



Editorial

MAKING SURGERY SAFER

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Surgery being one of the main modalities of treatment, in fact, in many cases, the only way to treat and cure patients and alleviate disabilities, has a crude mortality of about 0.5-5% after major surgery and morbidity may reach up to 25%. Mortality from general anaesthesia alone is reported as high as one in 150 patients in some areas of sub-saharan Africa¹. Focusing this point, WHO has taken a number of global and regional initiatives. Among those, "Safe Surgery Saves Lives" programme is a successful one. Also taken "Pulse Oximetry Project", "SAFROS Project", "Global Initiative for Emergency and Essential Surgical Care" – all are intricately linked to provision for safe surgery¹.

Delivery of health care in appropriate and safest possible way is a complex one. It needs an institutional dedicated healthcare system which, by default, identifies and documents the problems of iatrogenic injuries and illness and guides doing the right thing for the patient for safety and quality care on the basis of medical evidence. The Institute of Medicine (IOM) in USA published a report estimating significant deaths from errors of commission in hospitals throughout the country². In another report in New England Journal of Medicine found that patients did not receive 45% of the care that was indicated by medical evidence³. Including the independent patient factors, all these errors of commission and omission contributed to patients' overall bad outcomes and safety. So it became evident that adverse outcomes are the end result of the weakness in the system of healthcare delivery. The obvious goal of any patient safety programme is to prevent errors, improving outcomes and also reducing the errors that do not cause harm either by chance or because of the unscripted action of diligent people within the system.

So it was recommended that individuals, a group of specialists, such as surgeons, or a unit, such as operating room suite, may wish to improve safety with an organized programme. But to be maximally beneficial the culture of safety has to exist throughout the health care setting.

For surgical safety, individual surgeons must require commitment to safety with efficiency, being attentive to one's own activities along with others, rehearsal, sense-making about the relationship between what is happening and what is intended and also effective communication with the team that is accurate, sufficient and understood. At this scenario, with 3 principal components before initiation of Surgery "Universal Protocol for preventing Wrong Site, Wrong Procedure, and Wrong Person Surgery" was published by Joint Committee in 2003⁴. This includes (i) Preoperative verification, (ii) Marking the operative site, (iii) Performing "time out" before procedure that ensures final assessment by the operating team about correct patient, site and procedure.

Based on the successful international programme "Safe Surgery Saves Lives", World Health Organization incorporates validated safety checklist to reduce the number of surgical deaths across the world by addressing important safety issues, including inadequate anesthetic safety practices, avoidable surgical infections and poor communication among team members⁵. These have proved to be common, deadly and preventable problems in all countries and settings. The checklist divides the operation into three phases, each corresponding to a specific time period in the normal flow of a procedure - the period before induction of anesthesia (Sign In), the period after

induction and before surgical incision (Time Out), and the period during or immediately after wound closure but before removing the patient from the operating room (Sign Out). Engaging one designated checklist coordinator, routine scheduled prototyped checking has been done involving all members of the team. During "Sign in" the coordinator verbally reviews and confirms identity, site and procedure, expected blood loss or any anesthetic risk in induction. In "Time Out" phase, team members introduce themselves with responsibilities, confirming the patient and procedure loud and ensure administering prophylactic antibiotics and instrument sterilization. For the "Sign Out", the team will review together the operation that was performed, completion of sponge and instrument counts and the labeling of any surgical specimens obtained. Finally, the team will review key plans and concerns regarding postoperative management and recovery before moving the patient from the operating room.

From the surgeon's point of view, efficiency and accuracy improves on avoiding preoperative stress and fatigue, involving the patient in the system and arranging mortality and morbidity conference not only to learn from mistakes but also from recoveries and perform root cause analysis, proactive hazard analysis and make useful recommendations to develop functional system to overcome situation based on medical evidence^{2,4}.

So developing and practicing appropriate checklist of precautions in surgical settings and incorporating database for morbidities with universal terminologies with sharing the mode of care can ultimately ensure better outcome in surgical patients.

References:

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