

# Improving Teamwork and Communication using the Surgical Safety Checklist: A Prospective Evaluation in the Lake Zone of Tanzania.



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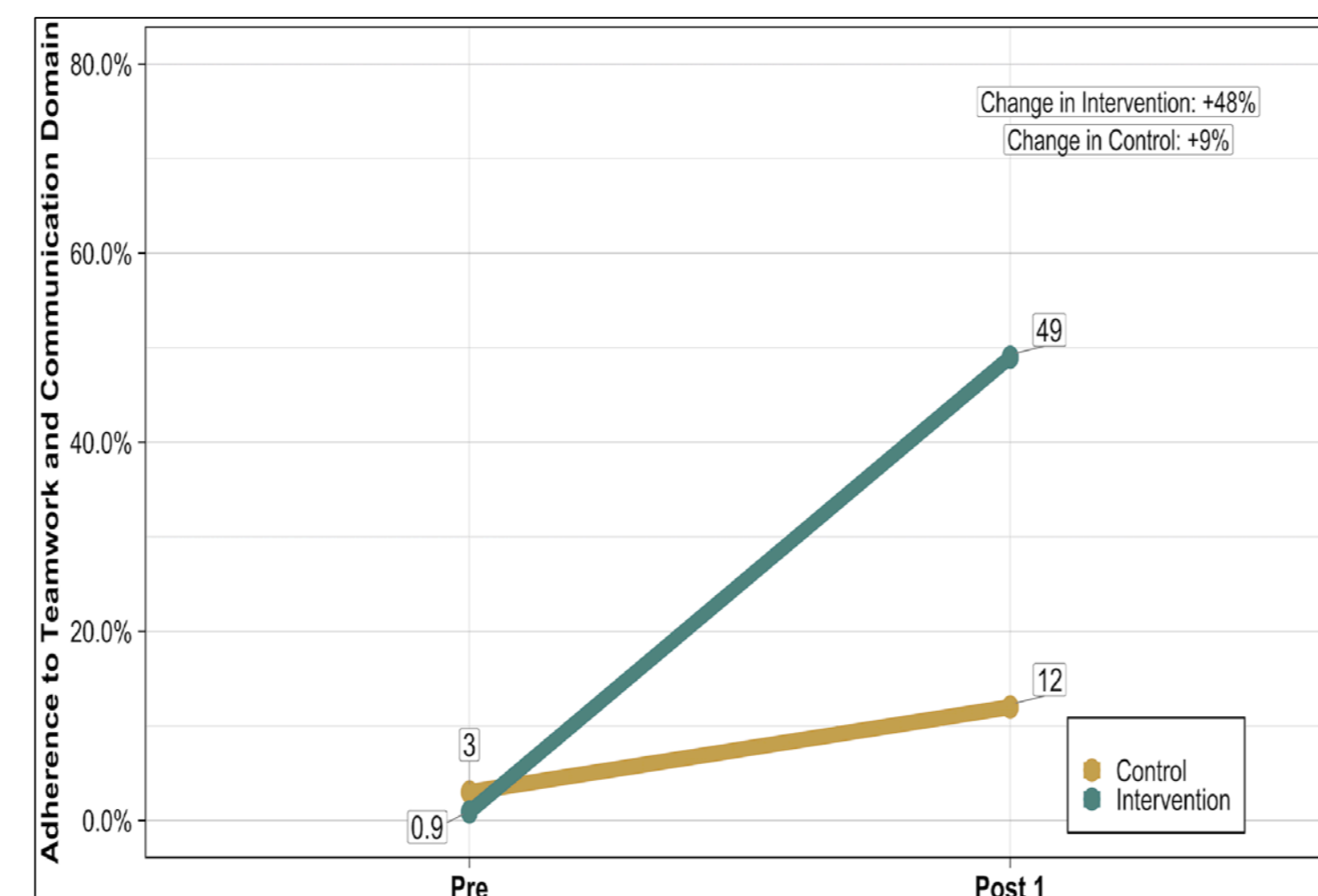
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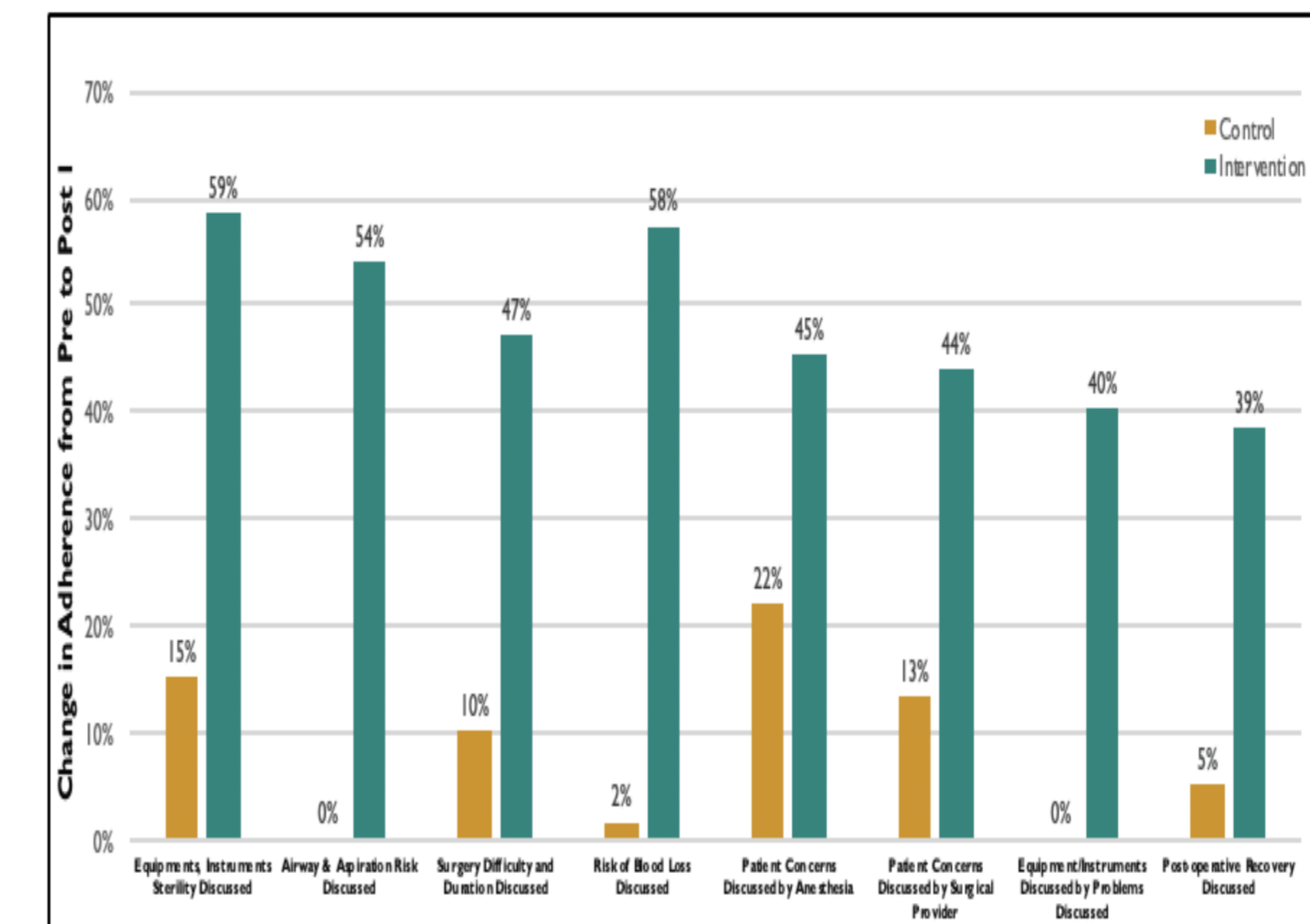
## INTRODUCTION

- The Surgical Safety Checklist (SSC), developed by WHO, is a tool to improve safety and encourage teamwork and communication in the operating room(OR) that leads to a reduction in surgical complications.<sup>1,2,3,4,5</sup>
- We hypothesized that its implementation as part of the Safe Surgery 2020 initiative in Tanzania's Lake Zone Region<sup>1</sup> would improve teamwork and communication in the OR, and be associated with a reduction in maternal sepsis, sepsis and surgical site infections<sup>2</sup>.

## RESULTS



Change in adherence to teamwork and communication indicators from pre to post intervention was higher among intervention than control hospitals (48% vs 9%,  $p < 0.001$ ).



Greatest improvement observed in: sterility discussed at 59% , risk of blood loss discussed at 58% and airway & aspiration risk discussed at 54% ( $p < 0.0001$ ) post-intervention

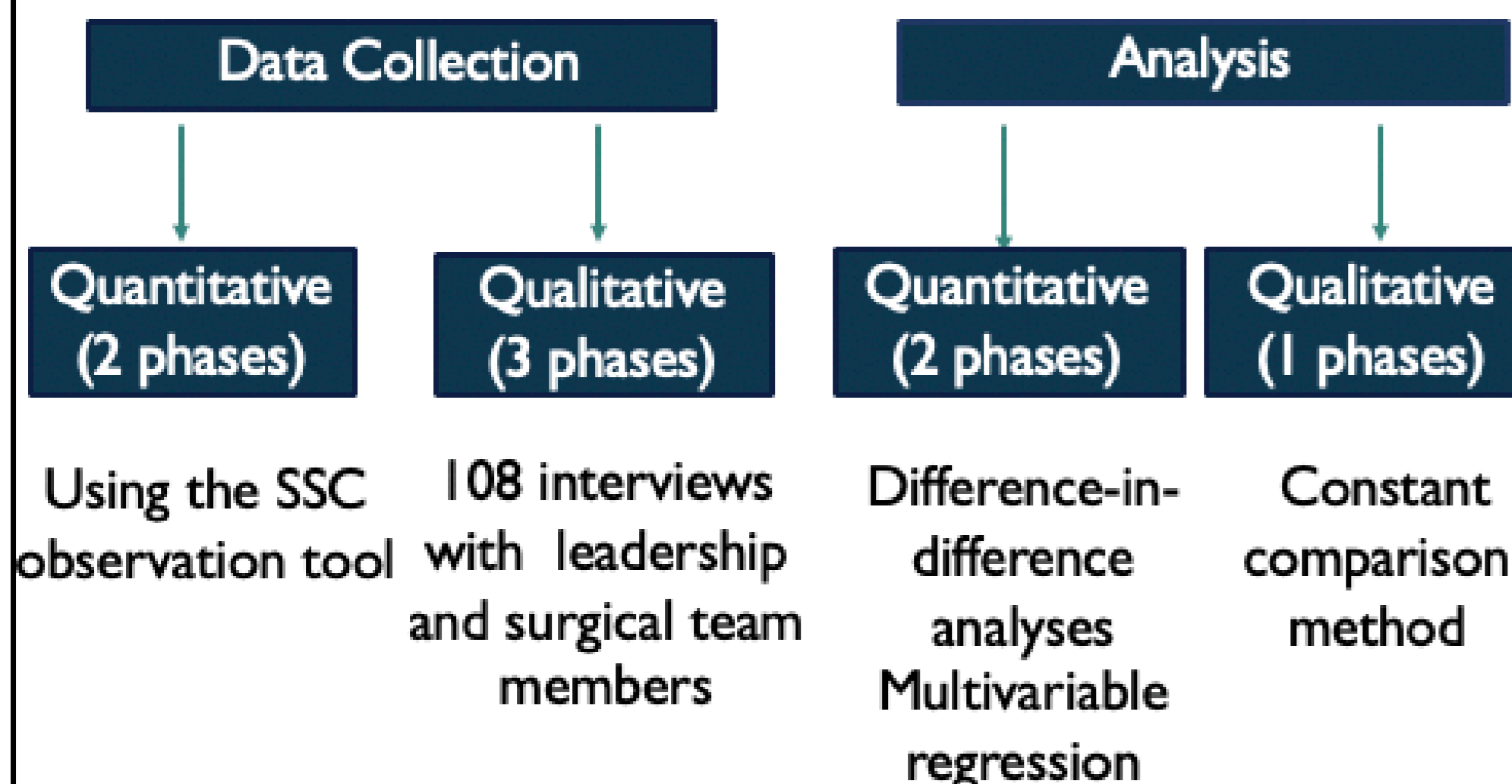
## TEAMWORK AND COMMUNICATION INDICATORS

- Risk of airway difficulty or aspiration
- Risk of blood loss
- Patient specific concerns – anesthesia provider
- Patient specific concerns- surgical provider
- Sterility of instruments and equipment
- Equipment problems during surgery
- Post-operative recovery concerns
- Duration and difficulty of procedure

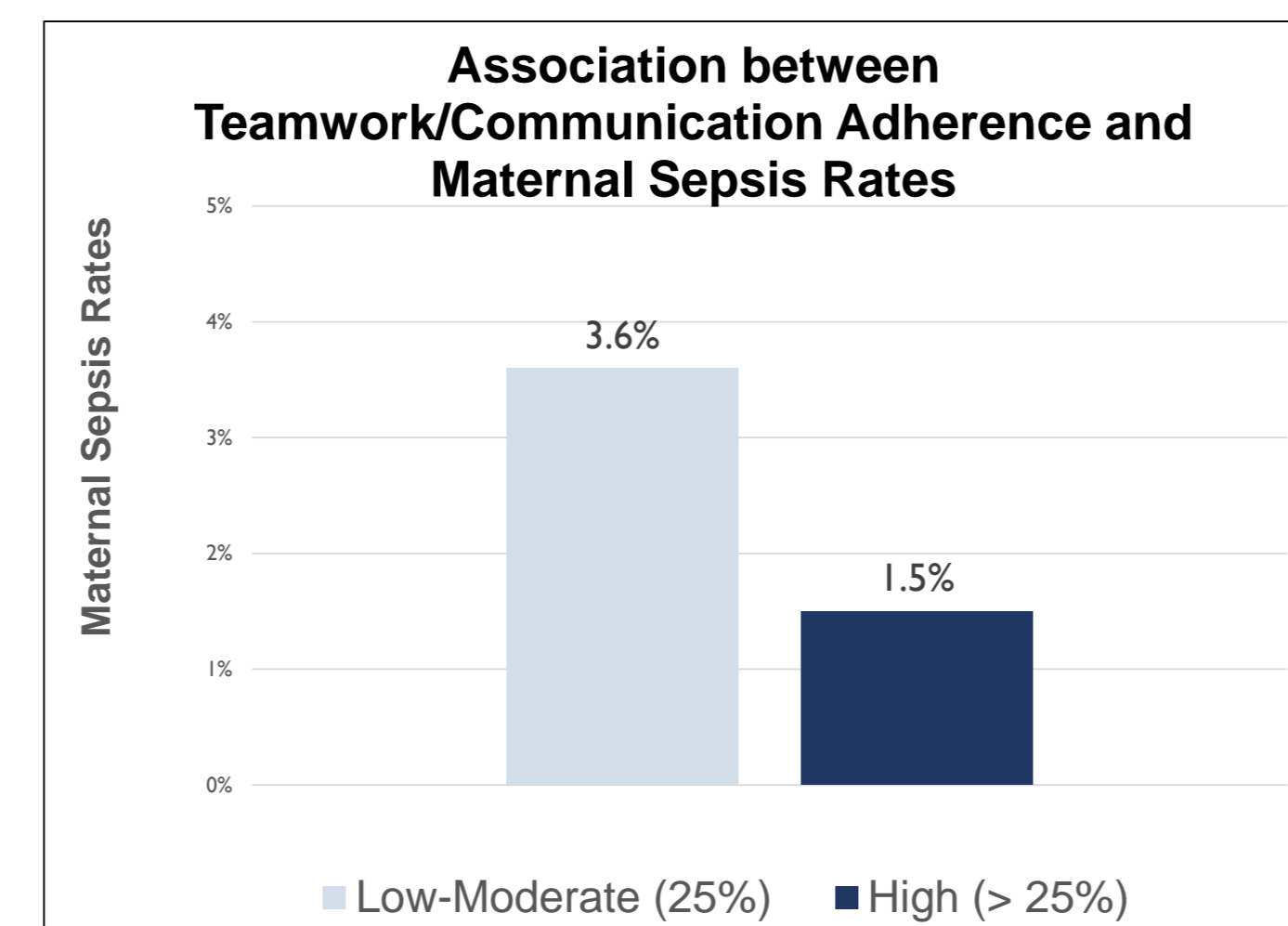
## METHODS

Longitudinal, mixed methods, prospective evaluation of SSC implementation in 20 health facilities in Tanzania's Lake Zone region.

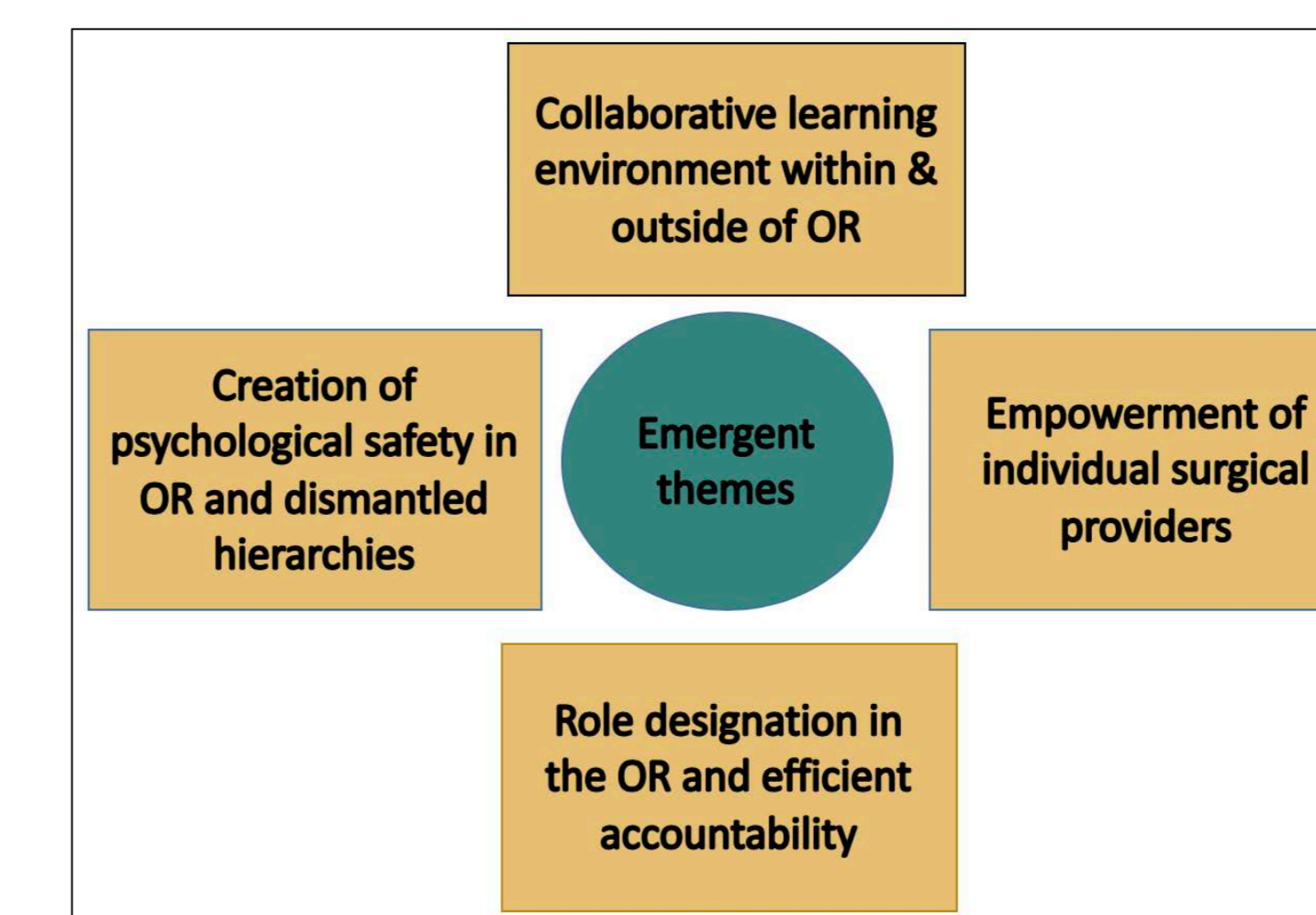
SSC implementation : over a 9-month period.



High teamwork/communication adherence was significantly associated with lower rates of maternal sepsis (3.6% vs 1.5%;  $p = 0.011$ ).



The teamwork and communication prompts encourage sharing of critical information about the patient, procedures and any known risks, so that the team is better prepared for the surgery



## DISCUSSION AND RECOMMENDATIONS

- As part of the multi-component Safe Surgery 2020 initiative in Tanzania's Lake Zone Region, SSC implementation has shown improvement in teamwork and communication in the OR, in a short period of time.
- Higher adherence to teamwork and communication is associated with a reduction in sepsis rates, suggesting teamwork might be a mechanism through which patient outcomes are improved. More research is needed in this area.

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