EDITORIAL

Defining a Medical Error

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Medical errors are very popular in mass media. They cover newspaper front pages and make simple people lose their trust in health professionals and mainly in doctors. Patients have always been seeing doctors as magicians. They really don't think about the possibility of having a bad outcome during their therapy. They cannot imagine that they will suffer from a complication after an operation. They usually do not want to accept the possibility of death for their beloved person who is admitted in the Hospital. Thus, medical errors should firstly be seen as unexpected events.

Medical errors are unexpected by many doctors, too. Most doctors believe that their patient will be successfully treated after his operation, will not present a complication and will certainly not die. This belief makes medical complications become unexpected by medical doctors, too. The problem is that if you do not think about the complication, you may also not search for it. If you do not search for complications, then you may discover them later than normal!

If medical errors were not considered unexpected by both medical doctors and patients, then things would be more simple. For example, many patients are fond of operations because they like to participate to medical interventions, even with the role of the patient. This is a very common *sport* of people with hysterical personalities. On the other hand, many medical doctors are fond of unneeded operations either for raising their earnings or for teaching more trainees in the operating theatre or because they think that their intervention/surgery cannot harm the patient and thus it is equal to a non interventional treatment. If medical interventions were limited to the needed ones only, then medical errors would be counted to the absolutely smallest number.

What is a medical error? This should be clear for medical doctors and patients. Because sometimes we both professionals and patients do not know what is a medical error. The QuIC (Quality Interagency Coordination Task Force)[1] expanded the IOM's (Institute of Medicine of the National Academies of US)[2] working definition of a medical error to cover as many types of errors as possible. Their definition of a medical error is as follows: "The failure of a planned action to be completed as intended or the use of a wrong plan to achieve an aim. Errors can include problems in practice, products, procedures, and systems. A useful, brief definition of a medical error is that it is a preventable adverse event.

Medical errors include errors in diagnosis (diagnostic errors), errors in the administration of drugs and other medications (medication errors), errors in the performance of surgical procedures, in the use of other types of therapy, in the use of equipment, and in the interpretation of laboratory findings. Medical errors are differentiated from malpractice in that the former are regarded as honest mistakes or accidents while the latter is the result of negligence, reprehensible ignorance, or criminal intent.

Medication error

Any incorrect or wrongful administration of a medication, such as a mistake in dosage or route of administration, failure to prescribe or administer the correct drug or formulation for a particular disease or condition, use of outdated drugs, failure to observe the correct time for administration of the drug, or lack of awareness of adverse effects of certain drug combinations. Causes of medication errors may include difficulty in reading handwritten orders, confusion about different drugs with similar names, and lack of information about a patient's drug allergies or sensitivities. When the nurse is in doubt, administration of a drug should be delayed until specifically authorized by a physician. A medication error is "any error occurring in the medication use process."[3]

The National Coordinating Council for Medication Error and Prevention of US (NCC MERP) has approved the following as its working definition of medication error: "... any preventable event that may cause or lead to inappropriate medication use or patient harm, while the medication is in the control of the health care professional, patient, or consumer. Such events may be related to professional practice, health care products, procedures, and systems including: prescribing; order communication; product labeling, packaging and nomenclature; compounding; dispensing; distribution; administration; education; monitoring; and use."[4]

Not only did the NCC MERP produce the nation's first comprehensive taxonomy for studying medication errors, it also established the following definition of a medication error: A medication error is any *preventable* event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer. Such events may be related to professional practice, health care products, procedures, and systems (including prescribing; order communication; product labeling, packaging, and no menclature; compounding; dispensing; distribution; administration; education; monitoring; and use) (NCC MERP, 1998-2001).[4]

Medication Error Severity

One of the most important steps in analyzing medication error data is understanding its severity. NCC MERP developed an *Index for Categorizing Medication Errors* for determining the outcome or effect of the medication error on the patient.[5] The Index contains four major subscales; these include potential for error, actual error that did not reach the patient, actual error that reached the patient but did not result in harm, and actual error that reached the patient and resulted