Global Scientific JOURNALS

GSJ: Volume 9, Issue 2, February 2021, Online: ISSN 2320-9186
www.globalscientificjournal.com

UTILIZATION OF WORLD HEALTH ORGANIZATION TRAUMA EMERGENCY PREPAREDNESS GUIDELINES BY NURSES AT SELECTED HOSPITALS IN NYANZA REGION, KENYA

Nancy Bousi Mogaka (Corresponding author)
School of Nursing, Mount Kenya University, P.O BOX 342-00100 Thika. Kenya

Catherine Mwenda PhD
Senior Lecturer school of Nursing, Mount Kenya University P.O BOX 342-00100 Thika. Kenya

Fatuma Affey Ph.D
Lecturer school of Nursing, Umma University P.O BOX 342-00100 Thika. Kenya P.O **Box** 4658-01002

The research in not financed

Abstract

Background: When trauma emergency occurs, hospitals are among the most important institutions that address such phenomena, as they are viewed as sanctuaries where victims seek solace. The issues of accidents and emergencies have seriously caused widespread effects globally. Particularly in many parts of this country. This call for hospitals to be prepared for an unusual increase in workload, hence the importance of hospital accidents preparedness guidelines. **Study objective:** This study explored the utilization of trauma emergency preparedness guidelines by nurses working at casualty departments of Kisii and Jaramogi Oginga Odinga Teaching Hospitals in Kisii and Kisumu Counties respectively. **Methodology:** The study adopted cross sectional descriptive study design whereby both quantitative and qualitative data were collected from nurses working at Accident and Emergency departments of KTRH and JOOTRH. The study utilized a random sampling method whereby the 113 nurses working in the Accident and Emergency departments of both hospitals were randomly sampled. Data collection was done through a self-administered semi structured questionnaire. The study involved all nurses working at Accident and Emergency departments of KTRH and JOOTRH. The data collected was cleaned and verified and then entered into the computer for analysis using SPSS version 21. Data was further subjected to descriptive statistics where the use of percentages and inferential statistics in which case Pearson Correlation Coefficient to compare the association of variables was used. The targeted 113 nurses working at Accident and Emergency departments of KTRH and JOOTRH. **Findings:** The study findings showed that 66.3% (61) of the respondents were not implementing WHO guidelines as required while 33.7% (31) were implementing WHO guidelines as required. The study also showed that respondents agreed that it was important for them to be aware on issues regarding trauma and emergency preparedness. **Conclusion:** The study recommended that casulty departments of the two hospitals should create an independent department that is charged with the responsibility of developing, reviewing and ensuring WHO trauma and emergency guidenes, and that the nurses undego training for the implementation and utilization of the guideline.

Key words: Trauma, emergency, accident

Specific Objectives
To determine the level of utilization of WHO trauma emergency preparedness guidelines by nurses at Accident and Emergency departments of KTRH and JOOTRH

Literature Review
2.1 Current Trends in Emergency Management
Emergencies regularly result in huge effects on individuals' health, including the loss of many lives. Each new danger uncovers the difficulties for overseeing wellbeing dangers and impacts of crises (UNISDR, 2009). Deaths, wounds, maladies, handicaps, psychosocial issues and other health effects can be dodged or decreased by crisis chance administration measures including health and different divisions, crisis chance administration for health is multisectoral and alludes to: the deliberate examination and administration of health dangers, postured by emergencies, through a mix of peril and weakness diminishment to counteract and relieve dangers, readiness, reaction and recuperation measures (Peppiat, 2006). The customary concentration of the health division has been on the reaction to emergencies. The continuous test is to widen the concentration of crisis hazard administration for health from that of reaction and recuperation to a more proactive approach which underlines anticipation and moderation, and the improvement of group and nation abilities to give auspicious and compelling reaction and recuperation. Flexible health frameworks in light of essential social insurance at group level can decrease fundamental defenselessness, ensure health offices and administrations, and scale-up the reaction (World Health Organization, 2008)

2.2 Sustainable development
Emergency risk management has advanced as a key component of sustainable development and a fundamental piece of a more secure world in the twenty-first century. Decreasing danger is a long haul advancement prepare which should be overseen by groups and people working together.

2.3 Health Systems
Most nations that are seriously affected by emergencies have poor and constrained essential health care services and framework, which in itself generally overstates the difficulties of emergencies preparedness and response. Nations with entrenched frameworks are stronger and for the most part arranged to manage any sort of emergency that may emerge.

3.Study Methodology

3.1 Research Design
This study employed a descriptive cross sectional research design. According to (Kothari, 2004) the primary advantage of this design is that it allows one to present data collected from multiple methods (surveys, document review, and observation).

3.2 Study Population
The study targeted all nurses (113) working at Accident and Emergency departments of KTRH and JOOTRH Hospitals. They were 60 from KTRH and 72 from JOOTRH totaling to

3.4 Sampling Procedures
The study adopted a two stage sampling procedure where by nurses working at Accident and Emergency in the two hospitals were first categorized into two strata and in each stratum simple random sampling was applied.

3.5 Data Collection

A self- administered semi structured questionnaire was used to collect data.

3.6 Quantitative data analysis

Statistical package for social sciences (SPSS) version 20 was used to analyze numerical data. Descriptive statistics; means, medians and their corresponding 95% confidence intervals (95%CI). Spearman's correlation coefficients and corresponding p-values were calculated. The sent point of the level of significance was at 0.05.

3.7 Validity of the Instruments

Content validity of the research instruments was done to ensure that such instruments gather the information the study purports to collect. According to Gay (2005), content validity is determined by expert judgment. Therefore the researcher strictly relied on the expert advice, supervisors and other members of the School of Nursing at Mount Kenya University on the validity of the instruments**.**

3.8 Ethical Consideration

Ethical clearance was obtained from the Mount Kenya University ethics board. Further, clearance was sort from the National Commission for Science, Technology and Innovation (**NACOSTI**) and later medical superintendent at Kisii Teaching and Referral Hospital and Jaramogi Oginga Odinga Teaching and Referral Hospital ethical committees. The researcher also sought Permission from the maternity unit management to collect data. Prior to data collection, informed consent was obtained from the respondents. Participation was voluntary. Confidentiality of the data and information was maintained by use of protected secret passwords and used only for the purpose of the study. Consent was sought from all participants before they are were involved. They were fully informed of the purpose of the study. The participants were allowed to voluntarily participate acknowledging their rights to withdraw from the process.

4. Demographic characteristics

Table 4.1: Demographic characteristics

Characteristics	Frequency	Percentage
Gender		
Male	40	43.5
Female	52	56.5
Age		
Below 21 Years	1	1.1
21-30 Years	55	59.8
31-40 Years	18	19.6
41 Years and above	17	18.5
Qualification		
BScN	30	33
KRCHN	52	57
ECN	10	10
Training		
Trained	55	60
Not trained	36	40
Where they trained		
Workshops	42	47
Colleges	38	42
Other	9	11

The study showed that slightly over half of the respondents (56.5%) 52 participated in the study was female while slightly less than half of the respondents (43.5%) 40 were male. The study further showed that the age distribution of those who participated in the study were below 21 years 1%, between 21 – 30 being 59.8%, 31 – 40 were (19.6%) and those above 41 years were represented by 18.5% . The Study also revealed that (56%) 52 of the respondents were drawn from the casualty department while (44%) 40 coming from OPD being the two areas where respondents were drawn from. The study also showed that among those who participated in this study 30(33%) of them were BScNs, (57%) 52 were KRCHNs and (10%) 10 being ECNs. Looking at whether those respondents had any training in emergency preparedness the study indicated that (60%) 55of the respondents had some training while (40%) 36 did not have the training in the area of emergency preparedness. Looking at where the respondents trained, the study showed that (47%) 42 of the respondents received their training in workshops, (42%) 38 received their training while in college and the rest 9(11%) got their training in other encounters like hospitals organizing their own training. See figure 4.2 below

4.2 Implementation on WHO emergency preparedness guidelines

Table 4.2Implementation on WHO emergency preparedness guidelines

Frequency	Percent
31	33.7
61	66.3
92	100.0

The study showed that 66.3% (61) of the respondents were not implementing WHO guidelines as required while 33.7% (31) of them agreed that they were implementing WHO guidelines as required. (Table 4.2)

4.3 Utilization on WHO emergency preparedness guidelines

Table 4.3: Utilization of WHO emergency preparedness guidelines

	Frequency	Percent
Yes	20	21.7
No	72	78.3

The study showed that among the respondents, 78.3% (72) were not utilizing WHO guidelines as required while 21.7% (20) of them were in agreement that they were utilizing WHO guidelines as required. (Table 4.3)

5. Discussion

The study showed that nurses in both KTRH and JOOTRH were not implementing WHO guidelines as required (66.3%), even though many nurses indicated to have knowledge on those guidelines. The study also indicated that utilization of WHO guidelines in the two hospitals that were under study that is KTRH and JOOTRH in Kisii and Kisumu Counties respectively were poor (21.7%)

The study indicated that there was no significant relationship between knowledge, attitude and Challenges ($r = .114$, $p = .279$), ($r = -.086$ $p = .429$), ($r = -.055$, $p = .964$) with utilization of WHO trauma and emergency preparedness guidelines and also knowledge, attitude and challenges ($r = .114$, $p = .279$), ($r = -.086$ $p = .429$), ($r = -.055$, $p = .964$) with implementation of WHO trauma and emergency preparedness this disagrees with UNISDR, 2009 report that suggets that Constructs like knowledge has a strong relationship with implemetation and utilization of WHO guidelines.

Well three quarters of the respondents participated in this study indicated that they were not implementing WHO guidelines in the departments that were investigated in the two hospitals. Further over two thirds of the respondents indicated that they were not utilizing WHO guidelines in the departments under investigation. Many of the reasons cited were that top level management from the two hospitals may not be necessarily involving the respondents in decision making in issues to do with the implementation of such guidelines. This was also in agreement with a study done by (Ingrassiaet al. 2014) entitled Education and training initiatives for crisis management in the European Union: a web-based analysis of available programs which suggested that there was a strong relationship between lack of education and training in major components of emergency and disaster preparedness and lack of implementation of such guidelines. In addition, the curricula and training materials are other factors that strongly relate with non-compliance in implementation and utilization.

In the improvement of the implementation and further utilization of WHO guidelines, the findings further indicated that even though most respondents were not utilizing such guidelines many (%) of them were knowledgeable of such guidelines and would be comfortable implementing them and that there were some dimensions of WHO guidelines that the departments under study within the two hospitals must work on, that is to ensure that they involve the respondents in developing WHO emergency and preparedness guidelines, have regular meeting to discuss the best ways to implement such guidelines, specify various roles of various stakeholders in the process of implemting such guidelines, have regular training of such guidelines and that the guidelines be simple to understand operationally functional.

Conclusion

In conclusion the study findings indicated that majority of the respondents were not implementing nor utilizing WHO guidelines as required, even though they were knowledgeable on those guidelines.

Recommendations of the Study

The two hospitals under study through the department of Accident and Emergency should improve on the methods of communication with the nurses, probably make use of regular meetings, available technologies like broad-based electronic communication (such as electronic mail, social media, mailing list and bloggs) to improve the exchange and flow of information, and also to encourage nurses within such departments to frequently and consistently adopt and utilize WHO Trauma and emergency guideline since this will greatly improve service delivery within such hospitals.

References

1. BenerA et al. (2003) Strategy to improve road safety in developing countries. *Saudi Medical Journal*, 24:447−452.

2. Bowen, Ashley. (2008) Are We Really Ready? The Need for National Emergency Preparedness Standards and the Creation of the Cycle of Emergency Planning." *Politics & Policy*, Vol.36, No.6, P.834-853.

3. Burkle FM, Jr. (2012) The development of multidisciplinary core competencies: the first step in the professionalization of disaster medicine and public health preparedness on a global scale. Disaster Med Public Health Prep. 6(1):10-12.

4. Chaffe, M. W. & Oster, N. S. (2006) The Role of Hospitals in Disasters. In G. R. Ciottone, P. D. Anderson, I. Jacoby, E. A. Der Heide, E. Noji, R. G. Darling, *et al.* (eds.), *Disaster Medicine* (3rd ed., pp. 34-42). Philadelphia: Mosby Elsevier.

5. Col, Jeanne-Marie.(2007) "Managing Disasters: The Role of Local Government." *Public Administration Review*. Special Issue, P.114-25.

6. Djalali A, et al (2014), Does Hospital Disaster Preparedness Predict the Response rformance during a Full-Scale Exercise? A pilot study. Prehosp Disaster Med. 29(4):1-7.

7. Haddow, George D. (2011)*Introduction to Emergency Management*. Burlington, M.A.: Butterworth Heinemann, P. 21-172,219.

8. Ingrassia PL, Foletti M, Djalali A, et al. (2014) Education and training initiatives for crisis management in the European Union: a web-based analysis of available programs. Prehosp Disaster Med. 29(2):115-126.

9. International Council of Nursing (ICN) & World Health Organization (WHO). (2009). *ICN framework of disaster nursing competencies*. Geneva, Switzerland: International Council of Nurses and World Health Organization.

10. Keim, M. E., & Giannone, P. (2006) Accidents Preparedness. In G. R. Ciottone, P. D. Anderson, I. Jacoby, E. A. Der Heide, E. Noji, R. G. Darling, *et al.* (eds.), *Accidents Medicine* (3rd ed., pp. 164-173). Philadelphia: Mosby Elsevier.

11. Kent, R. (1994) Accidents Management Training Programme. *Accidents Preparedness* . UNDP.

12. Kuban, R. & MacKenzie-Carey. (2001) Community-wide Vulnerability and Capacity Assessment. Ottawa, Canada: Ministry of Public Works and Governement Services.

13. Kothari, C. (2004) Research Methodology Methods and Techniques. New Delhi; New Age International (P) LTD. Fooscalps Fullscaps

14. Mehta, S. (2006) *Accidents and Mass casualty management in a Hospital: How well are we prepared.* Retrieved March 11, 2011, from Journal of Postgraduate Medicine: http://www.bioline.org.br

15. National Research Council Committee on Disaster Research in the Social Sciences, *Future Challenges and Opportunities. Facing Hazards and Disasters: Understanding Human Dimensions.* Washington, D.C.: National Academies Press, (2006) P. 2-31, 65-81, 91-109, 219-233. Print.

16. Nantulya VM, Reich MR (2003) Equity dimensions of road traffic injuries in low- and middle-income countries. *Injury Control and Safety Promotion*, 10:13–20.

17. Neuman B, Fawcett J (2002) *The Neuman Systems Model* (4th edn). Upper Saddle River, New Jersey, Prentice Hall

18. Peppiat, D. (2006) ProVentionConsortium, International Development Committee, Humanitarian Response to natural disasters. Seventh Report of Session 2005-06. House of Commons. HC 1188- II. Evidence 65-70

19. Rassin, M., Avraham, M., Nasi-Bashari, A., Idelman, S., Peretz, Y., Silner, D., *et al. (*2007) Emergency Department Staff Preparedness for Mass Casualty Events Involving Children. *Accidents Management and Response , 5* (2), 36-44.

20. Regional District of Nainamo. (2006) *Hazard Risk and Vulnerability Assessment* . Vancouver.

21. Rubin, J. N. (2004) *Recurring Pitfalls in Hospital Preparedness and Response*. Retrieved June 24, 2011, from Journal of Homeland Security: http://www.homelandsecurity.org

22. Saunders, Lewis, Thornhill, (2007) Research Methods for Business Students, 5th Ed, RotolitoLombarda: Pearson Education
23. State of the World's Children Report (2011) Children in an urban world. New York, NY, UNICEF.(2001, Accidents Response and Preparedness Plan. *Part 1:Hazard Analysis and Response Guidelines* . Kathmandu, Nepal: UN Nepal's Inter-Agency.

24. United Nations International Strategy for Accidents Reduction (UNISDR). (2004)*Living with Risk: A global review of accidents reduction initiatives , Volume I* . Geneva, Switzerland: UN. 138
25. United Nations International Strategy for Accidents Reduction (UNISDR). (2005) January 18-22). World Conference on Accidents Reduction. *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters* . Kobe, Hyogo, Japan: UN.

26. United Nations International Strategy for Accidents Reduction (UNISDR). (2008) World Accidents Reduction Campaign. *Hospitals safe from Disasters: Reduce Risk, Protect Health Facilities, Save Lives* . Geneva, Switzerland: UN.

27. United States General Accounting Office (GAO). (2003) *Hospital Preparedness: Most Urban Hospitals have Emergency Plans but lack certain Capacities for Bioterrorism Response.* New York: GAO.

28. WHO/PAHO. (2003) *Establishing a Mass Casualty Management System* . Washington DC: PAHO.
29. World Health Organization (2004) World Report on Road Traffic Injury Prevention. WHO, Geneva.
30. World Medical Association. (2006) Statement on Traffic Injury". Adopted by the 42nd World Medical Assembly Rancho Mirage, CA., USA, October 1990 and revisedby the WMA General Assembly, Pilanesberg, South Africa, October 2006.
31. World Disasters Report (2011) Geneva, International Federation of the Red Cross and Red Crescent Societies.

32. World Development Report (2011) Conflict, security and development. Washington, DC, World Bank, 2011.

33. World Health Organization (2008) Global Assessment of National Health Sector Emergency Preparedness and Response, Geneva

34. WHO/PAHO. 2003,*Establishing a Mass Casualty Management System* . Washington DC: PAHO.

35. World Disasters Report (2011) Geneva, International Federation of the Red Cross and Red Crescent Societies.

36. World Development Report (2011) Conflict, security and development. Washington, DC, World Bank.

World Health Organization (2008)Global Assessment of National Health Sector Emergency Preparedness and Response, Geneva