Patient-safety is a critical issue

Mistakes on the part of the medical fraternity claim thousands of lives around the world

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KNOWING that one is more likely to die by a medical error, than a traffic accident will send chills down your spine, even if you are the coolest of dudes. But, that is the cruel truth we have to face till we collectively work on making our health care system safer.

Globally, hospitals are believed to be among the most important institutions and medical practitioners among the most trusted professionals. That trust occasionally hangs in the balance when an accidental misdiagnosis, drug overdose or a wrong site surgery exacerbates the pain and suffering of patients who actually go to hospitals seeking relief of symptoms.

A recent headline in *Dawn* captured my attention. The story reported on the negligence of two trainee doctors, due to which a woman lost her life. Ms Farhat Ishaq, who was brought to Jinnah Hospital in Lahore, to give birth and hence a reason for celebration, lost her life due to excessive bleeding caused by a 'misadventure' by two trainee doctors during her fourth caesarean surgery.

Another story that was published earlier, Zara, a 9th grader reportedly fell prey to a medical error after going through an appendicitis surgery in The Cantonment General Hospital, Rawalpindi. After her condition deteriorated due to a negligent excessive dose of anaesthesia, she was transferred to a different hospital where she died the same day.

National newspapers are full of other such reports. Few weeks earlier, a 14 year old boy, Abbas, died in a Lahore hospital, and the parents alleged, it was due to misdiagnosis and carelessness of hospital personnel. In another incidence, a young girl from Ichara in Lahore was found dead in front of the diagnostic lab of a local hospital.

Unfortunately, these incidence are not isolated as one might wish. Hospitals in Pakistan and around the world are rife with adverse events resulting from hospitals' negligence, oversights and blunders. Errors can involve wrong medicines or wrong potency, wrong site surgeries, mishaps during surgeries or complications thereafter, failure in diagnosis, equipment failure and misinterpretation of lab reports. Most errors can broadly be categorized as medication errors or mistakes in prescribing and administering medication to patients, including failure to foresee the side effects of known allergies, and interaction of multiple prescribed drugs; surgical errors, including post surgical infections and bedsores; diagnostic imprecision; and system failures.

Medical errors are believed to result most frequently from systems failures and system-related blunders. Studies have shown that 75 per cent of the medical errors are a direct result of system failures. More specifically, the way a certain health care system or a hospital is organized, and gaps therein, the predominant modes or types of health care delivery and accessibility and distribution of resources in the delivery system are more important determinants of an error or a near escape, than the individual professionals behaviour per se.

The greatest recognition of such errors in United States transpired through a report in the US by the Institute of Medicine (IOM) in November 1999 entitled *To Err Is Human: Building A Safer Health System*. The report estimated that in US hospitals alone, medical errors were responsible for 44,000 to 98,000 deaths annually, with an estimated annual cost ranging from $17 billion to $29 billion.

Another study estimated the cost to be $5 million per year in a typical large teaching hospital. Medical errors pushed their way to being the eighth leading cause of death in that country, higher than those caused by motor vehicle accidents, breast cancer, or Aids. The gravity of the situation prompted The President of United States to order the Quality Interagency Coordination Task Force to make recommendations on improving health care quality and protecting patient safety. The subsequent report, on medical errors, was issued in February 2000. Since then, hundreds of agencies throughout United States are busy implementing the recommended interventions.

In spite of cost constraints, people of Pakistan deserve no less of a quality and safety in health care. Are there other structural constraints? You bet. Can we improve the situation? No doubt. So what does it take? Recognizing that a problem exists is the first important step to its resolution. Knowing the nature and gravity of the problem with particular reference to Pakistani hospitals is crucial for formulating appropriate interventions.

Former US president Mr Bill Clinton stated in his landmark speech, in February 2000, on patient safety, that reporting is an important first step.

"Reporting is vital to holding health care systems accountable for delivering quality care, and educating the public about the safety of their health care system. It is critical to uncovering weaknesses, targeting widespread problems, analyzing what works and what doesn't, and sharing it with others."

In other words, while focusing their energies on preventing any adverse events from happening at the first place, hospitals should encourage reporting of adverse events and other undesirable outcomes resulting from hospital care. Till the capacity for comprehensive reporting is built, a starting point would be voluntary reporting of so called "never events", or events that should not have happened under any circumstances, eg., wrong site surgeries, objects left in the body during surgeries, and death due to negligence, to name a few.

Reporting is essential in order to identify system problems such as equipment failure, misreading of medication labels and potency, errors resulting from inappropriate scheduling, and those resulting from unclear instructions. The eventual outcome, still, should be to promote a culture of patient safety at all levels.

Are the errors in hospitals preventable? It is well known that even in best of the health systems, most errors that occur, are preventable. A study released based on chart reviews of 15,000 medical records in two US states, Colorado and Utah, found that 54 per cent of surgical errors were preventable.

Professionals concerned with patient safety in hospitals are beginning to agree that we shouldn't call the adverse events errors, because that implies someone should be blamed. We should not call them accidents either, because that takes the responsibility away from everyone. In fact, the responsibility lies with everyone in the society for creating a culture of patient safety. Doctors professionally believe in "first do no harm". It is pretty well agreed that more often than not, no one wishes to harm patients' purposely. So let's face it, it is basically a systems' problem and not that much of individuals. Overly simplistic and overly complex health systems both cause problems. Problems may also arise from miscommunication among hospital personnel as well as between patient and doctors.

Reducing errors will not only prevent death and suffering but will help reduce health care cost. Not taking care of the business properly would actually result in an increase in the health care cost. Lawsuits against doctors and hospitals that are generally considered a mixture of curse and blessing are rampant in Europe and North America. In my opinion, for a less developed country such as Pakistan it would be more of a curse than a blessing, as it would result in malpractice insurances, and unnecessary testing and diagnostic procedures, worsening the already unaffordable health cost.

Luckily for Pakistan, acculturation and emulation of the health care related lawsuit culture has not been as momentous as some of the other trends, though such lawsuits have begun to surface. In Karachi, for instance, a lawsuit against National Institute of Cardiovascular Diseases and two of its associate professors was reported in the local press on September 1, 2003. The lawsuits sought Rs35.8 million as damages for "causing death of a heart patient by wilful negligence and dereliction of duty". Hospitals and health care professionals would have to adopt various preventive measures for assuring patient safety and gaining as well as retaining the consumers trust, to curb the frequency of such lawsuits from gaining momentum.

While detailed studies of the errors' patterns is still a pie in the sky, there are small changes hospitals can make to prevent some errors. Improving the working conditions in hospitals may be an important first step. Over-scheduling, both voluntary and involuntary, should be totally discouraged. A pharmacist maybe included on medical rounds, because doing so reduces errors related to medication ordering. Efficient routine tests of equipments are essential, as equipment failure may result in adverse outcomes. An example, would be defibrillators with dead batteries or intravenous pumps with malfunctioning valves causing increased doses of medication over too short a period. With proper attention and care, some cases of infections, such as nosocomial and post-surgical wound infections can be prevented. Some of the blood transfusion-related adverse events, such as giving a patient the blood of the incorrect type, are also preventable by putting proper checks and balances in place.

Patients can help reduce medical errors as well, by taking some simple steps. It is important for them to take part in every decision about their health care. For instance, by accurately conveying symptoms to the doctors, by keeping their own written health care history, and by keeping a list of medications they are taking and any drug allergies they may have. More importantly, hospital patients and their attendants can help by respecting hospital rules and by communicating clearly with doctors and other paramedics about the history of health problems and health care.

As I have written in one of my reports, published by the Utah State Department of Health, Salt Lake City, Utah, patients in US hospitals too are vulnerable to medical errors.

"United States' health care system, which is known to offer the most technically advanced health care, is (also) characterized by unacceptably high levels of adverse events due to medical errors."

The question is not if there are medical errors and adverse events in Pakistani hospitals. After all, to err is human. Nor the gravity or frequency of such errors or medical misadventures is in question. We all roughly know there are inherent problems in Pakistani hospitals at system as well as at individual level. The question is what is being done at a reasonable scale, preferably national level, to reduce the risk of such errors in future. We may not have instant answers but the presented facts carry an important message that should not be ignored by the concerned authorities.