



## SURGICAL CHECKLIST

## Obstetrics &amp; Gynaecology

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## ABSTRACT

WHO has undertaken a number of global and regional initiatives to address surgical safety. Much of this work has stemmed from the WHO Second Global Patient Safety Challenge "Safe Surgery Saves Lives". Safe Surgery Saves Lives set about to improve the safety of surgical care around the world by defining a core set of safety standards that could be applied in all WHO Member States. Therefore, working groups of international experts were called together to review the literature and the experiences of surgeons around the world. They reached consensus on four areas in which considerable improvements could be made in the safety of surgical care: surgical site infection prevention, safe anaesthesia, safe surgical teams and measurement of surgical services. Definitive methods for investing preoperative and postoperative briefing and debriefing into conventional culture should be developed. General processes for identification of the patient, procedure, operative consent form, and the surgical site should be mandatory and implemented prior to the patient entering the operating theatre (OT). In the OT, a time-out or surgical pause helps avoid inaccuracy and promote communication among surgical team members. All significant records, images, and essential equipment should be called out and availability confirmed. If any part of the verification process is incomplete, OT activity should be halted until verification is successfully completed.

## KEYWORDS

SSC (surgical safety checklist), OT(operation theatre)

## INTRODUCTION

The World Health Organization (WHO) published the Surgical Safety Checklist (SSC) in 2009 as part of their "Safe Surgery, Saves Lives" campaign. The checklist is based on aviation checklists, which are quality practice in that field. The SSC is utilized by majority surgical contributor all over the world.

Taking into consideration the high burden of surgical services and complications that can emerge during surgical procedures, surgical safety is a world-wide public health concern. A review of the in hospital adverse events showed that most adverse events were operation-related, and roughly 43% were preventable [1].

The surgical safety checklist include three components: sign-in, performed before the induction of anaesthesia; time-out, performed before skin incision; and sign-out, performed immediately after skin closure or before the patient leaves the operating theatre [2]

WHO Member States have continued to be active in label these issues. Significantly this work has been initiated by the world wide implementation of the WHO Surgical Safety Checklist, a 19-item tool created by WHO in association with the Harvard School of Public Health.[8] (Figure no.1)

## Key Sections of the Surgical Safety Checklist

## 1. Preoperative Period (Before anesthesia)

- Patient identification
- Confirmation of surgical site and marking - Allergies and medication history.
- Availability of necessary imaging and equipment.
- Review of patient-specific risks (e.g., comorbidities, bleeding risks).
- Surgical site preparation
- Sterility of instruments and equipment.

## 2. Time-Out (Before Skin Incision)

- Re-confirmation of patient identity and procedure.
- Surgical site and side validation.
- Antibiotic prophylaxis administration (if applicable).
- Clarification of each team member's role and responsibilities.
- Discussion of any anticipated critical events or complications.
- Blood products or special equipment availability.

This pause helps ensure that the entire team is prepared and any last-minute issues can be addressed.

## 3. Intraoperative Period (During Surgery)

- Monitoring the patient's vitals and anesthetic needs.
- Ensuring the availability of backup instruments and materials.
- Sterility protocols are maintained throughout.
- Continuous team communication, especially during critical moments.

## 4. Postoperative Period (Before the Patient Leaves the Operating Room)

- Confirming that the correct procedure was completed.
- Verifying instrument, sponge, and needle counts (to avoid leaving objects in the patient).
- Reviewing any specimens collected for pathology.
- Assessing patient stability and readiness for transfer to recovery.
- Communicating any critical information to the postoperative care team, such as patient specific concerns or postoperative instructions.

## 5. Post-Procedure Debriefing

After the surgery, a brief debriefing takes place to reflect on the procedure. This helps identify potential areas for improvement, such as equipment issues, communication gaps, or unexpected complications.

Figure 1. Surgical safety checklist for patient safety by WHO [8]

## DISCUSSION

In the context of high surgical demand, intraoperative teams are faced with a number of challenges. Best care practices and patient safety are directly affected by these challenges. As theatre lists fill up, and workloads increase, safety practices are neglected [3]

Despite the hectic schedules of operating theatres, intraoperative team members often prioritise pushing procedures, sometimes at the expense of patient safety. Many theatre scheduling processes revolve around completing the sometimes overwhelming 12–15-h shifts without considering that each patient has unique needs and expectation.

In addition To the fast pace, the team's processes and relationships are stressed. Consequently, each of these factors impedes the use of the WHO SSC. Intraoperative team collaboration becomes quintessential

in a complex setting, where patient safety is dependent on multidisciplinary expertise ([4]

Interdisciplinary teamwork requires mutual trust, respect and understanding of each other's responsibilities to facilitate safety practices through the use of the WHO SSC. The SSC has been shown to reduce complications and mortality by more than 30%. The checklist is simple and can be completed in less than two minutes.

On inquiring to the operating staff about the possible hindrances in implementing the checklist, we came to know that the lack of awareness, training, motivation, and perception of insignificance about the checklist were the major barriers in the way of its application. This result is contrary to a study in England in which the resistance from senior faculty is the most common barrier to the checklist execution, followed by the lack of staff appropriate training and awareness [5]

By September 2014, the WHO team had identified 4132 institutions who had expressed an interest in using the checklist And 1790 institutions who were actively using the checklist in at least one operating theatre.[6]

A study published in 2009 showed that implementation of the 19-item World Health Organization (WHO) Surgical Safety Checklist substantially reduced the rate of surgical complications, from 11.0% to 7.0%, and reduced the rate of in-hospital death from 1.5% to 0.8%.[7]

This Remarkable effect of a relatively simple and accessible intervention resulted in its global adoption. Seven years after Introduction of the checklist, numerous studies have shown the benefit of the checklist, but observers, audits and trials Have also reported common barriers to successful use of this patient safety tool.

## CONCLUSION

Surgical safety checklist is fundamental to become a part of regular surgical culture, even in an emergency or at the End of a long shift when uncomplicated tasks are easily out of mind. With constant utilization, surgical team members will become Familiar with the checklist, less uncomfortable about using checklist, more time efficient, and give out the hurdles to success. And ultimately, patient harm will be reduce and promote for patient safe surgical environment. The surgical safety checklist is a crucial tool in modern surgical practice, contributing significantly to patient safety and overall surgical success. By promoting communication, accountability, and consistency, it minimizes the risk of errors in surgical field and it helps to create a more reliable and safe surgical environment.

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