



Improving Care in Accident and Emergency Departments in Pakistan

Amna Yasmin¹, Humaira Noreen², Muhammad Abdullah³

^{1,2}DHQ Hospital, Sahiwal

³Frontier medical and dental college, Abbottabad

ABSTRACT

Introduction: Emergency departments (EDs) are perceived as 24/7 portals where a rapid and efficient diagnosis, urgent attention, primary care, and inpatient admission is provided for stabilizing seriously ill and wounded patients.

Objectives: The main objective of the study is to analysed the improving care in accident and emergency departments.

Material and methods: This analytical study was conducted in DHQ hospital, Sahiwal during 2020 to 2021. For this 5 hospitals were selected for the determination of improving care in accident and EDs. All hospitals were visited one by one and collect the data for the determination of mode of clinics and improving care. Number of patients and number of doctors were also counted.

Results: Analysis of results was performed by comparing the data of hospitals with international standards. Patient case notes were checked for compliance with RCP 12 point generic medical record keeping standards on 5 point scale to stratify the level of compliance. Hospitals where case notes fulfilled all the 12 standards were placed at point 5. EDs safety scores were measured on 4 point scale and different hospitals were categorized according to grades A, B, C, D and F.

Conclusion: It is concluded that the emergency service would be provided largely by doctors in middle grade or career grade posts supported by nurse practitioners, general practitioners, and senior house officers working under much closer supervision than at present.

KEYWORDS: Care, Emergency, Health, Improving.

INTRODUCTION

Emergency departments (EDs) are perceived as 24/7 portals where a rapid and efficient diagnosis, urgent attention, primary care, and inpatient admission is provided for stabilizing seriously ill and wounded patients, including those with life-threatening conditions ranging from different head injuries to heart failures. EDs have assumed a wider role in the integrated healthcare system and are therefore cataloged as the cornerstone of the safety net. Furthermore, EDs play a key social role by offering access to the healthcare system for both insured and uninsured patients¹.

Their importance in the healthcare system is also underpinned by the fact that more than half of the hospital activity takes place in their settings. Besides, as a “care hub”, it is a point of interaction between communities and hospitals². Nonetheless, several serious problems have become glaring in EDs, even in developed countries, and must be therefore thoroughly addressed to ensure low early mortality rates and complications, increased patient satisfaction, timely emergency care, and long-term morbidity. Not surprisingly, these growing deficiencies greatly contribute to the acceleration of healthcare costs which increases the financial pressures on hospitals and shrinks their profits³.

From this perspective, it is essential to count on the support of suitable methodological approaches to assist decision makers along the emergency care journey. The novelty of the study then lies on the need of providing orientation as well as a scientific evidence base to healthcare administrators, clinicians, researchers, and practitioners on what process-improvement methodologies can be used to fully understand and tackle the top-five leading problems presented in EDs⁴. Overcrowding, prolonged waiting time, extended length of stay (LOS), excessive patient flow time, and patients who leave without being seen (LWBS). Previous reviews have been conducted relating to this topic; some of them focused on critically reviewing the implementation of specific approaches to address different ED problems. For instance, some authors analysed the use of lean thinking and its effects on ED processes, while others studied the contribution of discrete-event simulation implementations to tackle overcrowding and model the ED performance⁵.



OBJECTIVES

The main objective of the study is to analysed the improving care in accident and emergency departments.

MATERIAL AND METHODS

This analytical study was conducted in DHQ hospital, Sahiwal during 2020 to 2021. For this 5 hospitals were selected for the determination of improving care in accident and EDs. All hospitals were visited one by one and collect the data for the determination of mode of clinics and improving care. Number of patients and number of doctors were also counted.

Collection of variables

A questionnaire had given to all consultants for the determination of data. The questions included type of clinic, organization, types of patients seen, reasons for establishing the EDs, and the specialists' opinions. Same questionnaire was also given to up to three general practitioners using each clinic, covering details of the EDs and general practitioners' opinions. General record keeping standards and hospital safety scores were also collected.

Statistical Analysis

The Stat software is currently performing a very significant role in the individualization and optimization of drugs intended for patients and, subsequently, all patients in general hospitals. This test controlled for age, sex, severity of underlying disease, medical service, and mortality. Adjustment for the severity of disease was accomplished with use of hospital safety scores and compliance with RCP medical record keeping standards.

RESULTS

Analysis of results was performed by comparing the data of hospitals with international standards. Patient case notes were checked for compliance with RCP 12 point generic medical record keeping standards on 5 point scale to stratify the level of compliance. Hospitals where case notes fulfilled all the 12 standards were placed at point 5. EDs safety scores were measured on 4 point scale and different hospitals were categorized according to grades A, B, C, D and F. Different hospitals were also checked for the provision of services like use of electronic health record system, ambulatory services, transport facility for the staff, child immunization facilities and accident and emergency and services in each hospital.

Table 01: Hospital Safety Scores

Grade	Safety Criteria	Score	Count of Hospitals	Percentage of Hospitals
A	≥ 3.133		23	46%
B	≥ 2.964		11	22%
C	≥ 2.476		8	16%
D	≥ 2.047		5	10%
F			3	6%
Totals			50	

A 5-point scale was developed to stratify the level of compliance (Figure1). Hospitals where case notes fulfilled all the 12 standards were placed at point 5.

**Compliance with RCP Generic Medical Record Keeping Standards
Rating on a 5 point Scale**

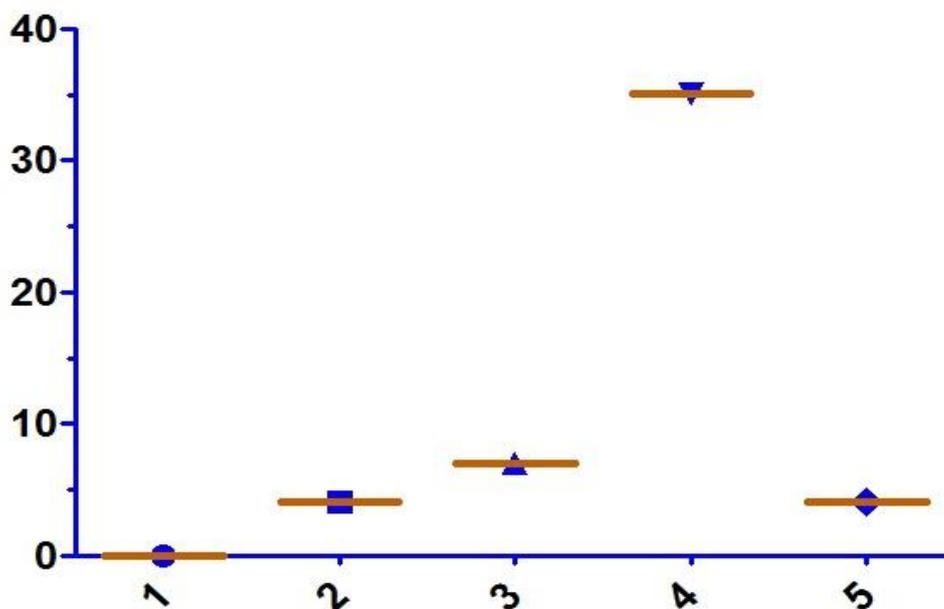
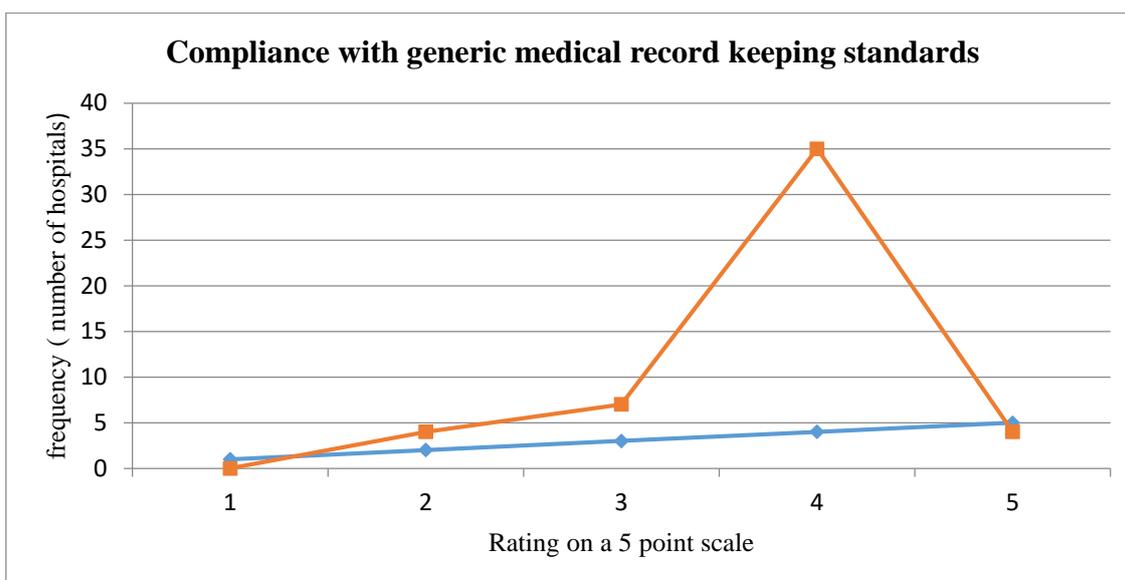


Figure 01: Showing RCP generic medical record

Using 26 national measures of care in EDS, a numerical safety score for all eligible hospitals were calculated. According to our data none of the hospital earns hospital safety score of 4, but 3 hospitals has safety score of 3.5, hence 2 hospitals earns grade A.



DISCUSSION

Attendances of new patients in accident and emergency departments continue to increase by about 2% a year, with the biggest increases seen in the numbers of medical and surgical emergency admissions⁶. This has placed an increasing demand on both doctors and nurses, especially as more of the investigations and emergency care occur within the department⁷.



Most of the papers made recommendations on improving care, but many were inadequately thought out, and they could not all be implemented without changing the way in which emergency departments work⁸. To fulfil all of the recommendations in the articles, the following would be needed: extra teaching sessions for emergency doctors (some at senior house officer level only); new guidelines or protocols for the management of certain clinical conditions; and new forms. Other recommendations would also affect the way the service is provided—for example, daily review of radiographs by a senior radiologist; use of general practitioners in the department to see patients with primary care problems; and increased clinical supervision of senior house officers⁹.

Improvements for patients with one disease should not be made at the expense of another group of patients, who may be given less priority. It is not wrong to investigate management of individual diseases or injuries, but emergency departments should also be judged for their overall management of all patients¹⁰. Seven forms and other types of documentation were recommended in the papers studied. Further forms could be used to improve the management of other conditions for which treatment has not yet been audited. To have too many forms, however, causes difficulties: computerised protocols may help¹¹.

CONCLUSION

It is concluded that the emergency service would be provided largely by doctors in middle grade or career grade posts supported by nurse practitioners, general practitioners, and senior house officers working under much closer supervision than at present.

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Cite this Article: Amna Yasmin, Humaira Noreen, Muhammad Abdullah (2022). Improving Care in Accident and Emergency Departments in Pakistan. International Journal of Current Science Research and Review, 5(6), 2045-2048