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Perceptions and Experiences of Nightshift Nurses: Views from the Wa Regional Hospital in the Upper West Region of Ghana

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Abstract:

This paper is one of three articles resulting from a comprehensive study carried out among nurses at a Public Regional Hospital in the Upper West Regional capital of Wa. It focused on the perceptions and recounted experiences of nurses who participated in nightshift duties. The main objective was to explore nurses' perceptions and experiences encountered during their routine nightshift duties relative to their health/wellbeing, work environment/work performance and the status of nightshift. Using a qualitative approach, 35 nightshift nurses were purposively selected for the study. Interviews and two FGDs were used to elicit relevant information for the study. Data collected was processed, analyzed and discussed using a constructionist approach to generate relevant themes. A thorough content analysis was used to tease out relevant thematic areas emerging from the data. The main findings corroborated earlier findings that, nightshift nurses experienced regular health concerns attributable to sleep deprivation and fatigue, diminished work performances as a result of poor work environment and a view that night shift was seriously underrated. We concluded that nightshift indeed posed a number of health risks hence has implications for patient care.

Keywords: Nightshift, perceptions, experiences, nurses, health risk, work environment

1. Introduction

Human resource in healthcare is a critical asset of every health system and the training, quality, expertise, diligence and satisfactory management of such are essential to ensuring quality health care delivery (Ofosu-Amaah, 2005). Nursing as a profession, and the shift work system is considered to be as old as human history (Ogunlade & Ogunfowokan, 2014). Nurses as health care providers are obliged to work during the day and during the night to cater for the needs of sick people (Abdalkader & Hayajneh, 2008; Taranjit Kaur & Shiva, 2012). Being one of the health worker groups that are vulnerable to a hazardous work environment, nurses who work at night have been studied variously to identify how the nightshift environment affects their physiological, social and professional wellbeing (Tunajek, 2007).

1.1. Literature Review

The literature is replete with suggestions that there are various effects of nightshift on workers with implications for the entire living sphere of the human race (Claffey, 2006; Coffey et al., 1998; Davis et al., 2001; De Castro, 2003; Dunn et al., 2005; Dunton et al., 2007; Chen et al., 2006). Health hazards and stresses of work, as well as intervening factors from outside the working life of workers have been found to influence, and impair nurses' state of health and general wellbeing (De Castro, 2003, van Mark, Spallek, Kessel&Brinkmann, 2006). Findings of many studies suggest that the major effect of nightshift is due to disruptions in circadian rhythms associated with phase shifting in sleep and wakefulness cycles, and cause interferences with daily routine at work, in family and social life (Abdalkader and Hayajneh, 2008; Akerstedt, 1996).

For instance, Ohida et al. (2001), examined the influence of morning, afternoon and nightshifts on job performance and stress on nurses and found that job performances and satisfaction were less on a rotating roster than on a fixed roster. Their study revealed that, although there has been a move towards studies of nightshift experiences and nursing turnover, there is still a general absence of research that attempts to associate perceptions of night duty with the health of workers [nurses], their job performance, and their interaction with colleague workers and patients within the hospital context in a comprehensive manner (Ohida, et al, 2001).

According to Tunajek (2007) most people have routine work hours with time left over for recreation and rest. At night, the body, usually turns its attention to growth, repair, rest, and recovery. Although working at night was not considered a health risk until

recently, experts are beginning to recognize the significant stress and biological changes triggered by frequently rotating or continuous night shift work. Recent studies indicate a major impact on human physiological functions and on individual workers' health and job effectiveness (Lasebikan&Oyetunde, 2012; Ogunlade&Ogunfowokan, 2014)).

Shift work disrupts this complex pattern of sleep-wake cycles, causing sleep deprivation, lack of rest and recuperation, and fatigue that may result in diminished cognitive functioning and job performance, increased stress, and more work-related accidents (Folkard&Akerstedt, 2004). Emerging studies suggest that healthcare workers experience various symptoms, which contribute to human error and work accidents, more commonly than those employed in industries with tightly controlled working patterns, such as aviation (Folkard&Akerstedt, 2004). Research suggests that fatigue can negatively affect nurses' health, quality of performance, safety and thus patient care, and that the effects of fatigue may be exacerbated for nurses over 40 years of age (Muecke, 2005).

Additionally, shift work has been associated with errors in task performance by medical residents, and studies of nurses show a correlation to problems with concentration, stress, and poor job performance. Haus and Smolensky (2006) reviewed several possible effects of a disruption in circadian rhythms on shift workers. It can result in insomnia or non-restorative sleep during the period of adjustment to a new schedule. It can also lead to changes in hormone levels, which can influence cell growth and division. In addition to work performance and biological makeup, shift work can also have adverse health effects through its potential impact on behaviour, such as poorer quality diet, or increased smoking or alcohol consumption (Nasarabi et al, 2009).

From the above, it is safe to conclude that the medical and psychological effects of shift work, particularly nightshift have been well researched and documented. However, as Abdalkader and Hayajneh (2008) put it, the effects of nightshift on nurses are particularly highlighted worldwide and usually researched in a quantitative manner almost neglecting the qualitative aspects.

Similarly, there is scant research on the behaviour and experiences of nurses working night shift (Nilsson, Campbell, & Andersson, 2008; Oléni, Johansson, Fridlund, 2004). In the absence of literature on the nightshift nurses' experiences and the meaning of these experiences, much of the literature tend to also focus on elements influencing nurses' work commitment, productivity and job satisfaction (Powell, 2013).

There is a wide paucity of information on how nurses on the night shift perceive and relate to the experiences on night shift duties. As such, the views and experiences have not been critically examined. This study, therefore sought to address this gap by exploring the perceptions and experiences of nightshift nurses from three critical angles, namely: health and wellbeing, work environment, and performance as well as their status relative to other hospital workers.

2. Study Methods

2.1. Study Setting

This study was undertaken at the Upper West Regional Hospital in four carefully selected wards; Male surgical, Maternity, Children's ward, the Casualty/Emergency ward. The choice of these wards was done based on their busy nature and the need for nurses to man them on a 24-hour basis. The Upper West Regional Hospital is a major referral hospital in the Upper West Region situated in the centre of Wa, the regional capital. It comprises 115 beds, 19 departments/units and nurses who take turns working the three shifts. The three shift-work schedules include the morning shifts; 6 hours (8am-2pm), the afternoon shift; 6 hours(2pm-8pm), and nightshift; 12 hours duration(8pm-8am).

2.2. Study Design

To describe the perceptions of nurses working in the hospital regarding their night work experiences, a qualitative research approach based on the phenomenological tradition has been used. Qualitative content analysis as an inductive approach is a process of reflection, deconstruction of data into codes and reconstruction into interpretive themes and patterns, and finally, the eliciting of meanings from the text (Lewins et al., 2005; Morse & Field 1995). This descriptive approach is more practical in the implementation, and easy to manage.

2.3. Target Population and Respondent Selection

The target population consisted of nurses in the selected wards at the hospital. The sample inclusion criterion for nurses was nurses who had been working the nightshift schedule for the at least twelve months or more. This duration was enough for such nurses to have had some experience in nightshift work. A total of 35 respondents (Night duty nurses) were purposively chosen. The nurses made up of two thirds of the total number of nurses on the nightshift roster as at the time of the study.

2.4. Method for Data Collection

Unstructured interview, also known as in-depth interview, was a very useful method employed. Under this method, an interview guide employed to conduct the interview was designed. In adopting this approach, a one-to-one interview was carried out. This was extremely useful because in-depth information was needed. The flexibility of this method was an asset used in eliciting extremely rich information. The first part of the interview focused on the nurses' background and work histories, and their individual experiences of their work. The second aspect of the interview focused on asking the nurses to describe their night work experiences and its impact on their social life.

The focus group interview was incorporated when it was realised during the data collection that some of the nurses felt more comfortable sharing their experiences in the midst of their colleagues. Two focus groups of six and eight participants for each were

conducted to augment the interview information collected earlier. This method allowed for validation and clarification of some responses collected using the initial method.

2.5. Data Analysis and Presentation

Data for the study was analysed by way of its content. This was based on a scrutiny of the transcripts. Meaningful segments of the data were identified and coded with appropriate labels in the transcribed text. Giorgi's method of data analysis as discussed by Anderson (2010) fits well into the Content Analysis Method and was adopted for the study. Giorgi's method of data analysis calls for six levels of data analysis. These levels are divided into individual and combined protocols. The individual protocols address data analysis for each individual interview. Combined protocols address the interviews as a group; what commonalities they present. The process of the analysis involved data categories and allocating units of the original data to appropriate categories of data. The data were interpreted within a constructionist framework (Crotty, 1998) allowing the nurses' engagement with their night shift world to bring into being their own unique reality.

3. Results and Discussion

The results and discussion have been deliberately integrated into this single section to enable participants' dialogue and meaning within the dialogue to remain pivotal (Blignault, 2009). The results center around the three main thematic areas of health and wellbeing, work environment and performance, and views on status of nightshift work and workers.

3.1. Perceptions and Experiences of Nightshift Nurses on Health and Wellbeing

The perception and experiences of nurses on nightshift duties were varied and mixed. A dominant feature that was identified in the nurses' descriptions was unsurprisingly the health-related issues that accompanied their night work. The nurses had concerns of potential physiological complications of working nightshift. The inability to sleep well, they felt, impacted on their longevity on nightshift.

Sleep deprivation was the first major experience that came out strongly from both interviews and discussions. A typical sentiment that ran through the data in that regard is the one as follows:

My sleep is not enough, even during the days, so, I always have a sense of fatigue and listlessness

The respondent felt that most of the time when they had to work in contrast to a normal situation by staying awake when everybody needs sleep and vice versa. This situation combined with a high level of responsibility and without any additional compensation (in comparison with day shifts), the most important things that she gains are an unhealthy psychosomatic condition and her personal unusual lifestyle. According to some previous studies, members of night staff face more health and safety risks than those of any other shift (Deori, 2012; West et al., 2007, Falkard&Akerstedt, 2004).

With regard to the perceived effects of the nightshift on the health of respondents, three female respondents reported having developed breast cancer in the course of their profession. Although this was very interesting, the veracity of the claim could not be adequately explored by this study. Some previous studies however have explored the connection between the two (SeeKloog, Portnov, Rennert, &Haim, 2011). Findings of such studies have laid credence to the fact that there was some relationship between nightshift and breast cancer.

On other routine ailments, quite a large number of respondents suggested that night duty was responsible for frequent headaches, backaches, persistent tiredness, insomnia and feet ailment. Issues of insomnia and persistent tiredness were more pronounced in the emergency/casualty ward and with the male nurses. A few respondents however refuted that the experienced ailments had anything to do with their night duty. A further interrogation revealed that those who attributed night duty to some ailments had worked considerably longer than their dissenting counterparts. Indeed the checks revealed that the average work duration of the first group of nurses was 3 years, compared to 7 months for the second group. This is understandable considering the fact that those nurses started their duties nine months before the research and may not have been exposed to any prolonged health hazards yet.

In addition to the above, malaria was one of the ailments reported by most respondents and the seriousness of it was found in statements such as you have to treat yourself of malaria after every shift [nightshift]. Observations in all the wards revealed the presence of fly-like mosquitoes whose very sight could induce fear in an individual.

3.2. Perceptions and Experiences Relating to Work Environment and Performance

The second objective of the study was to examine the nurses' perceptions and experience with regards to the nightshift working environment and their views on how it affected their performance. The findings in this regard, centre on safe work environment and performance of duties.

Exposure to occupational injuries was the first issue noted during the discussion on work environment. Almost all the respondents reported they had sustained at least needle stick injury or back injury during the night shifts. These injuries usually occurred when nurses became too busy, drowsy or tired when she/he was likely to lose concentration and cause an accident. Aside injuries resulting from accidents, and tiredness, the poor (dim) nature of illumination in the wards also affected the vision of nurses and this compromised the safety of their patients as well.

Abdalkader and Hayajneh (2008) have identified that accidents predispose nurses to infections such as HIV/AIDS, hepatitis B and other viral infections. In general, as reported by Lipkin et al. (1998), backache can result from exposure to psychological hazards. Additionally, McVicar (2003) identified stress as a psychological problem which manifests itself with aches and pains of neck or back depending on the biological structure of the person.

Another finding relates to reduced work performance as a result of work environment. Reduced work performance is identified in the literature as: decreased memory capacity, lapses in attention, and diminished reaction times. Diminished work performance was found to occur in nurses that did not obtain anchor sleep, which was defined as at least 4 hours of sleep obtained regularly during the same clock hours every night, both during work days and days off (Gold et al., 1992:101).

With regards to this study, it was found that none of the nurses interviewed obtained anchor sleep. Nurses reported that they experienced decreased mental alertness at mid-shift, and on the first two shifts of their stretch of shifts in as a result of inadequate sleep and changing their sleep/wake cycles. They expressed concern about this diminished capacity and the subsequent risks to patient safety. Some common consequences of this situation was medication error, risk factors, inaccurate patient identification, and incorrect operation of medical equipment.

The diminished work performance as cited by the respondents have been associated with poor quality/quantity of sleep, and/or circadian rhythm disruptions. In the literature, work performance was found to be lowest in those nurses that rotate shift work (Dunn et al., 2005, Hsu and Kernohan, 2006, Miller, 2006, Ulrich, Buerhaus, Donelan, Norman, and Dittus, 2005). Prolonged fatigue and inadequate recovery result in decreased work performance and more adverse incidents (Niu, Chung, Chen, Hegney, O'Brien, & Chou, 2011).

3.3. Perceptions of Status of Nightshift Nursing

The final objective of this study sought to highlight the views of nightshift nurses on their status relative to other nurses and hospital staff. Respondents were asked to provide an assessment of their nightshift work roles and how other perceived them.

It emerged that a lot of respondents were quite upset about the perceptions and insinuations that night work was less strenuous and hence amounted to 'no work'. It was reported that many people including other co-workers had made assertions to the fact that night duty was virtually 'worthless' compared to other shifts.

For instance a respondents lamented that:

We the night owls(referring to nightshift nurses) are deemed as lazy, and that we hardly do no work. Some people, patients and their family members have the view that we only come to sleep. That we are mere watchmen and women. But you wouldn't believe what we go true at night. Sometimes most emergencies are brought in at night, most patients on admission feel a lot of pain at night. In my view the nightshift is the toughest.

Another respondent intimated that

Before I got my nightshift rotation, I always believe that it will be the easiest, no theatre, quiet and serene atmosphere unlike the crowded and noisy nature of the day shifts. I was completely wrong, the night is equally as hectic if not more hectic than the day shifts. Still another remarked,

I am amazed at the level of disrespect for night duty, in fact those who denigrate us are ignorant; how can 12 hours be easy, compared to 6 hours? Our shift is the longest, involves the most lack of sleep and deprivation of our social life. Yet we are the least respected and most vilified.

The apparent disparaging remarks about nightshift left the respondents feeling that they needed to defend the work that they did as nurses on nightshift. They felt that their work, and that of their co-workers, made a difference in patient outcomes. They wished negative perceptions would change and that they could sense some degree of appreciation for the work that they did at night. These sentiments are in line with those expressed in earlier studies to the effect that nurses today doing night-shift work still had difficulty in having their work recognised as equally valued and viewed as equally important as that of day workers (Deori, 2012; Kelly, Berridge & Gould, 2009; Brooks, 1999). Similarly, Powell (2013), concludes that "it was clear that, in general, participants felt neither family, friends, management nor peers placed sufficient value in their work or role" (p. 21).

Finally, regardless of the adverse effects of nightshift on nurses and the seeming disregard for it, there was a general feeling among the junior and orientation, nurses that the nightshift afforded them the opportunity to put their knowledge to practice. Given the fact that they usually are in charge of the wards at night, they are able to take decisions regarding patient care. The participants emphasized that being a night working nurse meant being independent and being skilled. In their opinion, the essence of night work was a great opportunity for learning more and they believed that this aspect motivated them to continue working at night.

Participants felt that their night working situation was difficult and stressful but they experienced a sense of fulfilment when they were able to manage their task properly and independently. They view night work as an opportunity for learning better and gaining more experience in their profession. This helped to compensate for the negative impacts of their nightshift work.

According to a respondent;

In day shifts, we have to carry out pre-determined routine tasks . . . but at nights we plan for our work personally, manage the patients' needs independently and this satisfies us and gives a sense of fulfilment.

Another intimated that;

On the whole, it was a useful experience for me; without those shifts, I wouldn't be able to be a skilled and expert nurse, and this created a sense of satisfaction. With these valuable experiences, in fact, I became an expert

These nurses always get a sense of purpose when they encounter new experiences during the nightshifts; the whole responsibility at night leads them to become skilled at their work, to gain more ability in managing the problems confronted

4. Implications for Practice and Research

The above findings and their discussion has revealed several pertinent issues with regard to nursing and nightshift duties. It corroborates many research findings on the health implications of night duty, the diminished performance of night duty staff due to fatigue, sleep deprivation and accident prone work environment. The implications for these findings cannot be overemphasized either. In the first place, it is prudent to consistently make nurses and nursing leaders aware of the causes and effects of fatigue and ensure that its impact is considered where staffing and patient safety intersect (Graves & Simmlons, 2009). Understanding the physiological alterations related to sleep loss and establishing different strategies to improve sleep health is essential for enhancing the quality of optimal health in nurses working varied shifts and long hours.

The impact of impaired performance must not be taken lightly. The findings in this regard indicate that it is of critical concern to address workplace safety issues in order to prevent or minimize accidents and injuries. It will be prudent to ensure that all wards and corridors are properly lit and the adequate support infrastructure (including human resources) provided to ensure that night duty is undertaken in the best possible conditions. This will certainly reduce accidents and injuries to the minimum while ensuring that patients and nurses are safe and efficient.

Another critical implication of the findings is that nurses at the hospital like those in other places consider night shift as a less desirable one not only because of its adverse health effects but because of how others perceive them. As indicated in the findings and elsewhere, night shift nurses believed they were tagged as inferior to day shift nurses, nurses who worked nights thought others saw them in a certain light; classifying them as nurses who do not do much, have lesser skills and are second rate nurses. The data clearly indicated that night staff felt they were forgotten or not considered, generating the view that this shift was of lesser value than other shifts (Also see, Powell 2013).

This unfortunate situation can and should be tackled at various levels right from training to management of nurses. We believe that for this perception of inferiority to cease or curtailed, all nurses should be encouraged to see all aspects of their job as a solemn duty to be performed as diligently and professionally as possible. The clients, spouses and all other persons who happen to cross paths with night duty must accord them respect and courtesy deserving of their sacrifices. As one nurse remarked “put yourself in our shoes and you will understand”.

This study also raises a number of questions worth pursuing further in other research. Key among this is the impact of night duties on social life of nurses. How does a society’s culture impact on the nursing occupation? Does cultural nuances and tenets impact on decisions to accept nightshifts or not? Additionally, what coping mechanisms are available to nightshift nurses to improve their health, social and psychological conditions? What constitute job satisfaction and what working conditions can lead to optimum preface among nightshift nurses? We believe qualitative and quantitative examination of these questions will provide a good understanding of nightshift nursing.

5. Conclusion

This qualitative study explored key perceptions and lived experiences of nurses on night duty at a regional hospital in Ghana. Its objectives examined the area of health and wellbeing of nurses, work environment and performance as well as the status of nightshift nurse relative to other nursing roles or duties.

We can conclude from the findings that indeed, nightshift does possess negative health implications on nurses ranging from sleep deprivation, fatigue, back pain among others. Their work environment is accident prone and occasional accidents/injuries are recorded. This leads largely to diminished work performance with massive implications for patient care and safety.

Finally, nightshift nurses were of the view that irrespective of been underrated and disrespected, their roles were critical in every way as other duties, if not more so. They valued their work, whether it was rewarding, challenging or not. They believed it was a privilege to sacrifice their many luxuries to take up night duties and hence must be rightfully compensated and recognized. The younger and junior nurses in particular felt that the nightshift provided them with the need opportunity to acquire valuable on the job experience. The least that can be done is the provision of the right environment and incentives to motivate night workers to do a decent and professional job.

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