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Overcrowding in the emergency departments: Challenges and opportunities for improvement

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Abstract

With the advent of Emergency Medicine, one can observe an increase in the number of Emergency Departments (ED) across the country. However, most EDs struggle due to an overwhelming number of patients. Overcrowding can lead to delays in patient care. For a city like Karachi which is an active disaster zone, preemptive preparedness is required in the face of terror threats and such overcrowding needs to be decreased to a bare minimum. The most frequent causes of prolonged length of stay (LOS) in the ED include non-availability of in-hospital beds, delays in response to subspecialty consultations and escalating medical expenses. All of these can negatively impact patient care by putting patient safety at risk and patient care in jeopardy. There is an increased risk of unintentional medical errors and a concomitant increase in unwanted lawsuits. A few simple interventions which may help alleviate this situation to some extent have been discussed.

Keywords: Emergency Department(s), Overcrowding, Length of stay.

Introduction

Emergency Medicine is a relatively new specialty in Pakistan leading to an increase in the number of Emergency Departments (ED) across the country. Although there are few hospitals which offer emergency services as per the international standards of care, most EDs struggle due to an overwhelming number of patients. ED units are generally one of the most overcrowded areas of a hospital; overcrowding can lead to delays in patient care which ultimately leads to unpleasantness.¹ According to the American College of Emergency Physicians (ACEP), 'crowding in the ED' is defined as having a greater number of patients as compared to the number of available treatment rooms and staff. This overcrowding is considered 'dangerous' when an extreme volume of patients in ED treatment areas forces the ED to operate beyond its regular functional capacity.^{2,3} Overcrowding in the ED is a major public health problem. It

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causes deterioration in the quality of health care, including but not limited to: increased waiting time, delays in diagnosis/management, increased financial burden and an overall patient dissatisfaction.⁴ It is a multi-factorial problem and through this paper we aim to outline the major causes, magnitude and implications of ED overcrowding and finally, to present some viable solutions.

The most frequent cause of prolonged length of stay (LOS) in the ED is non-availability of in-hospital beds. This results in patient stay in ED for longer hours which is unsuitable for patients and their attendants. At our institution, the routine ED time allowance is limited to 4 hours, following which various personnel including 'bed care coordinators' are alerted to overcome this crisis. At times, a prolonged ED stay leads to patients' weariness which ultimately leads to a shifting out to another hospital to curtail further prolongation in the LOS. Fruitless discussions about administrative problems with family members consume an already busy physician's time, preventing him/her from catering to other sick patients.

Inadequate medical staff appointment is another concerning issue. Although the Human Resource (HR) department of an institution plays a major role in creating and advertising job positions, it tends to overlook the quality of hired personnel, probably because there is a dire need of work force in the hospital. Inevitably, there is a greater likelihood of committing medical errors which may result in potential loss of human life.

Karachi being an active disaster zone requires preemptive preparedness in the face of terror threats. In the event of emergent circumstances, the hospital generates an 'orange' code alert requiring all available physicians/staff to report immediately to ED to provide additional assistance. Patients already being catered to in the ED are swiftly moved out to general/special wards such that incoming patients/victims may be accommodated. However, with the surge inpatients and high bed occupancy, the environment in the ED becomes chaotic. There are difficulties in patient identification and time-restrained medical examinations may cause ED physicians to overlook potential life-threatening injuries. Due to a challenging coordination between medical staff and ancillary services staff under these stressful conditions, there is an overall poor delivery of medical care. All these factors

contribute to increased patient dissatisfaction.

Misconceptions about ED care lead some patients to walk into the ED demanding to see their regular primary care physicians leading to friction between the physicians and the family. Perhaps the primary care physicians could explain to their patients about medical emergencies, the purpose of EDs, and provide them with alternate methods of communication.

Smaller community hospitals often transfer critically-ill patients to our tertiary care ED without an adequate history, hospital course or referral. This not only adds to the patient volume but also causes medical staff exhaustion.

Another very important reason for ED overcrowding is a delay in response to subspecialty consultations. Specialist consultation is an important aspect of emergency care. Complex patient presentation may require the involvement of multiple teams for treatment advice and disposition. Inefficient response to these consultations further adds to increased stay in the ED and patient/physician frustration.

Escalating medical expenses have become a hurdle for physicians and patients alike. Since health insurance is a rare phenomenon, non-affording families are unable to bear healthcare expense even after consulting financial assistance programmes. After prolonged discussions with administration, such families opt for transfer to outside hospitals with more affordable healthcare. Delays in clearance of hospital charges results in continued patient occupancy of the bed and prolonged waiting time for the incoming acute patients.

The increased ED LOS at our institution resulted in devising strategies of patient referrals to outside hospitals. However, major drawbacks include financial loss to the home institution, reluctance of the family for transfer to an unfamiliar hospital resulting in forceful stays, and rejection by other hospitals for further management due to their lack of facilities. This reflects a failing tertiary care ED-based referral system that can only be salvaged on national grounds if proper attention is given to the problem.

All the above reasons mentioned so far can negatively impact patient care by putting patient safety at risk and patient care in jeopardy. There is an increased risk of unintentional medical errors and a concomitant increase in unwanted lawsuits. Patients are made to suffer, not just because of their medical problems but also due to an inefficient healthcare system. A stressful environment is volatile and may result in verbal and

physical violence adversely affecting the physician and medical staff productivity. In the face of such an event, administration in charge of the ED may also need to put up hospital diversions resulting in further delay of medical treatment to deserving patients.

Although the scenarios described above paint a dismal picture, a few simple interventions may help alleviate this situation to some extent. An initial step may be to devise a proper and effective triage system for filtering out non-acute patients who may be sent to outpatient clinics. Efforts should be made to increase the hospital's regular and Intensive Care Unit (ICU) bed capacity in order to facilitate prompt transfer of patients from the ED. Large 24-hour observation units may be constructed in the ED - allowing ED physicians to temporarily withhold discharge. These patients may then be discharged only after proper review and management thereby avoiding unnecessary hospital admission. Flexible financial assistance may be offered to patients and families who wish to pursue treatment in the same hospital. The number of qualified and trained medical and non-medical staff may be increased with clearly assigned responsibilities for providing timely and improved patient care. Attractive recruitment and retention policies devised by HR would allow qualified people to apply and remain gainfully employed.

In conclusion, ED overcrowding continues to be a nationwide concern. It is time for the government, public/private hospitals and existing EDs to work cohesively to solve this multi-dimensional problem. Stated effectively in the words of Dr. Kellerman, "this problem endangers and jeopardizes lives. And we simply cannot allow that to happen".⁵

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