

Forensic patients in the emergency department: Who are they and how should we care for them? ☆

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Abstract

Background

Patients who suffer violent, crime related injuries are likely to seek medical assistance in emergency departments. Forensic patients may not disclose the cause of their injuries leading to the impairment of evidence. We explored healthcare providers’ perceptions of forensic patients and how they should be cared for.

Method

The perceptions of physicians and nurses regarding the profiles and care of forensic patients were explored in three urban emergency departments. The data were collected through a talking wall and analysed collaboratively, with the participants, using content analysis.

Results

Healthcare providers in emergency departments differentiated between living and deceased forensic patients. Healthcare providers identified living forensic patients as victims of sexual assault, assault, gunshots and stab wounds, and abused children. Deceased patients included patients that were dead on arrival or died in the emergency departments. Healthcare providers acknowledged that evidence should be collected, preserved and documented.

Conclusion

Every trauma patient in the emergency department should be treated as a forensic patient until otherwise proven. If healthcare providers are unable to identify forensic patients and collect the evidence present, the patients’ human right to justice will be violated.

Keywords: Clinical forensic care; Emergency department; Violence and crime; Talking wall

1 Introduction

Violence and crime is escalating at alarming rates around the world. The World Health Organization cites violence and crime as the fourth leading cause of death amongst adults [1]. Many victims survive violent and criminal incidents with severe to minor injuries and most seek medical attention in emergency departments [2-4]. Forensic patients are victims of violence and crime that require the involvement of the justice and healthcare systems due to the nature of their injuries [5]. Patients with traumatic injuries should therefore be treated as potential forensic patients until proven otherwise [6].

Victims of violence and crime enter the emergency department (ED) with evidence on their bodies, clothes and belongings that can assist with criminal investigations or investigations into violent incidents [7]. Despite this, emergency healthcare providers tend to focus on life-saving management, resuscitation and referral rather than on preserving and collecting evidence. For example, when a trauma patient enters the ED, regardless of the cause of injury, wounds are exposed for examination, cleaned and sutured, often resulting in the loss, contamination or destruction of evidence [8]. As a result, the manner in which evidence is handled in EDs may compromise and violate the victim’s right to justice [9,1].

Potential forensic patients have distinctive physical and emotional needs that require sensitivity from healthcare providers in EDs to advocate for justice and protection of the patient. Fox and Cook [10] suggest that if awake and orientated patients perceive healthcare providers as insensitive, they may not disclose their need for management of evidence and referral to the justice system. Patients may fear blame from the healthcare providers or they may know and fear the perpetrators. In the chaotic environment of the ED, saving lives and treating patients in the shortest amount of time to make space for new patients tends to take precedence over identifying forensic patients and collecting evidence [11]. Furthermore, McBrearty [12] points out that patients may be so focused on their injuries that ‘victimisation may not be apparent’. If medical management damages or destroys evidence on a forensic patient, case progression may be compromised. The destruction of evidence even leads to negative prosecution outcomes in sexual assault cases in the USA [13,14]. Healthcare providers in EDs are ideally placed to identify, collect and preserve evidence, and to document injuries within minutes to hours of a patient being injured.

Given the high rate of violent crimes in South Africa, Ward et al. [15] called for an assessment of the ability of healthcare services to screen and manage forensic patients. Simply caring for forensic patients both physically and emotionally is no longer regarded as sufficient. Healthcare providers in EDs have to take up their forensic roles and responsibilities to preserve and collect evidence that can be used to prosecute perpetrators [16,3]. This study explored South African healthcare providers’ perceptions of the profiles of forensic patients and how they should be cared for. Exploring the perceptions of healthcare providers towards forensic patients provides an important baseline for future educational programmes and interventions aimed at simultaneous treatment of patients and collection of evidence.

2 Methods

This study was based on an action research design that strongly advocates for participants to be actively involved throughout the research process. The participants were involved in the creation of research questions, data collection and data analysis meeting the aims of action research, namely building relationships, communication, inclusion and participation [17]. We used this methodology to promote awareness amongst practitioners in their current practice, encouraging them to seek solutions applicable to their context.

2.1 Setting and sample

The healthcare providers – physicians and nurses – at three EDs in urban hospitals in South Africa participated in the study. Nurses were the most accessible participants while physicians were not as actively involved due to their work schedules. ED A was in a state hospital with 31 beds that was staffed by 70 nurses (23 professional nurses) and 23 physicians that on average attend to 1600 patients per month. Two of the ED’s were in private hospitals, which provides care to patient with medical insurance, with 14 beds each. ED B was staffed by 28 nurses (22 professional nurses) and 22 physicians and, on average attend to 1200 patient per month. ED C was staffed by 33 nurses (15 professional nurses) and 25 physicians that on average attend to 2500 patients per month. An estimated 39% of the patients attended to in the selected EDs were potential forensic patients. An open invitation was extended to all permanently employed healthcare providers to participate voluntarily. The exact number of participating healthcare providers is unknown due to the open participatory nature of the data collection method.

2.2 Data collection

We collected qualitative data through the use of a talking wall. This ensured minimal interruption to daily activities in the participating EDs. The talking wall technique [18] was developed in the business environment to initiate discussion, explore issues, analyse problems and develop action plans [19,20]. Data was collected by writing questions, posed by the researcher, on a flipchart attached to a wall. Participants provided answers, by writing on the same sheet of flipchart paper.

The nurses as the most accessible participants identified a suitable wall space in the tea rooms of each of the EDs as all healthcare providers utilize the tea room. We posted the following question on the talking wall: Who are forensic patients and how should we care for them? Healthcare providers then wrote down their perceptions and opinions on the sheets of paper provided. The data was collection over a period of a month from 25 February to 2 April 2014. The talking wall worked well, for the reason that participants could answer the question in their own time. However exactly how many participants contributed is unknown as some points were added after discussions in the same hand writing while others obscured their hand writing or just made ticks behind the point they agreed with. The answers provided was written in the form of short statements.

2.3 Data analysis

After the data were collected from the talking wall, we invited all participants to participate in a generated collaborative data analysis [21] using inductive content analysis as proposed by Stringer [17]. Participants from the EDs volunteered to participate in data analysis sessions and included only professional nurses as no physicians volunteered to participate. Sessions were facilitated by one of the researchers and held separately in each ED. The responses provided on the talking wall were read and re-read out loud by one of the participants and then meaningful words, phrases and sentences were circled by the researcher. Two of the ED’s namely ED A and ED C divided the responses from the data into living and deceased forensic patients and thereby created the two main themes. The words, phrases and sentences were then categorised to fit under care that should be provided to living and deceased forensic patients. The data from the three EDs were combined as the categories and themes identified were similar (see Table 1 for summary)

Table 1 Results from the collaborative qualitative content analysis.

Theme	Categories	Data excerpts
Living forensic patient in the ED	Forensic patients	Victims of sexual assaults
		Assault victims
		Gunshots victims
		Victims with stab wounds
		Abused children
	Care rendered	Evidence collection
		Preserving evidence
		Documenting
		Referral to the police
Deceased forensic patient in the ED	The case of the unnatural deaths	Gunshot
		Stab wounds
		Motor vehicle accidents
		Pedestrians vehicle accidents
	Reporting to authorities	Informing the Police

The research ethics committees of the Faculty of Health Sciences, University of Pretoria, South Africa (Reference number 364/2013), the hospitals approved the study protocol prior to data collection. The healthcare providers signed informed consent prior to the study and verbal process consent was obtained before each contact session.

2.4 RIGOR

The trustworthiness of the data was ensured through collaborative data analysis with participants from the selected EDs. After the data analysis was completed member checking of the raw data and the themes and categories in each ED was done by displaying the sheets of paper on the wall space in the tea room and requesting comments and additions as suggested by Loh [22]. The sheets were displayed for a period of two weeks to ensure that all the healthcare practitioners that participated had an opportunity to check the findings. No changes were made to the themes and categories.

3 Results

The two themes identified from the generated data were namely living and deceased forensic patients in the ED as participants differentiated between the service provided to living and deceased forensic patients. The themes are explained using categories and excerpts from the data recorded on the talking wall as summarised in Table 1.

3.1 Living forensic patients

The first category namely *forensic patients* identified the type of patients that the participants perceived as being living forensic patients. The types of patients identified were victims of sexual assault, assault, gunshots and stab wounds, and abused children.

The second category identified was the *care rendered* that focused on the forensic care in the form of evidence management. The evidence that needs to be collected from living forensic patients in the ED were ‘*bullets*’ (ED A and B), ‘*clothing*’ and ‘*storing it* (clothing) *in paper bags*’ (ED B) and the ‘*collection of evidence from sexual assault patients*’ (ED B and C). The participants recorded that this evidence ‘*can be used in investigations or court*’ (ED A). Participants regarded the documentation of a patient’s history, injuries, and the evidence collected as important. The handling of collected evidence especially ‘*storage of the (collected) items*’ (ED A) was also important. The participants specified

that ‘*child abuse with obvious/visible injuries should be reported to the Family violence, Child Protection and Sexual Offences Unit of the police service*’ (ED B and C). If forensic patients with recognisable signs and symptoms of violence and crime were admitted to the emergency department and found to have evidence on their person ‘*call the police for investigations and collection of drugs obtained from patient*’ (ED A).

3.2 Deceased forensic patients

Those patients who were either dead on arrival at the ED or died in the ED from obvious violent or criminal incidents were included in the category of the case of unnatural deaths. The types of patients that were mentioned in this theme included victims of gunshots, stab wounds, ‘*motor vehicle and pedestrian vehicle accidents*’ (ED B).

The participants perceived that no direct forensic care was needed and the category of *reporting to the authorities* was identified. Participants agreed that healthcare workers in the ED were responsible for ‘*informing the police services of a patients dead on arrival*’ (ED B) and ‘*arranging post-mortems*’ (ED B) of deceased forensic patients.

4 Discussion

The participating EDs concluded that forensic patients included living and deceased victims of violence and crime. South African healthcare providers in three EDs in urban hospitals identified living forensic patients in EDs as victims of sexual assault, assault, gunshots, stabbings and abuse. The deceased forensic patients included victims of gunshots, stab wounds, motor vehicle and pedestrian vehicle accidents. Healthcare providers were able to identify some groups of forensic patients but need to familiarize themselves with the entire forensic patient population as identified by Pasqualone [4] and Pasqualone and Michel [23,24] in Table 2.

Table 2 Categories of forensic patients.

Abuse of the disabled*	Malpractice and/or negligence
Assault and battery*	Occupation-related injuries
Burns >5% of body surface area	Organ and tissue donation
Child abuse and neglect*	Personal injuries*
Clients in police custody	Product liability
Control of communicable diseases	Questioned death
Domestic violence*	Sexual assault*
Elder abuse and neglect*	Sharp force injuries*
End-of-life decisions –Not for resuscitation	Substance abuse
Firearm injuries*	Toxic exposure
Food and drug tampering	Transcultural medical practices
Forensic psychiatric clients	Transportation injuries
Gang violence*	Victims of mass destruction/terrorism*
Human and animal bites*	

Adapted from: Pasqualone [4] and Pasqualone and Michel [23,24].

The groups of forensic patients serves as a reminder to healthcare providers of the number of forensic patients possibly in their care as this may increase awareness and extend the specific forensic care provided. Pasqualone [4] identified forensic patients based on United States of America and Australian legislation, where there is specific legislation around each category. The groups of patients identified as the forensic population identified in Table 2 may differ in countries with other legal foundations [4]. In South Africa the patients declared to be in need of forensic services includes victims of sexual assault, physical assault, psychological trauma, domestic violence, substance-, drug- and alcohol-related injuries or violence, drunken driving, child abuse and elder abuse [25]. The list based on the South African context is not as detailed as the groups of forensic patients identified by Pasqualone [4] yet, the

participants were able to identify the groups of patients often attended to in the EDs. However victims of psychological trauma, domestic violence, substance- drug and alcohol related injuries and drunken driving were omitted by the participants, further research and clarification for the omission in identifying these groups of patients is needed.

Healthcare providers should be educated about the forensic patient population so that they can identify and provide appropriate care and refer this specific population to support groups and the criminal justice system. Conviction rates for contact crimes are estimated to be between 8.2% and 9.9 % [26], and the role that evidence collected or not collected by healthcare providers plays in the prosecution rate, needs further investigation.

The initial care provided to forensic patients should balance the medical needs while protecting and preserving evidence [27]. The specific care provided to forensic patients were identified as the collection of evidence, documenting injuries and evidence collected, and referral. Collecting evidence is indeed an essential part of forensic care [28,16]. While collecting evidence is not a complicated task, training in the collection and documentation of evidence is essential to ensure that the evidence can be used in the justice system [27]. Most countries have standardized evidence collection kits and the collection kits in South Africa includes a detailed manual explaining the procedure of evidence collection. However to get access to the evidence collection kits may sometimes be challenging and some practitioners may resort to using ordinary throat swabs and envelopes to create a makeshift evidence collection kit [11]. Currently in South Africa forensic aspects during undergraduate and post graduate education is limited and mostly focused on forensic psychiatry and pathology [29] limiting the healthcare providers knowledge on alternative options available for equipment and materials to use when collecting evidence. Healthcare providers in South Africa have however, been found to be confident in caring specifically for sexual assault victims regardless of their knowledge levels [29]. According to the authors the high levels of confidence could be due to poor course content that may create a false sense of confidence without improving actual knowledge [29]. Linnarsson et al. [30] found that healthcare providers in Sweden were able to care for sexual assault victims but were ill-equipped to care for other groups of forensic patients. Limited literature is available on the confidence levels of healthcare providers regarding forensic care and more investigation is required

The participants also reported that where abuse is evident in children, this should be referred to police services. However, the diagnosis of child abuse is emotional and clinically challenging [31]. The reporting of child abuse is mandatory and healthcare providers in EDs are ideally placed to identify and act in order to protect the children in their care.

The participants furthermore described care activities limited to the forensic needs of the patients and made no mention of the medical or psychological needs. Medical needs may have been overlooked due to the instinctive manner in which healthcare providers assess, treat injuries and provide pharmacological interventions in EDs. There is consensus that forensic patients have been exposed to trauma and their reaction to the incident depends on the traumatic experiences through their lifetime [32]. Each patient should be individually assessed for their psychological needs in a non-judgemental manner as reactions to trauma are very unpredictable [32]. Healthcare providers should be aware that secondary traumatization of the forensic population should be avoided therefore, healthcare providers' attitudes and words have far reaching effects on the healing of forensic patients [33]. The care required by forensic patients should address their medical, forensic and psychological needs and can only be initiated after the patient has been identified as a forensic patient.

5 Limitations

The use of the talking wall posed some limitation as it was situated in the tearoom that is used by all healthcare providers in the participating EDs, thus the number and category of healthcare providers that participated could not be determined. Furthermore participants only wrote short statements and words on the flip chart posing a challenge for providing long descriptive quotations in the results. Therefore the data from all these EDs was combined to provide an overall picture of the forensic patients cared for and in what way.

6 Recommendations

Healthcare providers in EDs should be able to identify forensic patients to ensure that evidence could be collected, preserved and documented and that referral to the criminal justice system takes place. However further research on the outcomes of collection and preservation of evidence from forensic patients in the EDs need to be undertaken to assess if more cases progress to trial. In addition further research and investigation on the use of the talking wall as a data collection method is needed in order to overcome the challenges.

7 Conclusion

Healthcare providers in the participating ED's in South Africa were to some extent aware of the forensic patients in their care. The participants realised that evidence must be collected and that documenting injuries and the details of the evidence collected are important. Therefore, healthcare providers in EDs should be able to recognise forensic patients, collect and preserve evidence needed to build a case against a perpetrator, and prevent the damage or destruction of evidence.

This paper adds to the awareness of the type of forensic patients and the care that should be provided in EDs. Healthcare providers in the EDs should be vigilant and have a high index of suspicion as every trauma patient is a forensic patient until otherwise proven.

Conflict of interest

We concur that we have no conflict of interest to declare.

Ethical statement

The study was approved by the Research Ethics Committee, Faculty of Health Sciences, University of Pretoria (Reference number 364/2013).

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Highlights

- Forensic patients includes more patients that sexual assault victims.
 - Nurses in emergency departments must assume their forensic responsibilities.
 - A trauma patients is a forensic patient until otherwise proven.
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