
TRAINING NEEDS ASSESSMENT FOR FORENSIC NURSING IN KENYA

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Abstract:

Introduction: Forensic nursing has not been adopted in Kenya despite the fact that nurses work in settings that require this knowledge. The national Bachelor of Science in nursing syllabus calls for lectures in forensic nursing but lectures have neither been developed nor are there educators prepared to teach the unit. This study aimed at evaluating the training needs for forensic nursing in Kenya.

Methods: The study adopted a descriptive cross-sectional study design. Data was collected utilizing a self-administered questionnaire, among 116 randomly sampled practicing nurses from three hospitals. Additionally, a focused group discussion was conducted among ten nurse educators and an in-depth interview with one key informant. Univariate analysis was conducted and the results presented using mean, standard deviations, frequency distributions, and proportions. Bivariate analysis was done using Pearson's Chi-square test to determine relationships between categorical variables and P values of 0.05 or less were considered to have a significant association. Qualitative data analysis involved clustering together related types of narrative information then analyzed using thematic analysis.

Results: Majority (90.5%) of the practicing nurses and 100% of the lecturers had no training on forensic nursing science whatsoever. The nurses and lecturers perceived training needs for forensic nursing practice included: advanced health assessment, 3.4%, evidence collection and documentation, 40.5%, forensic psychiatry, 12.9%, gender violence 5.2%, legal implications on forensic nursing 13.8%, theory and practice in forensic nursing, 24.1%. Majority of the nurses, 98.3%, had a positive attitude towards forensic nursing because they reported that forensic nursing is an integral component in the practice of nursing care in Kenya.

Conclusion and recommendation: This study identified gaps in forensic nursing education in Kenya in that the nurses reported a lack of skills needed to care for forensic patients. Training in forensic nursing science is therefore strongly recommended.

Keywords: Kenya; forensic nursing; forensic nursing practice; forensic nursing roles

Introduction

Forensic nursing is an essential specialty of nursing because it extends the traditional nursing practice with medical-legal aspects of potential or actual client problems. The International Association of Forensic Nurses defines forensic nursing as the application of nursing science to public or legal proceedings (IAFN 2002). Forensic nurses investigate real and potential causes of morbidity and mortality in a variety of settings; provide care to victims, the accused and perpetrators of crime (Lynch & Duval, 2011). Their responsibilities include conducting the forensic assessment, and photo documentation, knowing how to properly recover and preserve evidence from suspects and/or victims, testifying in court as a fact or expert witness, and serving as a bridge between healthcare and legal systems (IAFN 2002). This emphasizes the need for nurses to be educated to identify victims of abuse, violence, and neglect, and be able to collect and safeguard physical evidence associated with unknown or potential criminal acts. This enables forensic nurses to serve as a bridge between the criminal justice system and the healthcare system.

Consequences of the violence are seen by healthcare professionals as they render care to the injured in emergency departments (ED), operating theatres, and gynaecological wards daily. As Michel (2008) notes, nurses are usually the first healthcare professionals to see patients, speak with their family members, handle personal property and collect laboratory specimens. Such actions can be extremely important to the different categories

of forensic patients who are treated in the various healthcare settings worldwide.

All nursing roles in the subspecialties of forensic nursing are investigative in nature and require specific knowledge of aspects of the law and expert witness skills. Forensic nurses are involved in investigating the underlying causes of injury or death in many settings. Freedberg, 2008 explains that historically, schools of nursing had been less than responsive to the health needs of inmate populations in the education of nurses. This is an issue that urgently needs to be addressed in countries where there is no formal forensic education because the complex area of nursing practice presents many unique challenges that complicate the work of a forensic nurse who lacks this specialized knowledge.

Sugg and Inui, (1992) revealed that primary care providers are frustrated by what they perceive as an “extra” social responsibility and that they could quickly become overwhelmed in caring for “non-medical” issues. Reid and Glasser, (1997) also reported that health care providers have expressed concern regarding their inadequate preparation, uncertainty on how to proceed if maltreatment is disclosed, and frustration with the inability to ensure positive outcomes for victims. Thus, Lynch (2011) advises that the forensic nurse should not be a part of the trauma team involved in life-saving measures, but rather performs a separate task in the photo-documentation, recovery, preservation, and security of evidence related to the forensic patient in coordinated efforts with those who are providing medical interventions.

There is no documented history of the true beginnings of forensic nursing in Kenya in published literature. Today, forensic nursing across Kenya primarily focuses on working with patients who require mental health services or are in some way connected to the criminal justice system. Kenya needs to consider the broader aspect of forensic nursing because research has indicated that forensic nursing education can be beneficial for improving forensic patient care (Kent-Wilkinson, 1997). Therefore to improve the care provided to all categories of forensic patients in Kenya, a new approach is required. Forensic nursing education is a vital link in the development of clinical acumen required for responding to the forensic circumstances encountered in their daily practice (Lynch, 2011). Historically, the existence of a significant gap between the health and justice systems has been created by the absence of forensic knowledge in traditional nursing education in Kenya. Consequently, the failure to recognize forensic situations such as the Post- Election Violence (PEV) in 2007/2008 often results in the loss and destruction of evidence and the lack of successful prosecution of the perpetrators. This consequence produces a negative outcome: Justice denied for victims.

Forensic nursing has not been adopted in Kenya despite the fact that nurses work in settings that require this knowledge. Forensic nurses investigate real and potential causes of morbidity and mortality in a variety of settings; provide care to victims, the accused and perpetrators of crime. All nursing roles in the subspecialties of forensic nursing are investigative in nature and require specific knowledge of aspects of the law and expert

witness skills. There is a significant gap that has been created by the absence of forensic knowledge in traditional nursing education in Kenya.

The need for preparing nurses in the forensic aspects of nursing care has become essential as the number of reported incidents of criminal violence increases in Kenya. A training needs assessment identified gaps that can and should inform the development of an evidence-based curriculum for forensic nursing. Evidence-based curricula will ensure that the nurse get the needed training that makes them part of a new and emerging specialty and provides a standard of forensic nursing practice in Kenya.

Methods

The study adopted a descriptive cross-sectional research design. The study was carried out in three purposively selected referral hospitals in Kenya: Mathari Teaching and Referral Hospital, Kenyatta National Hospital and Nairobi Women's Hospital, which accommodate majority of forensic patients. In Mathari Teaching and Referral Hospital, of the 700 beds, 350 are occupied by civil patients and the remaining 350 are occupied by patients under legal custody. Kenyatta National Hospital is an 1800 bed capacity facility with six thousand members of staff of whom 1600 are nurses. It is the largest referral hospital in East and Central Africa. Nairobi Women's Hospital is a non-profit organization with a Gender Violence Recovery Centre (GVRC) which provides treatment to survivors of rape and domestic violence.

The population of this study consisted of one hundred and eleven nurses working at Kenyatta National Hospital's accident and emergency department, forty-three nurses working in Mathari Hospital's maximum security section and fifteen nurses working in Nairobi Women's Gender Violence Recovery Centre. The sample was one hundred and sixteen nurses working in the hospitals named above, who were selected proportionate to the number of nurses working in each setting. The sample size was determined using Fischer's (1998) formula but since the target population was less than 10,000, the sample size was adjusted using the formula by Yamane (1967). This translated to 64.5% (n=76) respondents from Kenyatta National Hospital, 26% (n=30) from Mathari Hospital and 8.6% (n=10) from Nairobi Women's Hospital. Ten nursing lecturers were purposively selected from public and private universities and the Registrar Nursing Council of Kenya served as the key informant for this study. Multistage sampling technique was utilized. A self-administered semi-structured questionnaire was used to collect both quantitative and qualitative data from 116 respondent nurses. A focus group guide was developed based on the study objectives to determine lecturers' awareness, preparedness in teaching forensic nursing and forensic nursing aspects to be included in the curriculum formulated by the researcher. A key informant interview was conducted with the registrar of the Nursing Council of Kenya. Data collection was carried out between January and April 2014.

Quantitative data from the complete questionnaires was coded and entered into the Statistical Package for Social Sciences (SPSS) version 20.0 database and analyzed using

descriptive statistics. Categorical data were then subjected to inferential statistics using Pearson's Chi-Square test to determine possible relationships between the variables and the predicted estimates and P values of 0.05 or less were considered to be significant. Results were presented using tables, pie charts, and column graphs. Qualitative data obtained from the open-ended questions in the questionnaires were coded for ease in analysis then categorized into emerging patterns which were later grouped into the identified themes. Data obtained from the focused group discussions and key informant interview were stored on tape recorders and later transcribed by listening keenly and writing down the responses. These were later coded for ease in analysis then categorized into emerging patterns. The data were then analyzed using thematic analysis where themes were identified based on the responses of the respondents.

Approval to conduct the study was sought from the School of the Nursing Sciences University of Nairobi. Clearance to carry out this study was sought from Kenyatta National Hospital/ University of Nairobi Ethics and Research Committee (KNH/UON-ERC).

Findings

Demographic characteristics

The distribution of sampled nurses per the hospital of work was as follows: 64.5% (n=76) respondents were from Kenyatta National Hospital, 26% (n=30) were from Mathari Hospital and 8.6% (n=10) were from Nairobi Women's Hospital. The age ranged between 25 and 59 (years) with a mean of

38.75 (± 6.93) years. The gender distribution of the participants was 73.3% (n=85) females while males comprised 26.7% (n=31). The duration of practice since qualification as a nurse ranged from 1-36 years with a mean of 14.48 years (STD dev. 7.58). The duration of work at the current hospital ranged from 1-33 years with a mean of 11.07 years (STD dev. 7.91). With regard to nursing professional qualifications 66.4% (n=77) had attained KRCHN qualification, 16.4% (n=19) had BSc qualification, 10.3% (n=12) had attained KRN/KRM, 6.0% (n=7) had EN/ECN while one respondent (0.9%) had attained Master's qualification

Nurses' awareness of forensic nursing

The study sought to assess the level of awareness of forensic nursing specialty. The overall findings revealed that of the total sample, 58.6% (n=68) were unaware of forensic nursing specialty while 41.4% (n=48) reported being aware. Specifically, 67.1% (n=51) of nurses sampled from Kenyatta National Hospital compared with 43.3% (n=13) of nurses from Mathari Hospital and 40.0% (n=4) of nurses from Nairobi Women's Hospital were not aware of forensic nursing specialty

Preparedness of nurses in forensic nursing practice

The findings show that 92.1% (n=70) of nurses at Kenyatta National Hospital compare with 83.3% (n=25) of Mathari Hospital nurses had not undertaken any training and all respondents 100% (n=10) from Nairobi Women's Hospital lacked any training in forensic nursing. Overall, 94.7% (n=72) of

nurses from Kenyatta National Hospital, 96.7% (n=29) of nurses from Mathari Hospital and 100% (n=10) of the nurses from Nairobi Women's Hospital stated that they need training in forensic nursing. Kenyatta National Hospital had 65.6% (n=63), who had not collected forensic evidence; 26.0% (n=25) respondents were from Mathari Hospital while 8.3% (n=8) from Nairobi Women's Hospital had not collected forensic evidence.

According to 30.2% (n=35) of the respondents, the existing nursing curriculum does not address the societal needs. Moreover, 46.6% (n=54) indicated that the nursing curriculum is not comprehensive in that it does not address all the training needs that a nurse requires to take care of a forensic patient. Moreover, a significant majority of the respondents 85.3% (n=99) indicated that the current nursing curriculum is not effective in developing forensic skills. A substantial proportion 82.8% (n=96) also indicated that the current nursing curriculum is not based on the global health standards. A significant majority 83.6% (n=97) indicated that the current nursing curriculum does not adequately prepare the respondents as experts in forensic nursing. However, with regards to the curriculum addressing the changing needs of the Kenyan society, 55.2% (n=64) of the respondents indicated that it was not adequate while 44.8% (n=54) indicated that it was adequate. A significant proportion 79.3% (n=92) indicated that the current nursing curriculum does not adequately equip them to handle forensic patients. Similarly 89.7% (n=104) of the respondents indicated that the current nursing curriculum does not adequately prepare them to practice nursing especially in a forensic setting.

Nurses perceived training needs in forensic nursing

Evidence collection and documentation was reported by 40.5% (n=47), 24.1% (n=28) of the sampled nurses reported that theory and practice in forensic nursing was an aspect they wished to be included in nursing training, 13.8% (n=16) of the respondents indicated that legal implications in forensic nursing was an important aspect. Forensic psychiatry was reported by 12.9% (n=15), gender violence was reported by 5.2% (n=6) respondents while 3.5% (n=4) indicated training in advanced health assessment as an important aspect to be trained on.

Key informant interview

Increased cases of victims of violent crimes in health facilities in the country triggered the NCK to recommend inclusion of forensic nursing in the BSc curriculum. It was also reported that nurses are tasked with the role of handling forensic cases even with the lack of training. A discussion of BScN curricula approved by the Nursing Council in Kenya revealed that all Universities in Kenya, with an exception of Kabarak and Maseno Universities had reviewed their BScN curricula and had included a twenty two hour component of forensic nursing. However, all these universities lack qualified nursing lecturers to teach in that specialty. It was also noted that all the universities copied the content as presented in the Nursing council syllabus. This content is however not purely forensic nursing content. The Procedure manual of the Nursing Council of Kenya also lacks content on Forensic nursing competencies.

Focused group discussion

The major themes, identified in the data as obtained from the focused group discussion as guided by research questions included awareness of the forensic nursing specialty, preparedness to teach forensic nursing and what to be trained on. Even though all the lecturers reported being aware of the forensic nursing specialty, they felt unprepared to teach the units added in the BScN curriculum. The following emerged as the main items they felt inadequately prepared to teach: evidence collection and documentation, forensic psychiatry, gender violence, forensic pathology, legal implications on forensic nursing, theory and practice in forensic nursing.

This study assessed the need for training in forensic nursing in Kenya. I focused specifically on the nurses' awareness of Forensic nursing specialty, preparedness to practice in Forensic settings and specific topics nurses would like to be trained in. The distribution of respondents per hospital was as follows: Kenyatta National Hospital 64.5 % (76), Mathari Hospital 25.9 % (30) and Nairobi Women's Hospital 8.6 % (10). These three hospitals are referral hospitals, which cater to the majority of forensic patients in Kenya. Majority of the respondents reported that they were unaware of forensic nursing specialty even though they handled forensic patients on a daily basis. There was a significant positive relationship between nursing qualification and the need for forensic nursing training ($p < 0.001$). Additionally, the difference in awareness of forensic nursing across hospitals was statistically significant ($\chi^2_{(2 \text{ df})} = 17.52$; $p = .000$). This difference in awareness could

be attributed to the sampling proportionate to size of the hospital since majority of the sampled nurses were from Kenyatta National Hospital. The findings demonstrate that the need for forensic nursing training was felt equally across the cadres of nursing. This is in agreement with the findings of Sugg & Inui, (1992) who revealed that many healthcare providers feel they lack sufficient knowledge to adequately assist victims of crime. This could be attributed to the fact that forensic nursing was not included in nursing curricula until 2011. Therefore the nurses might not have introduced to the specialty while in training and yet they were posted in clinical settings where this knowledge is required.

The findings also revealed that the lecturers involved in the focused group discussion had little awareness about forensic nursing. For instance a respondent from a public university said that “...as much as I have had heard about forensic nursing through the media I feel that I am incompetent in teaching forensic nursing...”. Her sentiments were echoed by another lecturer from private university who informed the group that “...anything to do with forensics should be handled by the law enforcement officers...”. This assertion culminated into a protracted discussion where other group members agreed with another member stating that “forensic nursing is better practiced in developed countries due to the proper systems in place”. These findings contravene the guidelines on scope and standards of forensic nursing practice (ANA, 2009) which requires that nurses offering forensic nursing education should acquire skills and knowledge appropriate to specialty area, practice setting, role, or situation.

Overall with regards to training in forensic nursing, a significant majority of the practicing nurses had not received any training on forensic nursing science. The difference in training in forensic nursing across the three hospitals was statistically significant (χ^2 (2 df) =18.94; p=.000). This shows that nurses in the sampled hospitals lack knowledge and skills required to care for forensic patients despite encountering forensic patients in their daily practice. Additionally, the lecturers unanimously reported that they were inadequately prepared to cover the required 22 contact hours on forensic nursing as stipulated in the Nursing Council of Kenya syllabus. The concerns raised by the nurses and lecturers about preparedness to practice in forensic settings were corroborated by the key informant who affirmed that the reported lack of preparedness is what prompted the NCK to issue a directive requiring forensic nursing content to be included in all BScN curricula in the country.

The aforementioned responses by the study subjects are in agreement with Reid and Glasser, (1997) who articulated that health care providers have expressed concern regarding their inadequate preparation, and frustration with the inability to ensure positive outcomes for victims of violent crimes. This highlights the existence of a significant gap that has been created by the absence of forensic knowledge in traditional nursing education in Kenya. With increased cases of violence being reported in Kenya today, the lack of knowledge in forensic nursing could impact the way forensic patients are handled negatively.

The practicing nurses reported that they were inadequately prepared in various aspects of forensic nursing namely: evidence collection, documentation and caring for victims of different types of violence in general. A general observation from the respondents was that this should be dealt with by the law enforcement officers. The lecturers shared similar sentiments as their practicing nurse counterparts. In the focused group discussion one lecturer asked “...*How do I teach something that I have never been taught before...*”. This triggered further discussion within the group and another lecturer opined “...*Maybe we should be trained first before being asked to teach...*”. This sentiment gained a nod of approval from the other lecturers who were present in the discussion reaffirming inadequate preparedness. The difference in need of forensic nursing training across the hospitals was not statistically significant ($\chi^2_{(2 \text{ df})} = 4.88; p=.087$). The findings demonstrate that the need for forensic nursing training was felt equally across the three hospitals under study.

The practicing nurses expressed concern that the curriculum was lacking important components that they felt would be important in preparing them to care for forensic patients. A significant majority of the respondents indicated that the nursing curriculum used in training them is not effective in developing forensic skills. Owing to the reported unpreparedness by the respondents it was evident that most nurses had difficulties identifying a forensic patient and were uncomfortable in dealing with victims of violence. This is in agreement with Cabelus (2012) who explains that a number of critical issues related to education, training, and

professional development go unresolved in forensic nursing. This is an indication that nurses in Kenya are posted to work in settings that require knowledge in forensic nursing even though they have not been trained on the same.

A significant majority of the practicing nurses, the lecturers and key informant indicated that forensic training is an important aspect in nursing in Kenya. With regards to aspects of forensic nursing that the respondents wish to be trained on, there were varied areas of interest and some of the responses were as follows: “...*I do not have any training on evidence collection and documentation...*” This concern was supported by another respondent who asserted “...*I have never collected any forensic evidence despite working with victims of crime...*” Another added “...*I find documenting assessment findings of victims of violence challenging...*” Concerning the handling of victims of violence one respondent offered “...*Patients whose diagnoses have legal implications should be handled by the law enforcement officers...*” Another area of concern was on forensic psychiatry where a respondent asserted “...*I am extremely terrified of mentally ill offenders...*” and further added “...*I wish I could be trained on how to care for the mentally ill offenders...*”

The aforementioned sentiments offered by respondents highlight the area that nurses required training on as follows: advanced health assessment, evidence collection and documentation, forensic psychiatry, gender violence, legal implications on forensic nursing and theory and practice in forensic nursing. The key informant further indicated

that most nurses reported that they were lacking capacity in evidence collection and documentation, nursing theory and practice and chain of custody of evidence collected. This is in agreement with Lynch (2011), who asserted that nurses in Kenya require a solid forensic education as a vital link in the development of clinical acumen required for responding to the forensic circumstances encountered in their daily practice.

Relevance to nursing and midwifery

In this paper, we have highlighted the existence of a significant gap that has been created by the absence of forensic knowledge in traditional nursing education in Kenya. With increased cases of violence being reported in Kenya today, the lack of knowledge in forensic nursing could impact the way forensic patients are handled negatively.

It is hoped that these findings will guide the formulation of a curriculum that addresses Kenyan forensic issues which will bridge the gap that has been created by the absence of forensic knowledge in traditional nursing education in Kenya. Consequently, this will prevent the negative outcome of justice lost for victims of crime in Kenya.

Conclusion and Recommendations

Based on the findings nurses practicing in Forensic settings in Kenya are not adequately trained to practice in forensic settings based on their current training. There is also a gap in forensic nursing knowledge in Kenya and the specific nurses' perceived training needs for forensic nursing practice include: advanced

health assessment, evidence collection and documentation, forensic psychiatry, gender violence, forensic pathology, legal implications on forensic nursing, theory and practice in forensic nursing.

Based on the findings of this study, the researcher recommends that Kenyan Universities should introduce forensic nursing science in their nurse education curricula. Training nurse educators in forensic nursing at the master's level will be the first step that will allow a larger number of nurses to be trained countrywide, thus improving nursing care and helping to resolve legal issues that would otherwise remain unanswered in the absence of this expertise.

At the national level, the government should embrace forensic nursing as a potential means of addressing the linked issues of timely evidence collection and extended waiting time for victims to receive legal services.

Limitation and Delimitation

This study's generalisability may be limited because it was carried out in referral hospitals and among university lecturers. Similar studies are recommended for lower level hospitals and midlevel nurse training institutions.

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