



A STUDY ON PROFILE OF PATIENTS ATTENDING EMERGENCY DEPARTMENT OF GAUHATI MEDICAL

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ABSTRACT

Introduction:

“Medical Emergency” is defined as a situation when the patient requires urgent medical care to prevent loss of life or limb and initiate action for the restoration of normal healthy life. Emergency care should be of high quality, cost effective and compassionate. Emergency department of Tertiary care teaching hospital admits patients of various demographics and diagnosis throughout the year and is one of the overcrowding units worldwide.

Emergency department is that part of a tertiary level institution which is staffed and equipped so as to provide rapid and varied emergency care especially or those who suffer from sudden and acute illness and are victims of severe trauma.

Gauhati medical college and hospital is a pioneer institute which runs academic pursuits, patient care and is a referral centre for speciality and superspeciality treatment. The emergency and the accident services are one of the mainstay offered by GMCH.

Materials and methods: The present hospital based cross-sectional study was conducted in the emergency department of GMCH from 10-05-2016 to 09-08-2016. Data of total 1372 patients who came to the emergency department during the evening hours from 6-10 pm were collected by a pre-designed and pre-tested schedule containing both open and closed ended questions.

Results: Majority of the patients were in the age group of 21-40 years (41.13%). Most of the patients were males (61.96%). Fever is the most common symptom (25.53%). About 44.92% of the patients were provisionally diagnosed as having fracture. About 43.22% of the patients were referred to the medicine department from emergency.

Conclusion: The first impression on the patient should be a proper and positive emergency care. Prompt and effective emergency care can save lives and reduce severity. It also reduces the duration of illnesses.

KEYWORDS : Emergency department, Emergency care, Gauhati medical college and hospital.

Introduction:

“Medical Emergency” is defined as a situation when the patient requires urgent medical care to prevent loss of life or limb and initiate action for the restoration of normal healthy life. Emergency Medicine is not a specialty in India as yet and hence, very few hospitals in our country currently have Emergency Medicine Department. However most hospitals have an area designated as “Casualty”, which is most often staffed by junior doctors and is inadequately equipped to effectively handle emergencies.¹

Emergency department is that part of a tertiary level institution which is staffed and equipped so as to provide rapid and varied emergency care especially or those who suffer from sudden and acute illness and are victims of severe trauma.

Emergency care should be of high quality, cost effective and compassionate. The accident and emergency services are one of the mainstays in the chain of medical care offered by the present day hospitals. With emergency department admissions accounting for about 40% of all hospital admissions in most countries, managing and improving processes in the emergency medical department is crucial to both care quality and operational profitability.²

GMCH is a centre of excellence for patient care with students and Doctors from across the nation. It is a pioneer institute which runs academic pursuits, patient care and is a referral centre for speciality and superspeciality treatment. The emergency and the accident services are one of the mainstay offered by GMCH.

Out of total 1,02871 patients attending the hospital during the month of June and July, 2016, 20% attend emergency department. About 34.8% of total casualty patient got admitted during that duration. In 1961, Platt Committee (UK) recommended the name Accident and Emergency Department for casualty services.

In India, the Central Council of Health in 1963 urged all state governments to set up Emergency Medical services in all major towns and cities.³

Common denominators of any successful Emergency Care are⁴:

1. Availability of adequate physical facilities, equipments, and supply of life saving drugs and surgical items.
2. Immediate professional attention after arrival in the hospital ED.
3. Continued and content medical support till the patient is in the ED.
4. Speedy diagnosis and resuscitation so as to make it possible for integrating a patient into an existing system of patient care services in the institution.

Objectives:

- 1) To study the socio demographic profile of the patients attending the emergency Department.
- 2) To ascertain the category of patients attending casualty based on the type of illness that are diagnosed during the specified period of time and their outcome.

Materials and methods:

The present hospital based cross-sectional study was conducted in the emergency department of GMCH for a period of 3 months from 10-05-2016 to 09-08-2016. Data of total 1372 patients coming to the emergency department were collected by purposive sampling. For convenience data were collected during the evening hours during the evening hours from 6-9 pm for 5 consecutive days in a week except Saturday and Sunday. Data were collected by using a pre-designed and pre-tested schedule containing both open and closed ended questions from the patients' attendants and from the patients' self. Hospital records were also used as study tool for collection of secondary data.

Those who were willing to take part in the study were included. Unidentified patients, patients brought dead, patients brought under police custody, those not willing to take part and those attending emergency labour room were excluded. Verbal informed consent was taken from each of the attendant of the patients explaining purpose and nature of the study. Privacy and confidentiality of the patients were maintained while collecting data and the results were presented in aggregate form without individual identification.

Findings of the study were tabulated and presented as percentage.

Results:

Table 1 shows distribution of the patients as per their socio-demographic characteristics. Majority of the patients attending the Emergency Department were in the age group of 21-40 years (41.13%).

Majority of the patients were males (61.96%).Majority of them were Hindu by religion (61.34%), About 29.95% were farmers by occupation.

Table 2 shows distribution of patients according to their presenting symptoms. Fever is the most common symptom(25.53%).

Table 3 shows distribution of patients according to their status of diagnosis.Majority 41.84% were diagnosed provisionally.

Table 4 shows distribution of patients according to their provisional diagnosis.Majority of the patients had fractures (44.92%), followed by soft tissue injury (22.03%) and burn (16.96%).

Table 5 shows distribution of patients according to their outcome of treatment.Majority 56.03% patients were admitted and 14.89% were discharged.

Table 6 shows department wise referral of patients from emergency. About 43.22% of the patients were referred to the Medicine department from Emergency.

Table 1- Distribution of respondents according to their socio-demographic characteristics :

Characteristics	Number of children	Percentage
Age group		
Upto 20 years	243	17.71
21-40 years	564	41.10
41-60 years	418	30.49
61-80	116	8.4
Above 80	31	2.26
Gender		
Male	905	65.96
Female	467	34.04
Religion		
Hindu	841	61.34
Muslim	311	22.69
Christian	160	11.70
Others	60	4.27
Occupation (n=1153)		
Farmer	345	29.95
Business	306	26.58
Labour	116	10.12
Service class worker	97	8.43
Housewife	209	18.14
Other	80	6.78

Table 2 : Distribution of patients according to their presenting symptoms.

Symptoms	No	Percentage
Fever	350	25.53
Accident	311	22.69
Loose motion	272	19.85
Pain abdomen	194	14.18
Burn	97	7.09
Poisoning	78	5.67
Snake bite/Animal bite	39	2.83
Vomiting	189	13.82
Chest pain	48	3.54
Difficulty in breathing	39	2.83
Abdominal swelling	68	4.96
Bleeding from nose	29	2.12

Table 3 : Distribution of patients according to their status of diagnosis:

Status of Diagnosis	No	Percentage
Provisional Diagnosis	575	41.84
Undiagnosed and under evaluation	797	58.16
Total	1372	100

Table 4:Distribution of patients according to their provisional diagnosis:

Provisional Diagnosis	Number	Percentage
STI	127	22.03
Fracture	258	44.92
Chronic liver disease	29	5.08
Animal bite	29	5.08
Snake bite	10	1.69
Renal colic	24	4.24
Burn	98	16.96
Total	575	100

Table 5: Distribution of patients according to their outcome of treatment:

Outcome	No	Percentage
Under observation	380	27.67
Admitted	789	56.03
Discharged	204	14.89
Dead	19	1.41
Total	1372	100

Table6: Department wise Referral of patients from emergency:

Department	No	Percentage
Medicine	341	43.22
Surgery	88	11.15
Orthopaedics	195	24.71
ENT	29	3.68
Others	136	17.24
Total	789	100

Discussion:

Emergency services are a vital component of the hospital. The emergency department of GMCH receives approximately 284 patients every day, accounts for around 20% of the admission to the hospital.Majority of the patients were admitted under the discipline of General Medicine.

In the study, it is found that majority of the patients were in the age group of 21-40 years(41.13%). Which is in accordance with the findings by Jeet Bahadur Moktan et al in 2016 at Karnataka, where it was 35.83%.⁵

In the study, it is found that majority of the patients were male (65.96%). Sulaiman Sait et al⁶ in their study also found the similar trend.Similar trend is found in another study done by Manju Salaria et al in Chandigarh ,where there was a prepondence of males (73%)⁷.

In this study ,majority of the patients were farmers(29.95%) followed by bussinessmen(26.58%) and labourers(10.12%).In the study done by Jeet Bahadur Moktan et al ,half of the patients were not employed and rest were having some sort of economic activity.Among the employed groups,most of them were following agriculture (45.97%), business (32.55%), and teachers(2.34%).⁵

In this study,majority of the patients attending casualty had fever(25.53%) followed by accidents(22.69%) and loose motion (19.85%). In the study done by Jeet Bahadur Moktan et al,majority of the patients were road traffic accidents(17.66%) followed by viral fever (9.5%) and chest pain(9.5%)⁵.In another study done by Sharonjeet Kaur et al,majority of the patients presented with diseases of cardiovascular system(26.5%) followed by central nervous system (23.5%) and respiratory system(10.7%).⁸

In this study,majority of the patients had fracture(44.92%) followed by STI(22.03%) and burn(16.96%).In the study done by Chik Loon Foo et al,majority of the patients suffered from pneumonia(10.2%) followed by septicemia(6.3%) and chronic obstructive pulmonary disease (4.7%).⁹

Majority of the patients from emergency were admitted under the discipline of General Medicine(43.22%) followed by Orthopaedics (24.71%) and surgery(11.15%). In the study done by Karim MZ et al ,majority of the patients were admitted under General Medicine(60%) of which internal medicine(22%), cardiology (13%), paediatrics (10%), neurology(8%) and gastro(6%).¹⁰ In another study done by Jitesh Dhingra et al ,majority of patients attending Emergency were under General Medicine(56.08%) followed by Surgery(14.64%)¹¹

Conclusion :

The first impression on the patient should be a proper and positive emergency care. Prompt and effective emergency care can save lives and reduce severity. It also reduces the duration of illnesses.

Our study reveals that fever and accidents have a great impact on emergency department.

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