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Keeping Patients Safe During Surgery: An Interventional Study to Enhance Compliance to the Surgical Safety Checklist at a Tertiary Care Teaching Hospital in India

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INTRODUCTION

- Surgical procedures expose patients to certain inherent risks.
- Rate of major complications after inpatient surgery has been estimated at 3–17% in industrialized countries and has been a significant cause of post-surgical morbidity and mortality.
- The checklist can serve as a tool to enhance the team's performance through better coordination and eventually prevent these errors.
- Hence, this interventional study was undertaken to enhance compliance with the surgical safety checklist (SSC)

AIM & OBJECTIVES

AIM:

To improve the compliance to the Surgical Safety Checklist through multi-pronged intervention at a Tertiary Care Teaching Hospital in India.

OBJECTIVES:

- To assess the compliance to the surgical safety checklist at major OT complex of a tertiary care teaching hospital.
- To conduct a root-cause analysis of the reasons for poor compliance.
- Devise a multi-pronged approach for sensitizing the OT users regarding the importance and process of documenting the SSC.

METHOD

Study setting: Twelve Operating Rooms of a tertiary care teaching hospital.

The **baseline data** was collected from the medical records of all patients who underwent surgical procedures over one month.

A **focused group discussion** was held with the stakeholders to identify the root cause of poor compliance.

Based on this, a **multi-pronged approach** was adopted to sensitize the operating teams of four departments (study group) regarding the SSC; the other three departments constituted the control group.

Post-intervention, the compliance was again measured across all seven departments, and the results were statistically analyzed.

CONCLUSIONS

It was concluded that compliance with the SSC depends on many factors. The role of top management, involvement of the team members, training, and developing a culture of patient safety was crucial in successfully implementing the surgical safety checklist. The intervention not only improved the overall compliance in terms of the checklist being attached to the case file but also positively impacted how meticulously the checklist was being filled.

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RESULTS

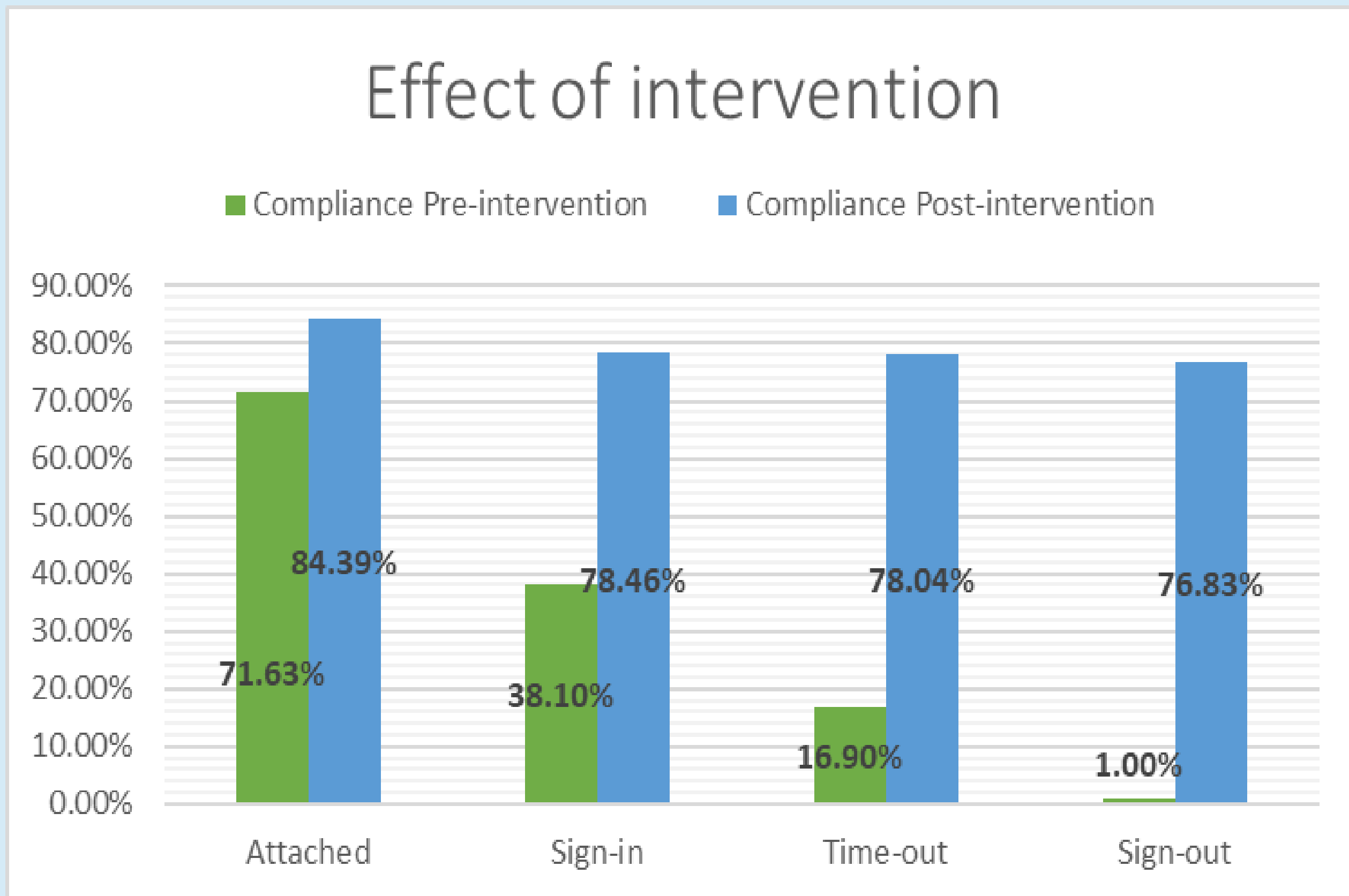
The SSC was attached in 71.63% (409/571) files in the pre-intervention stage and 84.39% (492/583) files in the post-intervention stage.

The study group showed better improvement as compared to the control group.

In the 'Sign In' phase, all the boxes were checked in 38.1% and 78.46% of the cases during the pre- and post-intervention stages, respectively.

The compliance to all the boxes in the 'Time Out' phase increased from 16.9% to 78.04%, while that in the 'Sign Out' phase improved from 1% to 76.83%.

All the differences were statistically significant, with a p-value of <0.05.



BOTTLENECKS IDENTIFIED

Perceived as wastage of time
Lack of clarity on responsibilities
No cooperations by surgeons
Belief that checklist wasn't important as there is negligible chance of an error

FACTORS CRUCIAL FOR SUCCESSFUL IMPLEMENTATION OF SSC

Involvement of team members
Periodic Trainings
Developing culture of patient safety
Role of top management

ACKNOWLEDGEMENT

I sincerely thank the efforts of the Nursing staff of the operation theatre complex for providing valuable insights into the bottlenecks and suggesting measures for improving compliance to the SSC.

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