Profile of patients reported to emergency medicine department

Dr. Anjanappa T.H

Professor & HOD, Emergency Medicine, Akash Institute of Medical Sciences and Research Centre Devanahalli, Bangalore, Karnataka, India

ABSTRACT

Background: Health care is one of the basic needs of each community. Since considering to healthcare and investing in this sector increases labor productivity and service production, therefore, optimal resource allocation and use of resources is very important. The present study was conducted for assessing the profile of patients reported to emergency medicine department.

Materials & methods: A total of 500 patients were analysed who presented to emergency department were included in the present study. Complete demographic and clinical details of all the patients were obtained. Some patients requiring emergency intubation in the ER were maintained on ventilator machine. Presenting complaints, personal details, and medication history were recorded. These patients were followed until the tenth day of hospitalization and outcome was determined. All the results were recorded in Microsoft excel sheet and were analysed by SPSS software.

Results: Mean age of the patients reporting to the emergency department was 62.2 years. Out of these 500 patients, 289 patients were males while the remaining 211 patients were females. Mean pulse rate was less than 60 in 53 patients (16 percent of the patients). Breathlessness and chest pain were most common presenting complaints found to be present in 55 percent (275 patients) and 43 percent (215 patients) of the patients. Out of 500 patients, nature of disease was non-trauma in 483 patients (96.6 percent). Out of 500 patients, 439 patients (87.8 percent) were discharged while mortality occurred in 3 percent of the patients (15 patients). The remaining patients were left against medical advice (LAMA).

Conclusion: Medical emergencies are common emergencies and hence a well-equipped ED and proper training of emergency physicians and paramedical team in are paramount in saving the lives of these patients.

Key words: Emergency, Medicine department

I. INTRODUCTION

Health care is one of the basic needs of each community. Since considering to healthcare and investing in this sector increases labor productivity and service production, therefore, optimal resource allocation and use of resources is very important. Evaluation of health care programs can determine their quality and progress of implementation and failure or success rate. Hospital services absorb almost half of health sector costs, so efficiency promotion of these services through cost reduction and use of potential capacity of health care organizations is necessary. Diverse economic incentives have been used for cost reduction in hospitals. However, in the field of patient access to hospital services and the quality of services have not yielded to positive results. For preserving quality and accessibility, it is necessary to focus on cost containment indexes by attention to the appropriateness or inappropriateness of health care services. ¹⁻³

Overuse of emergency departments (ED) is of concern in Western society and it is often referred to as 'inappropriate' use. Patients assess their medical problems with worries and

interpretations in their own context and may decide to seek help independently from referral or triage systems. Although there is some consensus of doctors and nurses concerning the perception of 'emergency', important differences were found between the perception of patients and clinical staff. Patients' perceptions of an emergency do not necessarily correspond with clinical interpretations made by health care providers. An extensive knowledge of the experiences and attitudes of patients and their choice behaviour is necessary.⁴⁻⁷Hence; the present study was conducted for assessing the profile of patients reported to emergency medicine department.

II. MATERIALS & METHODS

The present study was conducted for assessing the profile of patients admitted to emergency department. A total of 500 patients were analysed who presented to emergency department were included in the present study. Complete demographic and clinical details of all the patients were obtained. Some patients requiring emergency intubation in the ER were maintained on ventilator machine. Presenting complaints, personal details, and medication history were recorded. These patients were followed until the tenth day of hospitalization and outcome was determined. All the results were recorded in Microsoft excel sheet and were analysed by SPSS software.

III. RESULTS

A total of 500 patients who reported to emergency medicine department were enrolled. Mean age of the patients reporting to the emergency department was 62.2 years. Out of these 500 patients, 289 patients were males while the remaining 211 patients were females. Mean pulse rate was less than 60 in 53 patients (16 percent of the patients). Breathlessness and chest pain were most common presenting complaints found to be present in 55 percent (275 patients) and 43 percent (215 patients) of the patients. Out of 500 patients, nature of disease was non-trauma in 483 patients (96.6 percent). Out of 500 patients, 439 patients (87.8 percent) were discharged while mortality occurred in 3 percent of the patients (15 patients). The remaining patients were left against medical advice (LAMA).

Table 1: Demography profile

| Variable | Value (%) |
|------------------|------------|
| Total patients | 500 (100) |
| Males | 289 (57.8) |
| Females | 211 (42.2) |
| Mean age (years) | 62.2 |

Table 2: Clinical profile

| Clinical profile | Value (%) |
|-------------------|-----------|
| Breathless | 275 (55) |
| Chest pain | 215 (43) |
| Abdominal pain | 105 (21) |
| Altered sensorium | 82 (16.4) |
| Others | 51 (12) |

Table 3: Outcome

| Outcome | Value (%) |
|-------------------|------------|
| Healthy discharge | 439 (87.8) |
| Mortality | 15 (3) |
| LAMA | 46 (9.2) |

IV. DISCUSSION

Most emergency care is provided in areas demarcated as casualty, emergency, or accident rooms. Formal education and specialty training in emergency management are neither universally available nor mandatory for physicians and personnel involved in casualty/accident room care. Usually, fresh graduates are posted in these rooms, often on rotation from various specialties, and they have little knowledge about practical patient management. Doctors often function as patient traffic controllers who redirect victims arriving in the emergency room (ER) to the respective specialties for management. Ironically, this system leaves the least experienced professionals to treat the most seriously ill and severely injured patient. Usually, different teams from the respective clinical departments often manage the emergency areas on pre-scheduled days of the week. The team on any given day admits and observes patients in the ER and then shifts their patients to respective wards at the end of 24 hours. This system is unlike that in developed countries where a separate team manages patients in the ER and then the patients are handed over to another team managing the medical floors. Hence; the present study was conducted for assessing the profile of patients reported to emergency medicine department.

A total of 500 patients who reported to emergency medicine department were enrolled. Mean age of the patients reporting to the emergency department was 62.2 years. Out of these 500 patients, 289 patients were males while the remaining 211 patients were females. Mean pulse rate was less than 60 in 53 patients (16 percent of the patients). Our results were in concordance with the results obtained by Choudhary R et al, who also reported similar findings. In their study, of the 3,618 cases presenting to medicine emergency on these days, 1,547 (42.3%) were advised admission. Nine hundred sixty-seven reported to the medicine wards. One hundred eleven (7.73%) expired within 24 hours; others absconded, were lost in transit, did not consent to participation, or were discharged. During the next seven days, 452 (46.7%) recovered sufficiently and were discharged to go home. Two hundred thirty (23.8%) left the hospital without informing the medical staff. Fourteen (1.4%) patients were transferred to other departments. One hundred thirty-seven (8.8%) patients died during the next six days of hospitalization. After Multivariate Logistic Regression analysis, abnormal Glasgow Coma Scale (GCS) score, high systolic blood pressure (BP), age, increased total leucocyte count, increased globulin, low bicarbonate in arterial blood, low Mini Mental Status Examination (MMSE) score, and a raised urea >40 mg/dL were found to be associated significantly with mortality. Of the 1,547 patients who needed urgent hospitalization, 248 (16%) died within the first week, one-half of them within the first 24 hours. An advanced age, abnormal GCS score, low MMSE score, increased systolic BP, leukocytosis, acidosis, and uremia were found to be associated with a fatal outcome. 10

In the present study, Breathlessness and chest pain were most common presenting complaints found to be present in 55 percent (275 patients) and 43 percent (215 patients) of the patients. Out of 500 patients, nature of disease was non-trauma in 483 patients (96.6 percent). Out of 500 patients, 439 patients (87.8 percent) were discharged while mortality occurred in 3 percent of the patients (15 patients). The remaining patients were left against medical advice (LAMA). In another study conducted by Philips H et al, authors quantified the patients and socio-economical determinants for choosing the general practitioner (GP) on call or the ED. Data collection was conducted simultaneously in 4 large cities in Belgium. All patients who visited EDs or used the services of the GP on call during two weekends were enrolled in the study in a prospective manner. They used semi-structured questionnaires to interview patients from both services. 1611 patient contacts were suitable for further analysis. 640 patients visited the GP and 971 went to the ED. Determinants that associated with the choice of the ED are: being male, having visited the ED during the past 12 months at least once, speaking

another language than Dutch or French, being of African (sub-Saharan as well as North African) nationality and no medical insurance. They also found that young men are more likely to seek help at the ED for minor trauma, compared to women.¹¹

V. CONCLUSION

From the above results, the author concluded that medical emergencies are common emergencies and hence a well-equipped ED and proper training of emergency physicians and paramedical team in are paramount in saving the lives of these patients.

REFERENCES

- 1. Hwang JI (2011). Inappropriate hospitalization days in Korean Oriental Medicine hospitals. International J for quality in health care 23(4): 437- 444.
- 2. Tavakoli N, Hoseini KM, Yasinzadeh MR (2015) Evaluation of appropriate and inappropriate admission and hospitalization days according to appropriateness evaluation protocol (AEP). Arch Iran Med 18(7): 430- 434.
- 3. Liggins K: Inappropriate attendance at accident and emergency departments: a literature review. Journal of Advanced Nursing. 1993, 18 (7): 1141-5.
- 4. Lee A, Lee A: The need for integrated primary health care to enhance the effectiveness of health services. Asia-Pacific Journal of Public Health. 2003, 15 (1): 62-7.
- 5. Fernandes CM, Tanabe P, Gilboy N, Johnson LA, McNair RS, Rosenau AM, et al. Five-level triage: A report from the ACEP/ENA five-level triage task force. J Emerg Nurs 2005;31:39-50.
- 6. Arora P, Bhavnani A, Kole T, Curry C. Academic emergency medicine in India and international collaboration. Emerg Med Australas 2013;25:294-6.
- 7. Panis LJ, Gooskens M, Verheggen FW (2003) Predictors of inappropriate hospital stay: a clinical study. Int J Qual Health Care 15(1): 57-65.
- 8. Gill JM, C.L.t Reese, Diamond JJ: Disagreement among health care professionals about the urgent care needs of emergency department patients. Annals of Emergency Medicine. 1996, 28 (5): 474-9.
- 9. Apolone G, Alfleri V, Braga A (1991) A survey on the necessity of the hospitalization day in an Italian teaching hospital. Qual Assur Hlth Care 3(1): 1-9.
- 10. Choudhary R et al. Profile of Patients Hospitalized through the Emergency Room to the Medicine Ward and their Short-term Outcome at a Tertiary Care Hospital in Delhi. Prehosp Disaster Med. 2015 Dec;30(6):593-8.
- 11. Philips H, Remmen R et al. Out of hours care: a profile analysis of patients attending the emergency department and the general practitioner on call. BMC Family Practice. 2010; 11: 88.