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Surgical Safety Checklist: Challenges and A Way Out

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ABSTRACT

Surgery is at the pinnacle of today's health care system. It is the only intervention that alleviates pain, disability and decreases the risk of death from common conditions. While surgeries are expected to safe lives, negligence in carrying out them can cause substantial harm to the patients. In 2009, the World Health Organization (WHO) published the Surgical Safety Checklist (SSC) as part of their Safe Surgery Saves Lives campaign. It was developed by WHO with the aim to decrease errors and adverse events and increase teamwork and communication in surgery. Over the years, this 19-item checklist has shown reduction in both morbidity and mortality among surgical patients and is now used by most of the surgical providers all over the planet. Though the checklist has improved surgical outcomes, many health-care providers are hesitant in implementing it in their everyday practice. Right utilization of this form can transform surgical care.

Keywords: *WHO Surgical Safety Checklist, Implementation, Adoption barriers*

1. INTRODUCTION

The 19-item SSC enables the surgical team to perform safety checks and good team communication at different phases in the perioperative period to ensure safe surgery. WHO SSC has played an important role in reducing the surgical morbidity and mortality globally. Despite substantial reduction in surgical mortality, morbidity and adverse events following the use of SSC, there still exists a hesitancy among the surgical team to implement it in the day-to-day practice. This is truly a matter of concern. In this article, we would like to highlight the challenges in the utilization of the WHO Surgical Checklist and the measures we could adopt to overcome them.

2. NEED FOR SURGICAL SAFETY CHECKLIST

Most adverse events reported from hospitals take place in the operating room (OR). Among these mishaps that take place in the OR, 40% were preventable, if the standard of care were used [1]. One million patients die due to preventable surgical complications every year [2]. WHO reports that the reported crude mortality rate after major surgery is 0.5-5%; complications after inpatient operations occur in up to 25% of patients; in industralized countries, nearly half of all adverse events in hospitalized patients are related to surgical care; at least half of the cases in which surgery led to harm are considered preventable; mortality from general anaesthesia alone is reported to be as high as one in 150 in some parts of the world.

Even with these data available, the need for SSC is unrecognized especially among the surgical providers in the rural parts of our country. A Checklist helps the surgical team to follow certain steps that ensures safety and diverts danger from patients. The 19-item checklist provides set of items that ensure patient safety and team communication.

3. OUTCOME OF SURGICAL SAFETY CHECKLIST

The SSC not only improves surgical outcome but prevents uncommon but serious errors, reduces morbidity and mortality related to surgery, builds team spirit, preventing complications and unplanned reoperations, prevents surgical site infections, encourages communication. Following its inception in 2008, the WHO Checklist was piloted in eight hospitals globally including both developed and developing nations. The initial results of implementation of the WHO Checklist in these hospitals showed a decrease in surgical site infections from 6.2% to 3.4% and decrease in death rate from 1.5% to 0.8%.[3]

4. CHALLENGES TO ENABLE SURGICAL SAFETY CHECKLIST

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Implementing a new system is always a challenge. Few would welcome it and try adapting to it quacking whereas many who are complacent with the old system would be reluctant. But any change can be made with time, patience, and consistency. Eventually the change will be accepted and made a routine.

The few challenges that we faced while we introduced surgical safety checklist are as listed below:

1. Reluctancy: The modified surgical safety checklist was designed keeping the existing system and practice in our organization. It was simple and straight forward. Despite this, it was not well-taken by the surgeon and anaesthesiologists, since in certain phases of the SSC nurses have a lead role to play.

2. Time concern: The surgical team expressed their concern for time and felt that the SSC was interrupting the workflow. Hence in the initial period checklist became a tick list.

3. Anxiety among the team: The nurses expressed an increase in workload especially in the ORs with quick turn around time, they also felt it to be an unnecessary interruption of their routine work. The huge turn-over and the time taken to complete the checklist increased the anxiety among the team.

4. Anxiety in awake patient: The patients who were awake and were not well-prepared regarding SSC were became restless and anxious.

5. Signing on the Document and Sign-out: Since the roles of each team member in the OR is well defined, there was a lack of coordination in ensuring that the surgical team members signed on the document. The reason being the varied timeout between surgeon and anaesthetist. At the end of the surgery, surgeon leaves the operation theater to take a break before next case or dictate notes, the nurse staff is occupied with packing and labeling of the samples, and for anaesthesiologist, it is most critical time. As the result, the key concerns for the recovery and postoperative management of the patient are often not discussed by the operative team.

6. Low adherence during emergency: There was a high reluctancy among the team while applying the SSC during an emergency surgery. The main concern was time.

5. STRATEGIES TO OVERCOME THE HURDLES

Though these challenges seem valid, we found it necessary to develop strategies to overcome it to improve surgical outcome.

1. Training: After piloting and understanding the challenges, we decided to meet the teams and orient them as on how to use the SSC. The surgical team members were met in their respective groups and were oriented to this. We inculcated team dynamics that resolved most of the problem.

2. Form with Procedure: The procedure and the personnel accountable in each phase was printed on the modified SSC designed by our organization.

3. Orienting the Patients: SSC protocol was explained to patients who were awake and thus overcame the hurdle of anxiety among patients.

4. Audits: Regular audits once in a month in the early stage, ensured adherence to the SSC protocol by the team members. It monitored the progress. The results were informed in group and team meetings. Slowly and steadly the team members complied to the SSC despite quick turn arounds as well as emergencies.

6. CONCLUSION

The WHO Surgical Checklist is an excellent tool to reduce the surgical complications worldwide. The surgical team need to work together to ensure that the checks triggered by the SSC are sincerely looked into to prevent untoward events in the operating rooms among the surgical patients.

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