However, in spite of the negative experiences expressed by nurses, a number of them had deep and emotional attachment to their job and their patients and are not easily distracted by their bad experiences.

**Keywords:** Experiences; Nurses; Spinal cord injury; Nursing management; Workload

### Introduction

Spinal Cord Injury (SCI) is a traumatic event that results in disturbances to normal sensory, motor, or autonomic function and ultimately impacts a patient's physical, psychological, and social well-being [1]. The management of SCIs requires significant health care resources and can place a substantial financial burden on patients, their families, and health workers. The Psychosocial and economic impact of SCI on health care providers and on the system has become an increasingly important topic [2].

Modern researchers approximate that about 2.3 million workers die from work-related accidents and diseases and more than 474 million people suffer from occupational diseases and non-fatal accidents; with additional economic costs of more than USD 2.8 trillion [3]. Preliminary data suggest that nurses are exposed to work place violence [4], physical injury [5], emotional stress [6], and psychological depression [7], and social harassment [8]. In countries like Ethiopia, research suggest that nurses experienced conditions such as disability, chronic pain, and muscle tension, loss of sleep, frustration, and anxiety [9]. More specifically, research conducted by Nouetchognou et al., in Cameroon, indicate that nurses, especially those in charge of chronic health conditions are burdened with workload, tight schedule and psychological trauma [10].

Ghana has a low infrastructural growth rate and a moderately unstable political climate, coupled with an inactive inspectorate division, which leads to poor adherence to health and safety measures

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Received Date: 14 Dec 2022

Accepted Date: 06 Jan 2023

Published Date: 11 Jan 2023

#### Citation:

Aziato L, Achempim-Ansong G, Ampah BT. Experiences of Nurses Managing Patients with Spinal Cord Injury at a Teaching Hospital in Ghana. *Ann Nurs Primary Care*. 2023; 4(1): 1025.

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[11]. Meanwhile, other researchers have indicated that low adherence to safety practices within the health sector promotes vulnerability to different hazards that are capable of predisposing nurses to various forms of health problems [12]. Other surveys in Ghana suggest that several studies have revealed that the cause of stress and its occurrence is due to overwork [13]. For instance, nurses' work in Ghana includes frequent changing of position of immobilized or bedridden patients, which predisposes workers especially nurses to back injury [14]. However, extra duty, outrageous work load, verbal abuse from aggrieved patients, frustrations, dubious work relationships due to inadequate resources, poor salaries among others, expose Ghanaian nurses to psychological dangers such as stress, depression and burnout syndrome [15].

Managing patients with spinal cord injury is viewed to be exceptional because the occurrence of the traumatic event itself is unpredictable and the patients were not ready to face it [16]. Nurses often tend to develop an attachment to their patients and this awakens emotions of grief, helplessness and sadness when dealing with patients [17]. However, they hide these emotions in order to keep focus on their professionalism [18].

There is a deficit of knowledge on the challenges of nurses managing patients with SCI in Ghana. Furthermore, there is little or no published research on the experiences of nurses managing patients with spinal cord injury in Ghana. This study is part of a broader study which sought to explore the experiences of nurses managing patients with spinal cord injuries at a Teaching Hospital in Ghana.

## Materials and Methods

### Study design and setting

An exploratory descriptive qualitative design was utilized in conducting the study to ensure a deeper insight as well as gather comprehensive information from a small group of nurses, by way of understanding their personal experiences.

The study was conducted at the accident and emergency center and the neurological ward of the Korle-Bu Teaching Hospital, located in Accra-Ghana. These two centers mainly manage all neurological conditions including spinal cord injuries from most parts of the Country. The Korle-Bu Teaching Hospital is the main national referral center in Ghana. It serves as a referral center for most patients with spinal cord injuries in the country.

### Data collection tool

A semi-structured interview guide was used to conduct an in-depth interview to allow respondents to comfortably talk about their experiences. The interview guide for the study was pretested on two nurses at the Greater Accra Regional Hospital, Accra before the main study to ensure clarity and precision of the questions [19].

### Inclusion criteria

Experienced nurses who had managed patients with spinal cord injury at the Accident Centre and neurosurgical wards for at least five continuous years were included in the study. Sixteen (16) nurses who met the inclusion criteria were purposively sampled to participate in the study after data saturation has been obtained.

### Procedure

A semi-structured interview guide was used to conduct face to face and in-depth interviews to allow respondents to comfortably talk about their experiences.

Detailed information with regards to the purpose and objectives of the study as well as the potential benefits and risks of the study, information on confidentiality, privacy and voluntary participation were explained to participants.

Participants, who met the inclusion criteria and agreed to participate in the study, subsequently gave their written consent. Meeting schedules for the interviews were then arranged with them. Interviews took place at Accident and Emergency Center and the Neurological Ward and lasted for 40 min to 1 h.

### Analysis

The study employed the use of numbers from 1 to 16 to identify participants, and they were coded as RP1 to RP16. Each tape-recorded interview was transcribed verbatim and coded. Data analysis was done using thematic and content analysis and Miles and Huberman concept. Similar patterns of data were categorized and categories were coded using descriptive subheadings. Related categories were then clustered to form themes. Themes and categories were examined further for suitability and re-categorization based on the objectives of the study.

## Ethical Considerations

Ethical approval was sought from the Institutional Review Board of the Noguchi Memorial Institute for Medical Research (NMIMR-IRB CPN 044/17-18) and the Korle-Bu Teaching Hospital (KBTH-STC 00095/2017). The purpose, potential benefits and risks of the study were explained to participants. Participants who met the inclusion and exclusion criteria and also agreed to partake in the study were made to sign a consent form. Participants were informed that their refusal to participate or withdraw from the study was without any consequences. Anonymity was ensured by using identification codes. Confidentiality was also ensured at all stages of the study. Participants' audiotapes, field notes, consent forms and audit were kept in a security safe and locked with password known to researcher and supervisor only. Also, identifiable information was separated from transcripts and kept under lock and key.

## Findings

### Demographic data of participants

The study comprises two (2) pilot studies and key Informant Interviews of 16 respondents. Overall, 13 females and 3 male respondents were interviewed. Among those interviewed, the majority of them were degree holders with only 2 diploma holders. Only two respondents were not married and one (1) preferred to keep her marital status private. The highest number of years a nurse had worked at the hospital was 38 years and the minimum was five (5) years. Four (4) major themes and thirteen (13) sub-themes were identified following the data analysis. The main themes were physical experience, psychological experience, social experiences and coping strategies. Under the first major theme, physical experience, four (4) sub-themes emerged which are: Physical injury, body aches and pains, tiredness, workload and lack of logistics, again, under the second theme; psychological experiences, three (3) sub-themes also emerged and it includes: verbal abuse, feeling of empathy and/or sympathy and feeling of sadness. The third major theme had 3 sub-themes emerging namely; effect on social life, had two (2) neglect of family and friends and reduced religious activities. Lastly, the fourth major theme, coping strategies, had three sub-themes which includes: obtaining patient/family cooperation, teamwork and contribution

among nurses and maintaining good health practices.

### Physical experience

**Physical Injury:** We always have to be changing patients' position every two hours which is not easy some of the patients are like twice the size of the nurse." This leads to injuries to the back and the calf muscles (RP2).

"You can apply all the body mechanics you've been taught; the back pain will always be there because the injury has already occurred." (RP15).

**Aches and pains:** "We apply the principle of the body mechanics alright when lifting patients but we still feel the effect on our back and spine. You sometimes experience back and neck pain because you have to be changing positions regularly" (RP2).

"You are always standing to attend to patients because you have a lot of procedures to perform on one patient. This leads to back aches, calf pain, foot and knee pains to mention a few..." (RP4).

**Tiredness:** "Hmmm... the workload has really affected us we always battle with tiredness..., you get to the house, and you feel very tired, like you are so tired and exhausted. (RP5).

"So, turning patients becomes very tiring and stressful, it's not easy to do that, it really affects you....in fact, our work is very tiresome." (RP1).

**Heavy workload and lack of logistics:** "...on days that I go for afternoon shift I get home by 10:00 pm because my house is quite far from the hospital and, I have to come for morning shift the following day. If care is not taken, you become unproductive and cannot perform as expected or there is a slowdown of activities due to burn out as a result of heavy workload" (RP5).

"hmmm" ..... due to the shortage of staff, sometimes only two nurses will be on duty so we become overwhelmed with work.... I'll say that the shortage of staff is our number one problem" (RP11).

### Psychological experiences

**Verbal abuse/Harassment:** "Also, patients and their relatives start to displace their anger on nurses. Some of them become petty, most especially when consultants from neurosurgical department come to break the outcome of the disease condition to them" (RP 12).

"Sometimes if patients do not survive, the relatives feel that more could have been done to save patients and so they tend to blame nurses and the hospital for the loss of their loved ones...but entirely, nurses suffer the most insults as we are those who are usually with them" (RP 15).

**Feeling of empathy and/or sympathy:** ".....hmmm is very pathetic because at times you see some very young people, some of whom are even newly married who get into this condition. You tend to put yourself in their shoes, because is not easy to have a spinal cord injury...it's not an easy experience at all" (RP1).

"...For me, whenever patients get involved in accident and are brought to the unit, I always tell my colleagues that we are not far from it. I feel really sorry for these patients because anything at all can happen. Patient may become permanently disabled and may not be able to walk again." (RP2).

**Feeling of sadness:** "Hmm sometimes it gets to you. When you are taking the history and you get the story of how the injury

happened, you feel sad. You have siblings or relatives of the same age group so telling them they will not be able to walk again, is really a difficult task." (RP11).

"Clients expect that they are coming to the hospital to regain their mobility back thus to be able to walk again but they come and go back without having their expectations and they become sad." (RP14).

## Social Experiences

### Effect on Social Life

"You don't even have a social life. Your life is centered around caring for these patients with spinal cord injuries. Sometimes when you are even on leave or off duty, you can be called to come to work and assist with care due to inadequate staffs" (RP3).

"Caring for patients with spinal cord injury really affect our social live. You can't even go out or attend social functions because the work is very demanding. They always say I don't have a life because you barely see me at social functions." (RP8).

### Neglect of family and friends

"We even tend to neglect our families. Weekends you are on duty; holidays you are on duty. If you have family, your husband even knows that you can't go anywhere...let's say going for outing with the family because you have to be at work so now, we are used to it." (RP10).

"As for me, my husband too is a nurse anesthetist so for him, he knows the job already. But to friends and relatives they don't understand you if they don't see you at family and social gatherings." (RP5).

### Decreased religious activities

"Even on some Sunday, when you go to church and you are also for afternoon shift, you are unable to concentrate at church. When the pastor tries to delay small you start feeling uncomfortable because you might get late to work" (RP10).

"The work is very demanding... and this sometimes makes nurses complain about their social life being affected and we barely get time to attend church services, so it really affects social lives of most nurses especially your relationship with God" (RP8).

## Coping Strategies

### Involvement of patients and relatives in the care

"You need to tell especially the relatives what is going on, otherwise before you realize they have lifted the patient up and that may result in further complications of patient's condition. They need to understand the condition and the consequences of doing certain things." (RP1).

"There are days when I have to involve patients' relatives in turning the patient, due to shortage of nurses. So, I often invite patients' relatives to come and assist us. This also helps them to know what to do and how to care for the patients at home." (RP2).

### Team work and financial contribution among nurses

"Sometimes we the nurses have to do financial contributions for needy patients so me at times, I go to my head of department or the hospital administrator for assistance." (RP5).

"The social welfare department has been of great help. For instance, patients who can't afford, implants have had it done for free

for them through the social welfare” (RP15).

### Managing with limited logistics and staff

“...I have to do whatever I’m supposed to do even when there is inadequate or no logistics. For instance, there are no air conditioners and I tend to sweat a lot but I’m still determined to work. You see, so whatever it is, it is my duty to work and provide care...” (RP5).

“For instance, when there are a lot of spinal injury cases, and we become overwhelmed, we just move nurses from other less busy units to come and help in caring for the patients. Or sometimes if nurses are on leave and have not travelled, we invite and plead with them to come and help so they are given the days off later.” (RP 12).

### Maintaining good health practices

“...Unfortunately, about 40% of our cases are spinal injury cases and most of these patients have to be lifted since they can’t do so themselves but we are few and have a lot of work to do. So, for my health it has been tampered with and I’m battling with it so I always do series of tests” (RP6).

“The main problem is the back ache, but other things come into play; for instance, food is not eaten on time because you have a lot of work to do, and you may develop ulcer, hypertension, your cholesterol level is always high.” (RP 9).

## Discussion

The aim of this study was to explore the experiences of nurses managing patients with spinal cord injury. The findings suggest that nurses caring for patients with spinal injuries are often physically and verbally harassed by patients and their relatives. This is similar to studies conducted by [20] but disagrees with findings from studies conducted among a similar population in Germany where the relationship between patients, patients’ relatives and nurses was described as cordial and friendly [21]. Depending on the attitude of nurses and the orientation given to patients’ relatives, patients can become violent and most likely tend to harass nurses. Aside physical harassment, nurses interviewed in Portugal admit that they were sexually harassed by patients and their relations [22]. This is contrary to findings of the present study, as none of the participants reported sexual harassment as an experience. This may be attributed to the fact that in Ghana nurses on duty are paired and entry into wards is mostly not restricted, and this does not create any privacy between patients and nurses.

Participants also highlighted physical stress as a result of work load as another experience. Almost all participants expressed how stressful it is to care for patients with spinal cord injury. In similar studies conducted on job stress and motivation among nurses, physical stress was universally experienced by nurses working with patients with spinal cord injury [23]. In addition, job demand and workload were also expressed as physical experience of nurses. This is in agreement with a study conducted by which revealed that nurses expressed increased work load. Nurses in Ghana experience physical stress due to the fact that most health facilities are overwhelmed with patients.

Participants further expressed that there is limited staff and logistics for nurses to work with at the neurosurgical unit and accident center. In most developing countries like Ghana, human resource and logistic limitations are paramount when considering challenges facing the health sector. In Ghana, this is considered one of the greatest challenges and serves as a hindrance to work success

of nurses. This concurs with findings from Nigeria [24] and Tanzania [25]. However, contrary findings from studies conducted by [26] in Canada suggest that hospitals where patients with spinal injury are managed are provided with modern logistics and human resource to enable optimum health outcomes [27].

Participants of the study again revealed that they have to deal with several health concerns and complications as a result of workload. Most nurses indicated they experience back pains, waist pains neck and knee pains as well as spinal deformity. Other studies also revealed similar findings as expressed by the nurses in the present study [28-30]. Similarly, a correlation between back pains and nurses work was reported in previous studies [1-3]. The provision of care for patients with spinal cord injury involve continuous standing and strenuous but static postures. On accordance [4], also reported spondylosis as a consequence of workload.

The results of the study also revealed several psychological experiences (sadness, empathy, verbal abuse and feeling of pity) that pose threat to the well-being of nurses managing spinal cord injury. Almost all participants expressed the feeling of empathy for patients and revealed they are mostly empathetic towards patients. They averred that caring for patients with spinal cord injury is pathetic because most of these patients are considered vulnerable and need help so they usually encourage these patients to get better. This finding is similar to other studies which also found that most nurses and healthcare providers are empathetic towards patients [5,6]. In contrast, other studies reported that nurses expressed a feeling of less empathy for their patients [7,8].

Participants of this study again expressed the feeling of depression and sadness towards patients and attached a magnitude of sympathy and emotions to their care for patients. This is similar to findings by [9] in a study conducted in Korea where nurses expressed feeling sad, having passion for their profession, and empathy for sick people. In contrast, [10] revealed that nurses’ response to patients commonly included scolding or indifference to the sick patients rather than care and empathy. Another study conducted in Liberia also revealed that only a few participants expressed sympathy towards the ‘chronic’ patients with spinal cord injury [11].

One challenging experience of the participants is that, they have difficulty balancing work and family life and this mostly leads to neglect of family members. Most of them expressed their experience of neglecting their children due to work demands. In a similar study, nurses expressed their difficulty in balancing work demands and family life [12]. Other findings even suggest that work demands of most nurses have resulted in broken homes and other family challenges [13]. This is in accordance with another observational study, in which the researchers found that nurses caring for patients with chronic neurological conditions are less likely to socialize with family and friends due to workload and bad work schedule [14].

Religiosity is one important attribute of most Africans, especially Ghanaians. Meanwhile, participants of this study expressed that work at the neurosurgical units and accident center are duty demanding to the neglect of their religious lives. On accordance, other studies revealed the regrets expressed by nurses who are challenged in balancing religion and profession [15].

As a result of participants’ experiences at the hospital, they expressed that they have adopted a number of strategies to cope with these physical, psychological, emotional and logistical challenges.

They expressed that they initiate counselling for both patients and their relatives. This is consistent with a study conducted in Ethiopia where nurses attested that counselling was the most pragmatic stress and violence management strategy [16]. Contrary to this common practice, counselling was not viewed as the best strategy for managing occupational experiences of nurses, even though it was used [17].

Participants were of the opinion that the involvement of patients' relatives in the provision of care helps them reduce work place violence (both verbal and physical). This is consistent with [18] study which also revealed that nurses adopted a patient-relative inclusion mechanism to facilitate care and reduce risk of emotional depression among both nurses and patients. However, contrary to findings from other qualitative studies, one study revealed that a number of violent cases were recorded in health facilities where patients' relatives were involved in the provision of care [19].

Considering that most patients with spinal cord injury have challenges with finances, participants stated that they resorted to involving social support systems such as Social Welfare Department to assist with payment of bills of patients who are financially incapable. Conversely, previous studies have provided evidence to suggest that there exists limited social support for patients who belong to the low class of economy, even though support is intermittent [20]. Variations in the level of social support received by patients at different health facilities may depend on acceptable policies and social interventions by stakeholders.

Our study further brought to fore that human resource especially nurses is limited, hence nurses have adopted task shifting and rotation as part of strategies to reduce work injury and stress. In similar findings [21], also revealed that while job rotation was regarded as a practical approach to enrich and expand job assignments, it also improved the health state of most nurses and reduced physical, emotional and psychological stress among nurses.

## Study Limitations

The results of this study are limited to some extent. As a qualitative study, no causal relationship and test of association was established among nurses' experience and their health outcomes. Again, respondents' bias could have limited the study findings as information provided could not be verified through a test of association. Similarly, data collection was limited to a single hospital and therefore study findings cannot be generalized.

## Recommendations

Agencies such as the Ministry of Health and Ghana Health Service responsible for the training, distribution and allocation of nurses to hospitals and health centers should recruit and train more nurses to add to the work force for managing patients with spinal cord injuries to reduce the overwhelming workload. Involvement of government and workers' union in implementing programs, including health insurance for patients with spinal cord injury is recommended to lessen financial burden on both patients and nurses who often have to contribute financially to support patients [22-30].

It is also recommended that hospital management take measures to provide health insurance coverage for nurses who experience physical injuries in the course of duty.

## Implication for Nursing Practice

The study provides evidence to suggest that in the health sector,

nursing practice is limited by several negative experiences of nurses. Comparatively, while developed countries have existing mechanisms and modern logistics in place to facilitate the practice of nursing, challenges of nursing practice in developing countries are quite enormous. The study further indicates that the neurosurgical and accident center of the hospital is under-staffed and only few nurses are mostly on duty at the ward. This puts pressure on the nurses caring for patients with spinal cord injuries. The information provided by the study is suggestive that nursing care in Ghana, especially at the Korle-Bu Teaching Hospital demands more stakeholder involvement than it is currently being done.

## Conclusion

The results of the study show that nurses encounter a lot of challenges and have a higher chance of experiencing occupational injuries in their line of duty, especially in caring for patients with spinal cord injuries. The experience of nurses spans from physical injury, verbal abuse, psychological stress, empathy, emotional abuse and logistical challenges. Most of the nurses also expressed challenges with balancing family life and professional demands. However, in spite of the negative experiences expressed by nurses, a number of them had deep and emotional attachment to their job and their patients and are not easily distracted by the bad experiences. This notwithstanding, nurses at the neurosurgical and accident center have adopted a number of strategies to help them manage their experience in caring for patients with spinal cord injury. There is however, the need to recruit and train more nurses to add to the work force for managing patients with spinal cord injuries to reduce the overwhelming workload.

## Acknowledgement

The authors would like to thank the management of the Korle-Bu Teaching Hospital and staff of the Neuro-surgical Units as well as all nurses who participated in this study for their cooperation.

## Author Contributions

Study concept and design: BTA (Benjamin Twiri Ampah) LA (Lydia Aziato) and GAA (Gloria Achempim-Ansong); acquisition of data: BTA (Benjamin Twiri Ampah) LA (Lydia Aziato) and GAA (Gloria Achempim-Ansong), drafting of the manuscript: GAA (Gloria Achempim-Ansong) and BTA (Benjamin Twiri Ampah), critical revision of the manuscript and study supervision: LA (Lydia Aziato) and GAA (Gloria Achempim-Ansong).

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