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Editorial

Errors in Medical Services: Risks and Harm to Patients and Paths to Remedy

"..."Imperfect understanding is a human condition; there is no shame in being wrong, only in failing to correct ourselves"..."

- George Soros

Medicine is perceived to be an orderly field of knowledge and procedures. It is not-not entirely. It is still an imperfect science. It constantly changes its knowledge base, replete with uncertain information, falliable individuals and lives brought in, kept on line, and subjected to treatment and attendant risks that are increasingly getting recognized, errors owned up, honesty of purpose driving givers of care and treatment towards improvement.

It is estimated that a modern air traveller has to log 20,000 years flying to reach a 50% chance of injury in a plane accident. If he was to get admitted to a hospital for a surgery, for a procedure of medical condition or a fairly serious nature he cannot be sure of such comforting figures. He will face a 6.7% of chance of medication errors, 3.7% of adverse events. If he faced some of such errors and others of a more severe nature, 13.6% of those could lead to death. The now forgotten, but then sensational surgery on an Indian woman, the mother of a famous movie star from India underwent at Sloan Kettering in New York for a brain tumor, where the surgery was done on the wrong side of the brain, ending in post-surgical fatality is all too familiar. This created a sensation around the time when the Institute of Medicine (USA) report on "To err is human-building a safer health system" appeared in 1999. Following this report, the Clinton administration aggressively took a number of measure and reforms for remedy.

Errors result from systems failure, not people failure, in a broad sense. The epidemiological analysis of medical injury reveals that most common adverse events arise by drug complications, followed by wound infections and technical complications. Complexities arise from powerful drugs, intensive care, prolonged hospital stay and the so called "July effect",

where the residents arrive newly in teaching hospitals. Sleep deprivation, unclear and illegible orders from senior consultants, lack of prompt communication are some other causes for mishaps. In any individual set-up, factors unique to the place of service can be identified with some insights.

Accumulating data collected by several concerned bodies in USA, Canada, Australia and Europe has stirred public and professions to reengineer health care systems for safety. Punishments, reprisals and fear will not work though attempts to fix blame and punish is a response as reflex. High risk industries like aviation which have progressed in safety by harnessing human factor engineering, organizational psychology operations research, and most importantly information technology. Safety can be achieved by design of safer care systems, including the human factor, but not through fear, anxiety, and reprisals, all negative in character. Punishment will produce not safety but secrecy, defensiveness and enormous human anguish. The basic obstacle to and difficulty in delivering medical care is execution. Reliable, efficient and individualized care can be ensured only when we have a system which has a mastery over data on the patient, every bit of it, from moment to moment, history, and coordination. These can come from the use of suitably designed information technology. It can structure actions, catch errors; patient centered decision support can be provided at the point of care, almost customized.

"It does not take geniuses to be diligent Diligence has to be cultivated as a virtue, though it will seem a mundane chore, requiring consent and earnest effort. Betterment is perpetual labor, since the world we live in is chaotic, disorganized and often confusing, with medicine as no exception, being distractible, weak, given to our all concerns", all quotes from Atul Gawande, the surgeon- writer- intellect.



Such frailties require for safety of those in our care, diligence on our part. "Check Lists"- a practice in the aviation and other high risk industries employ, is needed absolutely in several medical care tasks, given hundreds of small steps involved, with no slip ups, goofs and frailties. To be better, we have to engage in perpetual labor which is repetitive. Moral clarity and diligence can greatly improve the outcomes. Overall, the health care system needs to introduce these concepts rigorously, to get anywhere towards a safer delivery of a complex and ever changing medical science to mankind. Once we realize that imperfect understanding is the human condition, there is no shame in being wrong, failing to correct ourselves is (George Soros).

In India, no nationally driven organized effort has yet been made to address this problem, though there are several papers and documents on safety in general terms have been published. Somewhat representative of the state of affairs prevalent in large teaching hospitals in the public sector is reflected in a presentation by Prof. A. K. Gupta, PGI-MER, Chandigarh, about its 1600 bed hospital from the "patients perspective" gathered by a survey and study he conducted as a head of the Hospital Administration faculty. Total lack of communication among treating consultants in transfer of patients, great delays - of even days - in cross referrals (inclusive of critical cases) which were catastrophic in outcome, no explanation of risks involved in surgeries to patients, and on consent issues, wrong mix up of diagnosis of carcinomas and tuberculosis etc, and complications post-surgery and failures were frequent. Rude insensitive behavior of doctors, nurses and paramedics and wrong dietary advice were experienced quite frequently. This compilation of experiences of patients in public sector teaching hospital, one tends to believe is possibly representative of the overall picture in this category of health care services. With some variation the state of affairs in the private sector counterpart may not be too different, as services rendered are to the poor and the indigent, and mostly free or low costs. If there are exceptions, they need to be studied. Private sector corporate health care institutions, well-advertised for their quality, catering to "clients" satisfaction by providing ambience and comforts, are generally considered patient-friendly and state-of-the-art in medical skills and care. No published data or reports of studies undertaken to enumerate and record adverse events and harm to patients by errors are available. The occasional reports on mishaps and legal recourses that follow are the only glimpses one gets of the status in these centers. Overall, since there is no established or mandatory truthful reporting system to the local health authority of adverse events, we have to guess that even these high -tech services may not

be free from errors affecting safety. The prescription to minimize errors in all these several types of services and harm to patients is to remove fear to elicit total honesty in reporting, and to put in place a scientific analysis to trace the fault in the systems, to help repair or reengineer them. Development of IT approaches to fit local condition and needs, training and satisfaction, diligent adherence to checklists all in tandem will take us in the right direction of the path "do not harm the patient" an oath taken upon entering this noble profession.



Suggested reading

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- Patient safety; patients' perspective. Prof. A. K. Gupta.PGIMER, Chandigarh, India. http://www.sctimst.ac.in/Conferences/resources/FOCUS_2010/Dr.%20A.K.%20Gupta-%20Patient%20Safety.pdf

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