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Patient Safety in Emergency Medicine and Critical Care

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The World Health Organization (WHO) defines patient safety as "the prevention of errors and adverse effects to patients associated with health care". From this definition it appears clear that patient safety is the absence of preventable harm to a patient during the process of health care and reduction of risk of unnecessary harm associated with health care to an acceptable minimum. An acceptable minimum refers to the collective notions of given current knowledge, resources available and the context in which care was delivered weighed against the risk of non-treatment or other treatment. Every point in the process of care-giving contains a certain degree of inherent unsafety. Clear policies, organizational leadership capacity, data to drive safety improvements, skilled health care professionals and effective involvement of patients in their care, are all needed to ensure sustainable and significant improvements in the safety of health care.

Emergency Medicine providers care for patients in dynamic and challenging environments; prehospital emergency care is a field that represents an area of high risk for errors and harm but has received relatively little attention in the patient safety literature. The Critical Care Medicine in Intensive Care Unit (ICU) is particularly prone to medical errors as patients are very ill and require continuous monitoring. The Critical Care of ICU patients can be complex, involving multiple consultants and many medications, where decisions often need to be made quickly. In this setting, it is well known that latent, systemic, organizational and clinical errors can occur also in a clinical reality considered to be safe and lead to the occurrence of a critical event with possible consequences to the patient and his outcome.

It seems clear that in Emergency Medicine and Critical Care patient safety is a real challenge and it is necessary to increase the knowledge and skills of all health professionals in order to prevent errors that can cause harm to the patient.

Patients treated in the Emergency Room and in ICU are critical and require rapid and effective multidisciplinary decisions. The complexity of these patients and their instability require the administration of therapies and medical procedures in standardized time, coordinating staffs of different specialists.

In consideration of these patients' characteristics the Patient Safety becomes a priority objective in their diagnostic-therapeutic pathways. It is necessary for all caregivers (physicians,

nurses, drivers, medical students, nurse students…) to be able to acquire a complex and systematic competence in patient safety suitable for the clinical risk analysis in the specific local realities in order to introduce all measures for the identification, analysis and prevention of error that can lead to an incident. Indeed, in the clinical practice risks and incidents, that were previously not detected by the system, may be better identified introducing and implementing the culture of safety with its tools.

Patient Safety becomes a fundamental principle of the medical care process that always presents an intrinsic degree of unsafety. In order to ensure the best grade of safety we can understand how within the Risk Management the adverse events can derive from organizational problems, problems related to the clinical practice, procedures and medical devices use.

In this complex clinical setting, the improvement of Patient Safety requires, therefore, a systematic effort at the system level, involving a wide range of actions in order to improve medical performance, the environment, the clinical risk management and devices use; some example are the prevention of infections, the safe use of drugs and the safety of the environment in which patients transit interdisciplinary.

In the Emergency Medicine and Critical Care, all medical treatments, that are already complex and subject to errors due to their high technology complexity, are a source of possible preventable and predictable incidents for patients overall when they are not performed in a specific designed setting such as the Emergency Room and the ICU where the medical and nurse staff competence and experience are able to provide a higher degree of mitigation of the intrinsic clinical risk. The analysis of clinical risks of each single local reality becomes essential to identify all the critical issues present and to implement all the necessary measures to prevent errors and the patient's injury (pro-active measure of patient safety).

Even though the Patient Safety [1] culture is spreading at the level of all the caregivers, it is still not completely integrated into the assistance processes that we utilize every day to treat patients. From the first data reported by the studies on Patient Safety in the USA [2], it has been shown that clinical practice at any level is subject to errors inherent in various diagnostic-therapeutic processes, including errors in the use of drugs. In general, it can therefore be said that about 1 in 10 people who receive medical care are affected by some form of preventable damage; this fact highlights, therefore, the importance of the safety and justifies its extensive and systematic implementation. Today is estimated that 1 in 4 patients are harmed whilst receiving primary and ambulatory health care, 134 million adverse events occur each year in hospitals in LMICs, contributing to 2.6 million deaths annually due to unsafe care and medication errors cost an estimated 42 billion USD annually. These events can effectively be prevented and the Patient Safety culture must be extensively and extensively promoted in the Health System by analysing the clinical risks, customizing procedures, protocol and operating instructions based on the individual local situations and needs of the specific patients' population without a rigorous standardization of procedures due to not flexible policies that cannot be effective and protective in every single care setting [3].

The first step to promote the Patient Safety is to introduce its culture and promote its penetration in all clinical setting in which the patient can be assisted. This allows to carry out the analysis of the clinical risk in the local reality and to establish a system to report errors and incidents (reactive measure of patient safety).

Each diagnostic-therapeutic process can be intrinsically "unsafe", and it is necessary to approach the clinical practice in a pro-active and reactive way in order to mitigate the clinical risk. Knowing that, for how safe a system can be considered, there will always be the possibility of an event that can determine an incident with various consequences for the patient. In effect we can act on preventable and predictable errors by implementing all measures suitable for their interception and prevention, but we are not able to act on unpredictable and therefore not preventable errors. However, if we apply a whole series of tools for the detection, reporting, description and analysis of identified errors and incidents, we can introduce a dynamic system in the environment adapting the clinical practice to specific local needs mitigating the clinical risk (reactive measures). Structuring the clinical activity, the environment and all personnel according to the local necessities, we can have a positive impact on safety (pro-active measures). In this way the specific Health System adapts to the patients' clinical needs, the local resources and the clinical risks inherent in the specific environment. It is known that the care provided by individual hospitals depends on the care complexity provided and the degree of specialization and competence presented. In this clinical setting the more complex the medical care is, the more complex the management of clinical risk is. For what concerns Emergency Medicine, the procedures to stabilize patients and provide primary care are a source of clinical risk due to their organizational and technological complexity. The deriving errors can cause different degree of injury to the patient.

In order to reduce the clinical risk, it becomes essential to produce protocols and procedures that describe all the possible medical procedures that can be applied to patients. These protocols must describe in detail all the steps of the procedure and all the necessary materials. Procedures and protocols must be reviewed at fixed intervals and after each incident to be improved. It is also necessary to introduce check lists in order to monitor and check the correct execution of protocols and procedures. In addition, all caregivers must be informed and instructed on the need to report any errors and incidents detected during patient care and the preparation of medical device for procedures. Communication among caregivers must be promoted and implemented using tools such as briefing and de-briefing in order to make the handoff safe and clear for everyone. Given the complexity of Emergency Medicine and Critical Care, protocols and procedures must describe in detail every possible situation in which the patient can be managed by providing all possible medical care. In case of identification of situations not previously described by protocols, the caregivers must immediately formulate protocols and procedures suitable for the treatment of these new medial situations.

In conclusion, Emergency Medicine and Critical Care present an intrinsic degree of "unsafety" due to their technological complexity and the patient's critical clinical condition. The problem of the competence and experience of caregivers who provide medical procedure is particularly important in the Emergency Room ad ICU. In this clinical setting caregivers may not have the experience to prevent the occurrence of errors and therefore incidents in the patients. The possibility of having a pool of caregivers dedicated to this complex specialty of medicine increases the competence and experience in this filed by reducing the clinical risk. The analysis of the clinical risk in every single reality allows to design a safer system in a proactive way. The extensive use of the incident reporting system allows the description and analysis of all events with the consequent system correction in a reactive way. The set of proactive and reactive actions make the system safer by reducing the occurrence of events. The introduction of procedures and check lists allows to increase patient safety, the continuous re-analysis of these procedures and check lists in relation to incident makes it possible to keep the system safer in a dynamic way according to the specific needs. This approach will be particularly

effective when the safety culture is promoted and implemented by introducing and promoting the concept of "no blame" cultures that increases the safety by involving all caregivers in an alliance in which everyone will be inclined to report an incident knowing that the focus is on "how and why" an accident occurred rather than "who" made the mistake.

References

1. Linda TK, Janet CM, Molla SD eds. (2000) To Err is Human-Building a Safer Health System. Washington, DC.: National Academies Press. p. 312. ISBN 978-0-309-06837-6.
2. Thomas EJ, Studdert DM, Burstin HR, Orav EJ, Zeena T, et al. (2000) "Incidence and Types of Adverse Events and Negligent Care in Utah and Colorado (Abstract)". Medical Care. 280(38): 261-271.
3. Brennan TA, Leape LL, Laird NM, Hebert L, Localio AR, et al. (1991) "Incidence of adverse events and negligence in hospitalized patients. Results of the Harvard Medical Practice Study I". N. Engl. J. Med 324 (6): 370-376.