

EDITORIAL

Patient safety, clinical outcomes, and efficiency in the emergency department*Seguridad del paciente, resultados clínicos y eficiencia en los servicios de emergencias*Martín Tejedor Fernández¹, María José Ferrer Higuera², Rocío Tejedor Benítez³

"First, do no harm". This aphorism by the illustrious Greek physician remains an accurate and practical orientation to achieve clinical excellence. From a current perspective it contains ethical principles, patient safety and efficiency. When we provide health care we are required as professionals to provide quality service first and every time, that is, without causing unnecessary harm to our patients. When we do so, clinical outcome is not only good, but also has a lower cost and greater clinical and economic efficiency.

The measurement of clinical outcomes is largely based on determining the level of non-quality or, in other words, how safe the attention is: rates of misdiagnosis, injuries during a procedure, medication errors, avoidable mortality, complications, sequelae, nosocomial infections and others are all quality indicators based on the presence of adverse effects and on the degree of unnecessary harm that invariably accompanies assistance.

The clinical and social impact of problems related with patient safety in the care process is enormous: more than 200,000 deaths per year in the US¹, about 1 out of 10 patients hospitalized in Spain suffer an adverse event², and about 12,650 deaths that annually occur in Spanish emergency departments (EDs) are related to an adverse event³.

From a purely economic standpoint, safer assistance would have an extraordinary impact, with an estimated saving of approximately 17-29,000 million dollars annually in the USA⁴ or 1,062,672,774 million euros/year in Spain in hospital assistance alone⁵.

As in other disciplines or medical specialties^{6,7}, professionals and emergency services have, therefore, the obligation to implement specific patient safety plans^{8,9}, and to promote and conduct actions leading to a radical reduction in adverse events. This requires incorporating new skills in tools usage, such as the Mode Analysis of Failure and Effects or LEAN¹⁰, to help deepen our knowledge of structured care processes and critical points of risk, allowing us to take preventive or corrective action on causes or faults that generate safety incidents, especially those that have clinical consequences

for patients and reduce attendance times, a determinant factor of outcome in time-dependent care processes.

Fulfilling its mission, SEMES incorporated patient safety indicators early in their Accreditation Standards for Emergency Services in Hospitales¹¹ and some similar guidelines for hospital Emergency Services (ES)¹² and Primary Emergency Care¹³.

The implementation of safety incident reporting systems has a rational basis: one learns by analysis of errors, but it is not possible to proceed if they are not reported and recorded. But this logical deduction has its difficulties when put into practice: there is a universal and tested professional resistance to incident notification, even if it is anonymous and voluntary, it carries the risk of becoming an end in itself, the incidents reported are mostly mild which often do not cause damage or injury to patients, and there are also other obstacles. So much this is so, there have been developments in alternative methods to know what really happens in clinical care through the analysis of case histories¹⁴.

Many factors can contribute to the occurrence of adverse events in emergency care in the prehospital setting: the environment where the action takes place, factors related to the patient him/herself, factors related to health providers (especially the problems arising from communication) and those related to the vast number of intervening professionals in the system.

There are numerous publications that try to characterize patient safety in the ED and many of them are descriptive, but there is no frame of reference to define, classify and report adverse events, so there is no way to know irrefutably the incidence of those in the field of prehospital emergencies. Thus, there is no universally accepted taxonomy of adverse events in emergency assistance. The difficulties that this entails for the classification and study of safety incidents are obvious.

There seems to be considerable consensus about the fact that most adverse events are preventable and

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that the types of incidents at this level of care relate primarily to the quality of clinical judgment resulting from the training of the professionals, adverse events related to medication, endotracheal intubation in situ, safety of land and air mobile units and secondary transport¹⁵. We have not found references to the impact on the results after the implementation of improvement actions.

The work published in this issue of the Journal by Galvan Nunez et al. is of great importance, since it represents an advance in studies on patient safety in Spanish EDs. In this work there is a clear implicit message: it is impossible to improve care if we are not able to detect what types of failures occur, their causes and the clinical consequences for the patient.

The natural manner which the authors implemented a safety incident reporting system is a breath of fresh air in a difficult field, which will affect other EDs. It is important to note that reporting systems and other initiatives aimed at improving patient safety are useful instruments for achieving the final goal: improved clinical outcomes, by reducing collateral damage and undesirable effects. So perhaps the work would have improved notably if the authors had considered this more extensively. It is not an easy subject, but knowledge, description and classification of safety incidents, although they represent an advance, are no longer sufficient in the contemporary context. The effort must be made, without further delay, to implement effective measures to reduce or eliminate forever certain faults which have serious consequences for patients, even if they are based on the findings of a single case.

We encourage authors of this work and other teams to show us the improvements in practice, in the near future, after root cause analysis of adverse events and the application of preventive and corrective actions, thus closing the cycle of quality, for the benefit of patients and the secondary victims of safety incidents: the professionals who care for them.

Conflict of interest

The author declares no conflict of interest related to this article.

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