

Assessment of nurses' challenges in crisis situation as seen in selected hospitals in Jos Metropolis

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Abstract

Background: Civil unrest has become widespread in the last decade in Nigeria. This study was aimed at assessing the challenges of nursing care during violent crisis.

Methods: A descriptive study was carried out on 137 nurses in two selected teaching hospitals in Jos; Jos University Teaching Hospital and Bingham University Teaching Hospitals. Challenges of nursing care during crisis were assessed using a structured questionnaire.

Results: A total of 137 nurses made up of mostly females (77.4%) participated in the survey. The age of participants ranged from 20-60 years. The Challenges encountered during, and post crisis situation includes: performing non-nurses'

duties (56.4%), physical illness; headaches 20.1%, waist pains 26%, and sleeplessness 20%.

Conclusion: Providing nursing care in crisis situation is quite challenging and often resulted in some health problems in nurses. The need for ambulance services, efficient pre-hospital services, dedicated phone lines, well trained personnel (nurses) on emergency response and occasional conduct of emergency drills are advocated.

Keywords: Assessment, Nurses, challenges, crises.

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Introduction

In the last decade, the city of Jos has witnessed a series of violent crises.¹ These crises often result in mass casualties with various forms of injuries resulting from gun shots, bomb blasts, machete cuts, arrow piercing injuries, and severe burns. Nurses deploy enormous amount of energy to save life during civil unrest and terror attacks.²⁻⁴ Nursing care in crisis situation is challenging, and performance by care givers at such times has been perceived to be below standard.⁵ Some challenges encountered include; difficulties getting to work, very high work load, and inadequate working materials.⁶⁻⁹

Nursing duties typically involve, but not limited to drug administration, bathing of patients, observation of vital signs, obtaining and giving information, immobilizing fractures, suctioning to clear airways and transferring patients. To the best of our knowledge, the ability to adapt to challenges posed by violent crisis has not been evaluated in our setting.

The aim of the study was to identify common challenges experienced by nurses during crises, how nurses react and respond to such situation, to suggest possible proactive emergency drills for nurses and other support staff in the health care industry and recommend possible solutions and ways to address the challenges.

Materials and Methods

Study design, setting and population

A purposive, descriptive study was carried out on 137 nurses from two select Teaching hospitals in Jos; Jos University Teaching Hospital (JUTH) and Bingham University Teaching Hospital (BUTH). The two hospitals, JUTH and BUTH are both tertiary health institutions situated in the city of Jos Plateau State, north central Nigeria. They are teaching hospitals and serve as referral centres to eight neighbouring states. The choice of these hospitals was informed by the fact that they are the only teaching hospitals in Jos. The study population consists of trained nurses and post basic student nurses working in JUTH and BUTH.

Sample size and sampling technique

A total of 137 Nurses were included in the survey. Sample size was determined using the formula reported in a previous study.¹⁰ The recommended sample proportion based on the study population was: 40% for few 100s, 20% for many 100s, 10% for few 1000s, and 5% for many 1000s. Based on the formula above, 20% (n=137.2) were sampled since both hospitals have a total of 686 nurses. Participants in study in the study were selected by simple random sampling using fish bowl method.

Instrument and Method of Data Collection

To collect relevant data for this research, the researchers used a semi-structured questionnaire with closed ended questions divided into three sub sections. Section A, comprising of informed consent, Section B biodata and Section C questions on the major variables of the study

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such as; knowledge of crisis and challenges in crisis situation. To further ensure reliability, a pilot study was conducted using the instrument. The respondents used in the pilot study were nurses from BUTH and JUTH, but were not included in the main survey. The reliability of 0.63 was registered. Self administered questionnaires were distributed to qualified nurses and post basic nurses on course working in various wards of both Jos and Bingham University Teaching Hospitals.

Ethical Consideration

Ethical clearance was obtained from the ethical committee of Jos University Teaching Hospital and Bingham University Teaching Hospital. All participants gave informed consent.

Data Analysis

Data analysis was done with SPSS for windows version 17 (SPSS Inc, Chicago, Illinois, USA) Descriptive analysis of frequencies and proportions were performed.

Results

A total of 133 out of 137 (97%) nurses surveyed completed and returned the survey questionnaire. The respondents were made up of mostly females (102; 77.4%). Most of the respondents (32;24.1%) were aged between 30-37 years, while those aged 20-29 years formed the smallest category (15; 11.3%). A total of 25 respondents (18.8%) did not fill their ages. Ninety-seven (73%) respondents were from JUTH, 40 (22.6%) from BUTH while six (4.5%) respondents did not respond to this question. Nurses with 21 years and above working experience were in the majority (32; 24.1%).

A total of 133 (100%) reported having one health challenges or the other after managing crisis victims. Of the health consequences of managing crisis victims reported by nurses, backaches was the most common health problem reported (75; 27.1%), followed by waist pains (72; 26%). Others include; headaches (57; 20.7%), and sleeplessness (55; 20.0%).

Patient load during crisis was enormous. The highest number nursed per respondent was between 30 and 39 patients. A total of 36 (27.1%) respondents reported nursing between 30 and 39 patients on morning duty. The same number of patients were reported by 38 respondents (28.6%) and 35 respondents (26.3%) during afternoon duty and night duties respectively

Majority of the respondents (61; 45.9%) could not comment on security measures deployed during crisis. Of those that responded, 20 (15%) suggested that armed security agents should guard the wards and hospitals. While 14 respondents (10.5%) suggested that buses should convey staff to and from working place during crises.

Majority of the respondents (53; 45.9%) made no suggestions on how to convey victims to the hospital, while 17 (39.8%) suggested that security officers should

assist in conveying victims to the hospital, while 14 (10.5%) said ambulance should be readily available.

Discussion

The study shows that violent crisis pose a major challenge to the provision of nursing care. It result in high work load and health challenges endangering the lives of Nurses. Nurses surveyed were predominantly females (79.4%) reflecting the general demographics of nurses in Nigeria and the world over^{11,12}. Our study observed that most nurses have multiple health challenges as a result of managing crisis patients. The most common health problem was backaches and waist pain while headaches and sleep disturbance resulting from long hours of sleep deprivation were also very common.

Strategies to safeguard the health of the nurse involved in the care of crisis victims, including the provision of appropriate working tools and environment are highly desirable in this setting. Violent crisis often resulted in the over stretching of limited resources. In this study 83.5% of the respondents reported that bed spaces were inadequate, often resulting in the managing of patients in an uncomfortable position, giving rise to back pains and waist pains. The challenges reported in this study supports the finding by American Nurses Association on Health and Safety, which states that the top concern of 74% of registered nurses were being over stretched and over worked. Another big challenge is the depletion of stocks of materials such as gauze, cotton wool, syringes, stationeries, food stuff and cleaning materials. During crisis it is usually difficult to replenish ward and hospital supplies.

The study observed that most of the crisis victims were brought to the hospital by security personnel. This highlights the need for security personnel to be properly trained in the provision of basic life support and first aid. The finding of this study collaborates previous study which reported that most victims of crisis only reach the hospital by the aid of security personnel or volunteer workers such as the Red Cross.¹³ Security of life remains a major challenge during violent crisis. Almost (91%) all the nurses surveyed expressed concern about the security of their lives. Reasons for the insecurity ranged from lack of security personnel to provide to provide work place security, movement to and from work place, molestation by both rampaging groups and the security agents that are meant to protect the people. A previous report showed that health workers have lost their lives and some suffered various injuries during violent crisis.¹³⁻¹⁵

Inadequate transport arrangement was another impediment to the provision of nursing care observed in this study. Majority of the respondents (61.9%) use their own cars to get to work, while those who do not have cars find other means of getting to work during crisis, which could be very unsafe. Insecurity and lack of or inadequate transport arrangement often results in Nurses resuming late to work during violent crisis as reported by

74.4% of our respondent.

Increase workload was reported by all the respondents. The reported nurse to patient ratio during the period was 1:20. This high patient burden is a major impediment to the provision of optimal nursing care and results in stress and other health related challenges.¹⁶ Reports of survey of Nurses to patient ratio in developed countries shows that it ranges from 1:2 to 1:6 depending on the practice setting. A survey of hospitals in California, New Jersey and Pennsylvania found a ratio of nurse to patient of 1:4. The state of California recommended the following Nurse patient ratio for different practice setting; psychiatry ward 1:6; general medical ward 1:5; paediatric ward 1:4; labour ward 1:3 and Intensive care unit 1:2. In addition to increase workload, working for extended period of time was very common. Crisis often resulted in disruption of normal duty schedule and some Nurses may work for days without getting a replacement. The crisis that engulfed Jos city on 17th January 2010 lasted four days^{1,13} with some Nurses working through the duration of the crisis. This further highlights the need for adequate transport and security arrangement for personnel on essential services during violent crisis.

Interestingly the study observed that there was no adequate compensation for the Nurses who rendered services during the violent crisis, as 76% of respondents reported never receiving any compensation. Appropriate compensation including insurance cover as practiced in developed settings would motivate personnel involved in the provision of care in dare emergency situation like violent crisis.

Strategies adopted to cope with challenges of nursing care during violent crisis included, mobilization of nurses from other areas of services to the emergency units, working for extended hours, managing available resources and shared responsibilities.¹³

In conclusion, this study reported the significant contribution of Nurses in providing care to victims of violent crisis. However, inadequate emergency preparedness was a major challenge and the provision of care to victims of violent crisis comes at an enormous cost such as health challenges and insecurity. The training of security personnel in the provision of basic first aids, emergency drills, provision of ambulance services, employment of more Nurses to handle emergencies during violent crisis, provision of adequate equipment and supplies in addition to compensation for Nurses who gallantly provide care during violent crisis are recommended.

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References

1. Chukwuka KCJ .The new face of plateau .Businessday online.com/2013/05/the-new-face-of-plateau/, 21st may2013 Accessed 10 October 2014.
2. Cabrera SL, Beaton RD. The role of occupational health nurses in terrorist attack employing radiological dispersal devices. *AAOHNJ* 2009 57:112-119.
3. Marek E. Anti-zionist legacy of Warsaw Ghetto resistance fighter ,2009. en wikipedia org /wiki /Talk% 3A Marek . Edelma (Accessed 22 October 2014)
4. Gallanger DG, Demaree I. No ordinary Heroes : 8 Doctors, 30 Nurses, 7000 prisoners and category 5 Hurricane. (Accessed 20th October 2014)
5. Goodwin TV, Whoolsey C. Disaster and Emergency Preparedness for Chemical and Radiological Terrorism and other Hazards, 2013 www.slideshare.net/enoji/disaster-nursing.17317416 (Accessed 20th October 2014)
6. Pham T, Men in Nursing/Minority Nurse 2008. www.minoritynurse.com/article/men-nursing (Accessed 21st October 2014)
7. Aiken LH, Clark SP, Sloanne DM et al. Nurses report on hospital care in five hospitals, *Health Aff.* 2001 20:43-53.
8. Demody K, Bennett PN. Nurses stress in hospital and Satellite haemodialysis units, *J. Ren Care* 2008 34:28-32
9. Duffield C, O'brien-pallas L. The causes and consequences of shortage: a helicopter view of the research, *Aust Health Rev.* 2003 26:186-193
10. Nursing Process among Nurses factors affecting its implementation Jun 8 2013 (Accessed 23rd October 2014)
11. Tri P . Men in Nursing/minority Nurse 2008. www.minoritynurse.com/article/men-nursing (Accessed 20th October 2014)
12. Lampert P ,Lynda K .Men are maginalised or choosing female dominated profession www.ausmed.com.au.2012 (Accessed 23rd October 2014)
13. Ozoilo KN, Ishaya CP, Ramyil AV, Nwadiaro HC, Challenges of the management of mass casualty: Lesson Learned from the Jos crisis of 2001, *World J Emerge Surg* 2013 ;8 : 4 4 - 4 4
14. McPhaul, KM, Lipscomb JA. Workplace violence in health care: recognized but not regulated. *Online Journal of Issues in Nursing.* 2004 9(3) . http://www.nursingworld.org/ojin/ (Accessed 23rd October 2014)
15. Edlich R, Hudson MA, Buschbacher RM, et al. Devastating injuries in healthcare workers: description of the crisis and legislative solution to the epidemic of back injury from patient lifting 2005 , www.ncbi.nlm.nih.gov/pubmed/15777173 (Accessed 10th October 2014)
16. Caruso CC, Running on empty: fatigue and health care professionals . www.medscape.com/viewarticle/768414 (Accessed 23rd October 2014)