

EVENT REPORT

Routine Sterile Glove And Instrument Change At The Time Of Abdominal Wound Closure To Prevent Surgical Site Infection

19 April 2023

General overview

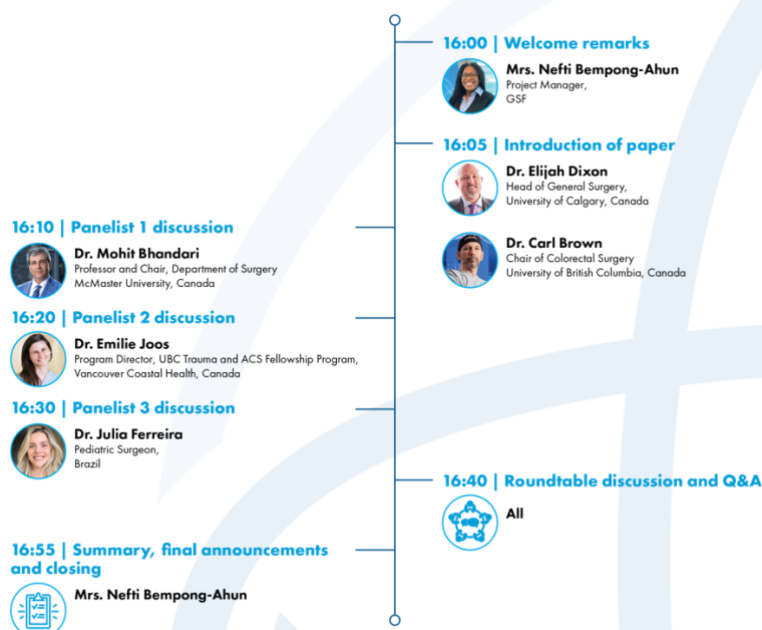
The event was hosted by The Global Surgery Foundation (GSF) and the United Nations Institute for Training and Research (UNITAR) in ongoing collaboration with Evidence-based Reviews in Surgery (EBRS) and the Canadian Association of General Surgeons (CAGS). Through partnership with CAGS, the event was designated an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification (MoC) Program of the Royal College of Physicians and Surgeons of Canada and approved by Canadian Association of General Surgeons.

In keeping with the EBRS methodology, the panel discussion focussed reviewing and evaluating the publication, *'Routine sterile glove and instrument change at the time of abdominal wound closure to prevent surgical site infection (ChEETAh): a pragmatic, cluster-randomised trial in seven low-income and middle-income countries'*.

Event objectives

- Review the evidence supporting the practice of changing gloves and instruments prior to abdominal wound closure.
- Critically appraise an article assessing the impact of glove and instrument change prior to wound closure on the incidence of surgical site infections.
- Discuss strengths and weaknesses of the trial as well as challenges in potential implementation of this intervention.

Agenda and speakers



Key messages

In a journal club fashion, the panelists assessed the article with the main objective of addressing the question: *“In patients (children and adults) undergoing abdominal surgery, does the use of routine glove and instrument change before wound closure lead to a decrease in surgical site infections (SSI) at 30 days?”* All in attendance agreed that the study was an exceptionally impressive undertaking.

The cluster-randomized trial concluded that routine glove and instrument change by all surgical team members decreased SSI and should be widely employed. Strengths included very strong uptake of change in the sites randomized to implement the intervention and the overarching fact that data from LMICs is much more compelling to guide meaningful interventions within those same settings. It was additionally emphasized that a smaller intervention that results in a small improvement in SSI rate still has the potential to be very meaningful to patients, given the cost and severe morbidity associated with SSIs.

The panelist discussed multiple future steps and implications. They suggested revisiting this same investigation in high income countries (HICs), as these study findings should theoretically carry across income status, although the current lack of supporting literature from these settings may be due to cointerventions. This information would better-prepare physicians to analyze the true effects of this intervention.

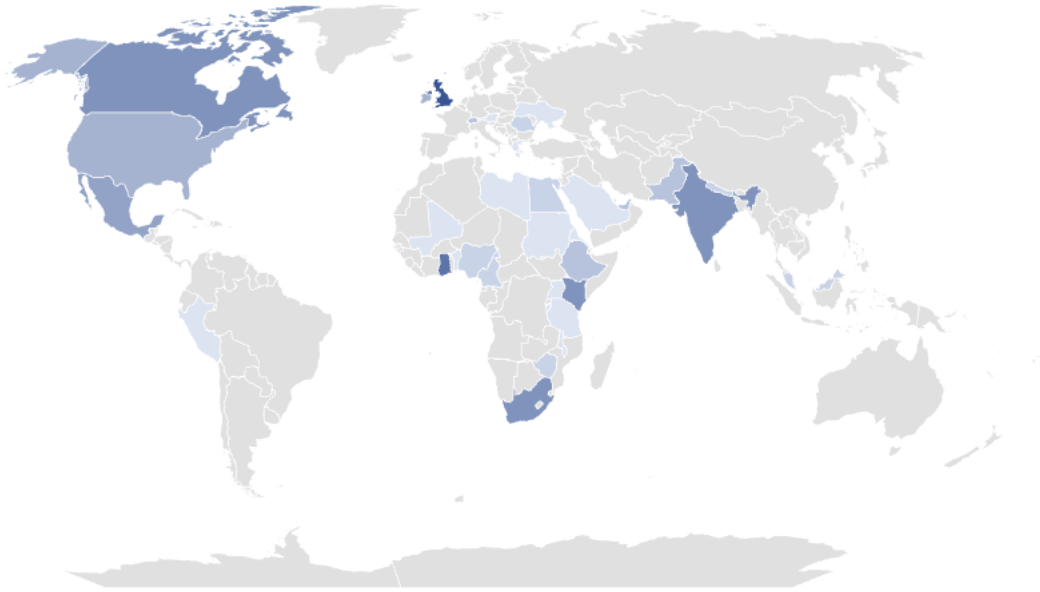
Additional studies must also be undertaken to determine whether there is a way to simplify the intervention or a more specific cluster of patients among the study sample evaluated that would benefit most greatly from this intervention. This would facilitate targeted intervention toward populations at greatest risk for SSI. Lastly, the panelists strongly advocated for a cost-effectiveness study assessing this intervention, as uptake of any intervention is likely to be poor in the absence of this supporting information.

The discussion was enriched by input from one of the publication’s authors, Mr. Dhruva Ghosh of the National Institute for Health and Care Research Global Health Research Unit on Global Surgery.

Event attendance

- A total of 98 participants attended the event via Zoom.
- A total of 40 countries were represented, with highest representation from the United Kingdom (10%), Ghana (8%), Kenya (6%), South Africa (6%) and India (6%) and Canada (6%).
- Most participants who attended were medical staff (61%) and academics (20%).

Geographic distribution



Evaluation

A total of 21 participants responded to the evaluation survey sent to the participants following the event. Participants were re-directed to the survey following the event and a reminder to complete the survey was also sent out two days following the event. 81% of respondents rated the webinar as 'very good' or 'good' overall and 95% of respondents strongly agreed that there was sufficient opportunity for discussion and questions from the participants.



Event outcome and next steps

The **event recording** is available here:

<https://www.globalsurgeryfoundation.org/events/2023/3/8/routine-sterile-glove-and-instrument-change-at-the-time-of-abdominal-wound-closure-to-prevent-surgical-site-infection>



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