

# Evaluating the Impact of a Student-Led Surgical Conference on Participants' Surgical Skills and Perceptions

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### **Background:**

Application rates to surgical training programmes among British medical students have significantly dropped in recent years, with surveys indicating a notable decrease in interest in surgery<sup>1</sup>. This decline is attributed to factors such as, insufficient surgical experience, timing of exposure in medical school, and financial accessibility issues in pursuing surgery<sup>2</sup>. This national student-led "See One: Do One" surgical conference aimed to address these concerns by offering cost-effective hands-on workshops designed to enhance student interest, experience and exposure to the field of surgery.

## Aims:

- 1. To assess the **effectiveness** of the conference in **improving participant interest** in a surgical career
- 2. To assess the **effectiveness** of the conference in **improving participants' confidence** in surgical skills
- 3. To identify perceived barriers in pursuing surgery and assess if the conference addressed them

#### **Methods:**

A national student-led conference was held in February 2024, hosting medical students from multiple medical schools across the country. Surveys were disseminated to participants prospectively one month before and immediately after the conference to assess efficacy. Surveys involved open-ended and Likert-scale questions ('10=very interested/very confident; '0=not interested/not confident) across a series of questions on surgical skills and perceptions. Ratings ≥7/10 were considered high. Thematic qualitative analysis was undertaken.

#### **Results:**

- Students (Male=48%, Female=52%) across all year-groups (1-5) completed the pre-conference and post-conference survey (n=44).
- 86% scored ≥7/10 reporting they were considering a surgical career pre-conference and 93% post-conference.
- There was an increased interest across all surgical specialties covered in the conference (trauma and orthopaedic surgery, maxillofacial surgery, general surgery, plastic surgery and neurosurgery).
- 4x increased interest in maxillofacial surgery (preconference=9%, post-conference=36%); a specialty that is often neglected in the medical curriculum.

• Confidence in surgical skills increased across the board (Figure 1).

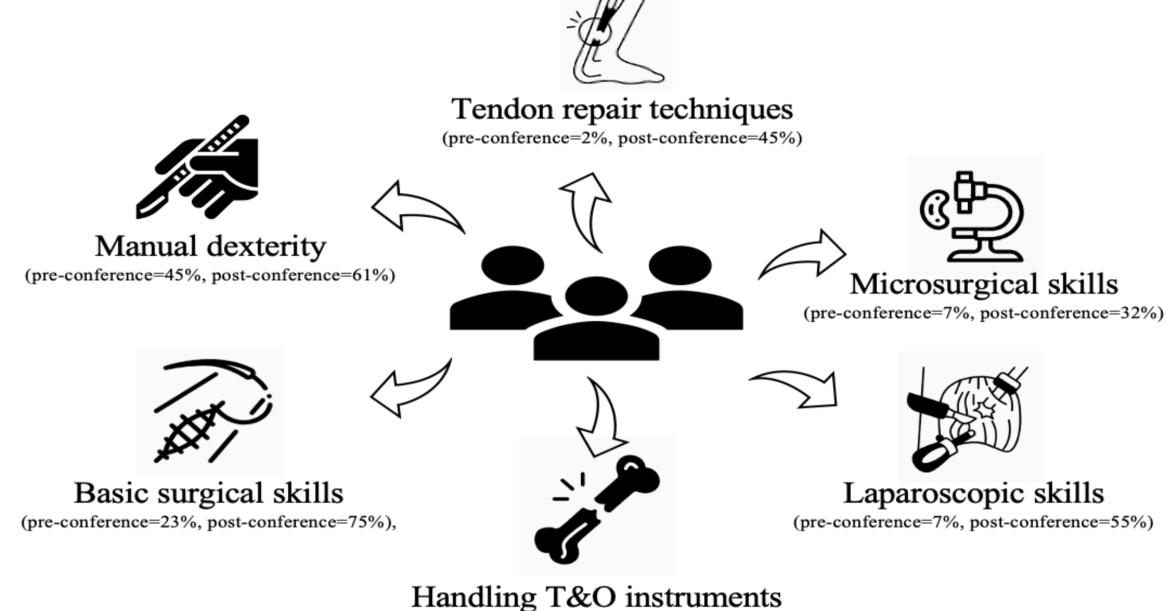


Figure 1: Participants' perceived confidence in various surgical skills

(pre-conference=7%, post-conference=59%)

- The most common perceived barriers reduced following the conference: accessibility/exposure (pre-conference=16%, post-conference=7%) and surgical experience (pre-conference=25%, post-conference=5%).
- Remaining perceived barrier was the **training pathway** (**preconference=25%**, **post-conference=23%**). The conference met student expectations (91% scoring ≥7/10) and **exceeded expectations in 52% of participants**.



#### **Conclusions:**

Early introduction to the field of surgery during the preclinical and clinical years of medical school can increase students' interest in a surgical career. Future strategies are required in the form of accessible surgical skills workshops in the medical curriculum.

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