Reporting surgical errors: Myth or reality?

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ABSTRACT
Medical errors have now been listed as an important cause of death, and are manifest in the numerous litigations that occur in the present day. Reporting of errors includes the mildest of complications like increased hospital stay to the most serious like death. A review of literature indicates that most institutions do not report serious complications due to fear of liability and loss of reputation. Interpersonal relationships between physician and patient and adequate counselling of the patient all seem to influence the patient’s decision to sue the surgeon. Mandatory reporting may be necessary to limit errors but its major fallacy includes the lack of immunity of staff from litigation and public harassment.

KEY WORDS
Surgical errors, Mandatory reporting, Intraoperative death.

INTRODUCTION
“Make it compulsory for a doctor using a brass plate to have inscribed on it, in addition to the letters indicating his qualification, the words ‘Remember that I too am mortal’”

– G. B. Shaw (1913)

Surgical errors causing either injury or death of patients can ruin professional reputation and career, endangers the trust that patients have in medical care professionals and are presently costly due to consumer courts. In the U.S., between 44,000 and 98,000 patients die each year as a result of medical errors, which exceeds the 8th leading cause of death (suicide). Malpractice litigations are associated not only with physician or surgeon’s negligence and error but also with the quality of communication between the doctor and the patient. A review of the current literature dealing with surgeon’s error or misjudgement and the factors responsible for and against reporting such adverse events is done.

COMPLICATION REPORTING IN SURGICAL LITERATURE

Although short term postoperative outcomes such as operative time, estimated blood loss, blood transfusion, length of hospital stay and time to return to work have been reported, death and complication rates within both hospital and medical literature still deserve consistency and clarity in reporting. Incomplete records, multiple sites of postoperative care, medicolegal concerns regarding documentation of patient safety issues and worry over public disclosure of data often hinder the accurate portrayal of the postoperative course and consequent tabulation of data.

In a study analyzing 119 articles reporting outcomes of 22,530 patients which included 40 studies of pancreatectomy, 35 oesophagectomy articles and 44 pertaining to hepatectomy (42 were prospective randomized controlled trials and 77 retrospective series), it was concluded that outpatient information (22% of articles), definition of complications provided (34% of articles), severity grades used (20% of articles) and risk factors included in analysis (29% of articles) were the most commonly unmet quality reporting criteria. Type of study (randomized controlled trial - vs- retrospective), site of institution (US -vs- non US) and journal (US -vs- non US) did not influence the quality of complication reporting.
In hospitals, staff members usually fail to report incidents due to time pressure, fear of punishment and lack of a perceived benefit. Shame and fear of liability, loss of reputation and peer disapproval are particularly strong disincentives among medical professionals. Hospitals also fear public disclosure of reports, with damage to their reputation, loss of business and litigation.

DISCLOSURE OF INTRAOPERATIVE DEATH

The surgeon must help the patient understand both what is planned preoperatively and how treatment is proceeding. The extent of disclosure is generally decided by the surgeon and that should include diagnosis, treatment planning and outcome. The surgeon is not expected to give the patient a “mini medical education” or even everything that is known about the iatrogenic complication but the patient should be told about the risk of complication involved in the proposed treatment and the actual outcome of one’s treatment. In case of intraoperative error, the surgeon’s postoperative care should include additional evaluation procedure and response which should be shared with the patient or patient’s surrogate in the early postoperative period. However, under disclosure of such errors may be even more anxiety-provoking for the family and patient, inducing fears that the complications were worse than they really were.

A Canadian study examined 192 general surgery patients for 1277 days and reported that 39% of patients suffered from a total of 144 complications. Two of these complications were fatal and 10 were life-threatening. An interesting feature of the study was while 80% of these adverse events were neither reviewed during morbidity or mortality rounds, 95% were not recorded on the discharge summary of the patients.

SURGEON’S TONE OF VOICE

Interpersonal aspects of care, such as quality of communication between physician and patient may be central to the patient’s decision to initiate malpractice litigation. The manner or tone in which a surgeon communicates might have an important bearing on physician-patient relationship. In a landmark first ever study investigating surgeon’s tone of voice during routine office visits and their malpractice claims history on 57 surgeons (23 were general surgeons and 34 were orthopaedic surgeons), it was seen that surgeons who were judged to be more dominant (OR 2.74, P = .02, 95% CI 1.16 - 6.43) and less concerned/anxious on the basis of their tone of voice were more likely to have been sued than surgeons who were judged to be less dominant and more concerned/anxious. The result did not vary according to the speciality of the surgeon (orthopaedic -vs- general). Thus it was concluded that dominance coupled with a lack of anxiety in the voice may imply surgeon indifference and lead a patient to launch a malpractice suit when adverse outcomes occur. This study also emphasized the selection, training and continuing education of surgeons, as there is little literature that specifically examines surgeon-patient relations or that provides guidance for how to improve their communication. The authors recommended an effective training method with the use of audio-taped interactions for feedback and to provide surgeons with a sense of how they sound during interactions with patients.

REPORTING OF ADVERSE EVENTS AND ERRORS

Adverse events have been defined as injuries related to medical management (in contrast to complications of disease). Error has been defined as “the failure of planned action to be completed as intended (error of execution) or use of a wrong plan to achieve an aim (error of planning)”. The primary purpose of voluntary reporting is
1. To learn from experience
2. All responsible parties are aware of major hazards
3. Monitoring progress in prevention of errors
4. To hold hospitals accountable for safe practices

In a study on 218 completed questionnaires sent randomly to surgeons listed in the American College of Surgeons 1998 year book, participants were asked to read two scenarios in which an adverse event occurred during the surgical management of patients. The average age of the respondents was 49.2 years (minimum 38, maximum 68), and 91% were males. The majority were general surgeons (36%), followed by plastic surgery (12%) and otorhinolaryngology specialists (8%). 26% of the respondents indicated that they believed, reporting the incident to the patient would result in litigation against them, regardless of where the initial surgery was performed whereas two-thirds of the respondents (62%) believed that reporting such events would result in improved patient care in future. Approximately 75% of respondents indicated that they believe that the use of surgical protocols would lessen the incidence of errors while the rest felt that errors typically results from lack of training and personnel
shortages, rather than the absence of protocols or standard procedures, and that the use of protocols may encourage staff to "stop thinking". Few respondents felt that while surgical protocols may reduce errors, they may also encourage litigation if they are not precisely followed, regardless of whether adverse events occur or not.\textsuperscript{7}

**VOLUNTARY EXTERNAL REPORTING SYSTEMS**

In the US, there are five major national voluntary reporting systems – The Joint Commission on Accreditation of Healthcare Organisation (JCAHO), Sentinel Events reporting Programme, the Medical error reporting programme, the Med MARx programme and the National Nosocomial Infection Survey. The last three are designed along with the pattern of the famous Aviation Safety Reporting system of Charles Billings.\textsuperscript{8} Adverse drug events, drug reactions, medication errors, drug name, labelling and packaging hazards and hospital-acquired infections are reported to them. As such they are the most successful voluntary programmes as they are safe, simple and worthwhile. Expert analysis is available and specific directions to improve health care are recommended. But then to set up a national voluntary reporting system would be a daunting task. Studies estimate that 1 million serious error-related adverse events occur annually.\textsuperscript{9,10} If "close calls" were also reported, the total would be around 5 million.\textsuperscript{11} Even if only 10\% of errors were reported, the number – 500,000 – is 15 times the number processed by the Aviation Safety reporting system. Such number would entail high cost of processing, delay in analysis, risk of breach of confidentiality and as such render reporting futile.

**MANDATORY REPORTING - CURRENT CONTROVERSY**

The Institute of Medicine (IOM) in US defines mandatory reporting systems as systems run by State department of health that require hospitals to report serious accidents and threats to patient’s safety. Mandatory reporting of serious injuries primarily improves safety by ensuring accountability.\textsuperscript{9} However, the American Medical Association and the American Hospital Association raised strong reservations against mandatory reporting as they felt that it would increase liability and drive reporting underground. Mandatory reporting system hold hospitals accountable by requiring that serious mishaps be reported and by providing disincentives, such as penalties or sanctions, for continuing to engage in unsafe practices. It also provides valuable information, to many other institutions if the lessons learned from serious accidents are widely shared. However, common arguments against mandatory reporting were

1. It may increase the pressure to conceal, rather than analyze errors.
2. Reporting is cumbersome and time consuming, carries the risk of loss of license or accreditation.
3. Most reports elicit no response and the lessons learned from investigation are seldom shared, hospitals often view reporting as all risk and no gain.
4. Reporting will not work in the present legal system, though no studies have ever linked any association between reporting and litigation. Ironically, few reports only indicated that full disclosure of events reduces the risk of litigation.\textsuperscript{12}

The successful and ideal reporting system should be non-punitive, confidential, independent, timely, system-oriented, responsive and evaluated by experts who understand the clinical circumstances and who are trained to recognize underlying systems causes.

In US, the National Quality Forum report has listed the following surgical events as mandatory reportable events\textsuperscript{13}

- Surgery performed on the wrong body part
- Surgery performed on the wrong patient
- Wrong surgical procedure performed
- Retention of foreign object in a patient after surgery or another procedure.
- Death of ASA Class I risk patient during or immediately after surgery.

The future of mandatory reporting is controversial. Mandatory reporting is no substitute for a good relationship between surgeon and patient. Few factors such as critical shortage of trained nurses, temporary or float personnel in high risk areas such as operating room or casualty, and cost pressures influence the ability of committed surgeons to limit or report errors. According to Marshall Marinker, the task of specialist is to "reduce uncertainty, to explore possibility, and to marginalize error. That of general practitioner is to mediate between predicament of the individual and the potential of the bioscience i.e., to tolerate uncertainty, explore probability and to marginalize danger."\textsuperscript{14}
Finally, the Institute of Medicine report in 2001 concluded - ‘Healthcare today harms too frequently and routinely fails to deliver its potential benefits’.\textsuperscript{15}

**CONCLUSION**

When guidelines have been established that certain wrongs have to be mandatorily reported, then it is definite that such wrongs do occur. Reporting those errors still seem to be in its infancy, with the majority of surgeons fearing slander, vindictive action, litigation and even delicensing of practice. A minority seem to believe that errors are mainly because of problems in the system, and not directly related to surgical / medical skill per se.

As long as the care-giver is considered part of a consumer market, where admitting that he has erred would penalize him, mandatory / voluntary reporting cannot be implemented. Audits conducted in small circles strictly in confidence, with additional emphasis on good surgical training, accurate diagnosis and planning treatment within means, may restrict the number of medical errors.

Reporting adverse events and means to overcome or prevent such events will definitely go a long way in improving knowledge and ultimately patient care. But that can materialize only if at least scientific fora and academic discussions are made exempt from public consumption, where medical personnel can discuss problems without the Democle’s sword of litigation hanging over their necks.

“From the time of Hippocrates, surgery has ever been the salvation of inner medicine. In inner medicine, physicians have dwelt too much in dogmas, options and speculations; and too often their errors passed undiscovered to the grave. The surgeon, for his good, has had a sharper training on facts, his errors hit him promptly in the face.”

– Thomas Allbutt (1922)

**REFERENCES**