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Original Research Article

Legal and ethical dilemma in treating trauma patients

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ABSTRACT

Background: The severity of the injury may be such that ongoing care of the individual patient is futile, and this can lead to disagreement with the family or friends of the patient with regard to further treatment. Patient capacity or ability to participate in the informed consent process may be compromised and the patient is therefore managed by the clinical team on the basis of the best interest's principle, with clinicians relying on proxy consent or substituted judgment. These sections of the hospital have their own ethical and medico-legal issues for the trauma patient and the treating clinician. The aims and objectives were to estimate the time of triage/ specialist care given in the Emergency Medical department (EMD) in Trauma case; to compare the result with Australasian triage scale and Manchester triage scale system and to study about the demography and audit the necessary findings from trauma patients in casualty.
Methods: This is a Prospective observational study done at R. L. Jalappa Hospital a constituent of Sri Devaraj Urs Medical College and Research, Kolar, Karnataka a rural based tertiary teaching hospital.
Results: A total of n=108 patients were evaluated in this study, severity of the injury was moderate been the highest with 52 (48%), severe been 33 (30.6%), mild been 20 (18.5%). Majority of the injury was in the age group 21-40, mostly been the major working population and bread winners involved in the Road traffic accidents. Mean time of specialist (surgeon) attending to the case was 70 minutes i.e. the interval between CMO and consultant attending to the trauma case in EMD.
Conclusions: Management of Trauma patients involves very meticulous work which can be achieved only with proper team-work and planning protocol and the more important aspects towards the management involves the documentation and proper communication with patient attendants and responsible persons. On concluding, the triage system followed in our setup with specialist care been provided is equal in its efficacy in comparison to the Manchester triage scale and is almost in par with the Australasian triage scale.

Keywords: Ethical, Management time, Medico-legal, Trauma

INTRODUCTION

The severity of the injury may be such that ongoing care of the individual patient is futile, and this can lead to disagreement with the family or friends of the patient with regard to further treatment. Patient capacity or ability to participate in the informed consent process may be compromised and the patient is therefore managed by the clinical team on the basis of the best interest's principle, with clinicians relying on proxy consent or substituted judgment.[1] These sections of the hospital have their own ethical and medico-legal issues for the trauma

patient and the treating clinician.[2] Emergency departments (ED) across the globe follow a triage system in order to cope with overcrowding. The intention behind triage is to improve the emergency care and to prioritize cases in terms of clinical urgency.[3] In ED triage, medical care might lead to adverse consequences like delay in a) providing care b) compromise in privacy c) confidentiality d) poor physician-patient communication and ultimately failing to provide the necessary care altogether or even having to decide whose life to save when not everyone can be saved.[4]

These consequences challenge the ethical quality of emergency care. This article provides an ethical analysis of "routine" emergency department triage.[5] The four principles of biomedical ethics that is a) respect for autonomy b) beneficence no maleficence c) justice provide the starting point and help us to identify the ethical challenges of emergency department triage. However, they do not offer a comprehensive ethical view. To address the ethical issues of ED triage from a more comprehensive ethical view, the care ethics perspective offers additional insights.

METHODS

This is a prospective study done at R. L. Jalappa Hospital a constituent of Sri Devaraj Urs Academy of Higher Education and Research, Kolar a rural based tertiary teaching hospital at NH4 (National Highway) in Kolar, Karnataka on way between Chennai and Bengaluru. Ethical clearance was obtained from present institutional ethical committee before the start of the study to obtain at the causality from the patients/ relatives/ accompanying persons of the road traffic accidents arriving at the casualty/ Emergency department. Data included basic details Hospital number, Age, sex, Injuries, Management at Emergency Department and disposition of the patient.

Statistical method

Data collected in pre-formatted sheet, entered into excel (Microsoft corporation), analyzed. Mean and standard deviation was obtained. Result and analyzed. The aims and objectives were the principles to comply with: legal concept with quality assurance practice legal; perform within legal and ethical boundaries; to prepare and maintain medical records and audit accurately.

RESULTS

Total of 108 patients were involved in the study, and the results were drawn based on the severity of injury, age group involved in the injury, the time lapse between the attending of the patient by CMO (casualty Medical officer) and the consultant on call. The results have been mentioned below.

Table 1: Severity of injury based on the grade the frequency and percentage are presented.

		Frequency	Percent
Severity of injury	NA	3	2.8
	Mild	20	18.5
	Moderate	52	48.1
	Severe	33	30.6
	Total	108	100.0

In present study covering the local area of Kolar, Karnataka, percent of victims having moderate injury was the maximum with the percentage of 48.1% and with more severe injury were second oncoming with 30.6%. and milder injuries being 18.5.

There can be still shortcomings in this, as the percent of people presenting with mild injury may be very less due to the ignorance and negligence of the population towards its treatment.

Table 2: Time interval between CMO and consultant seeing the patient.

Statistics	
Mean	1.0152
Std. error of mean	0.26425
Std. deviation	2.73342

Mean time lapsed between CMO and consultant was 1.01 hrs. which was consistent with International standards. The organization of the EMD and triaging patients towards the attending of the trauma patients was at par.

Table 3: Age group and severity of injury postulating the different age groups involved in the aforementioned accidents.

		Severity of injury				Total
		NA	Mild	Moderate	Severe	
Age group	<20	1	0	11	7	19
	21-40	0	11	28	16	55
	41-60	0	5	8	7	20
	>60	1	4	5	3	13
Total		2	20	52	33	107

Severity of the trauma changed with the age group involved in the trauma patients. Younger age groups of 21-40 years were involved in the moderate and severe injury. Next with the middle age of 41-60 years of age were involved in moderate injury more compared to severe.

Table 4: Information provided by informant in time of the injury and a family member being the most common one presenting the patient to the EMD.

Information provided by	Frequency	Percent
NA	1	0.9
Brother	1	0.9
Family member	96	88.9
Father	4	3.7
Husband	1	0.9
Son	3	2.8
Wife	2	1.9
Total	108	100.0

In present study, presenting history for the traumatized victims were provided by a second-degree family relative accounting for more than 88.9 % of the population being studied.

DISCUSSION

Emergency care is a sensitive issue which requires urgency due to overcrowding. Urgency of care results from a combination of physical and psychological distress, which appears in all emergency situations in which a sudden, unexpected, agonizing and at times life threatening condition leads a patient to the emergency department (ED).[6]

The Australasian College for Emergency Medicine (ACEM) defines ED overcrowding as the situation where ED function is impeded primarily because the number of patients waiting to be seen, undergoing assessment and treatment, or waiting to leave exceeds the physical and/or staffing capacity of the ED.[7] ED overcrowding is a common scenario across the globe and resources like staff, space and equipment are limited.[1-3] Patients often have to wait for a long time before being seen by a doctor and even longer before being transferred to a hospital bed.[8] The result is not merely inconvenience but a degradation of the entire care experience-quality of care is compromised, the patient's safety may be endangered, staff morale is impaired and the cost of care increases.

In this study conducted in the trauma center from a tertiary care center, authors observed that moderate type of injury was the most common type accounting for almost 52% of the injuries (Table 1), next comes are the very severe ones, most commonly involved age group was 21-40 (Table 3), corresponding to the previous reference as said in the introduction i.e., bread winner of the family are the most commonly involved in Road traffic accidents. The attendant giving the history and presenting the patient to the EMD is a less related family member (88.9%) (Table 4) and the most important inference drawn from present study is the mean time for a consultant to attend to the patient is 1.01 hours (Table 2). The term triage is derived from the French word trier (to sort) is now specifically used in specific health care contexts. Iserson et al, describe the requirement of three conditions for triage in emergency practice:

1. At least modest scarcity of resources exists.
2. A health care worker (often called a triage officer) assesses each Patient's medical needs based on a brief examination.
3. The triage officer uses an established system or plan, usually based on an algorithm or a set of criteria to determine a specific treatment or Treatment priority for each patient in short, the triage is all about in life threatening conditions, the question can become: "Who shall live when not everyone can live?" Ethical issues are hardly considered in emergency department setting.[4]

Ethical issues are hardly considered in emergency department setting. A study by Anderson-Shaw et al has suggested that patients hospitalized through ED often present with ethical dilemmas significantly impacting their inpatient care and overall health.

Table 5: Emergency department triage.

Manchester				
England	1-	Immediate	Red	Level 1-0 minutes
Scotland	2-	Very urgent	Orange	Level 2-10 minutes
	3-	Urgent	Yellow	Level 3-60 minutes
	4-	Standard	Green	Level 4-120 minutes

Table 6: The Australian triage scale.

Australian Triage Scale			
Australia	1-	Resuscitation	Level 1-0 minutes
New-Zealand	2-	Emergency	Level 10 minutes
	3-	Urgent	Level 30 minutes
	4-	Semi urgent	Level 60 minutes
	5-	Non-current	Level 120 minutes

There is need of more research regarding the proactive use of ethics consultation outcomes in ED.[9-10] The inappropriate use and/or misuse of ED services is one of the common problems leading to overcrowding. Socio demographic characteristics are predictors of non-urgent use of emergency department. Public orientation, strengthening and expanding primary care services can be a solution to the problem. For ED triage on the international literature are The Manchester Triage Score (Table 1), The Canadian Triage and Acuity Scale, The

Australian Triage Scale (Table 2) and Emergency severity Index (ESI). In ESI, there are five-levels of these triage score. In addition, national and institutional guidelines are also developed and used in practice.[10]

CONCLUSION

Management of trauma patients involves very meticulous work which can be achieved only with proper team-work and planning protocol, and the more important aspects towards the management involves the documentation and proper communication with patient attendants and responsible persons. Following all this the management of trauma cases by present surgical team in the Emergency Department intensive care unit.

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