

Laparoscopic Training Initiative for OBGYN Residents at Cape Coast Teaching Hospital, Ghana

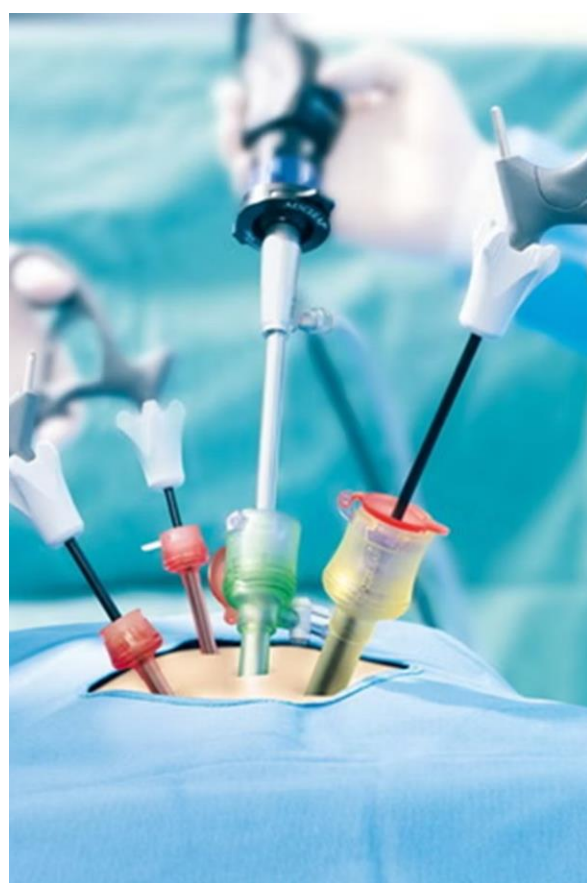
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Objective

- Since the IHCV medical mission is annual, we aimed to provide education to the local Cape Coast Teaching Hospital residents to create sustainable practices, even after we depart from Ghana
- Tools such as laparoscopes, hysteroscopes, and cystoscopes are less commonly utilized due to decreased access and existing education to reinforce consistent practice, adequate simulation, and increase comfort regarding hand positioning and tool utilization



Background

- Many trainees in low-resource settings have limited access to minimally invasive gynecologic surgery (MIGS) training.
- Laparoscopic surgery improves surgical outcomes and recovery times, but structured MIGS curricula are often unavailable in sub-Saharan Africa.
- This initiative sought to build foundational laparoscopic skills, enhance psychomotor proficiency through simulation, and promote evidence-based surgical practice among OBGYN residents at **Cape Coast Teaching Hospital, Ghana.**

Highlights



Diagnostic Laparoscopy



Journal Club Presentation

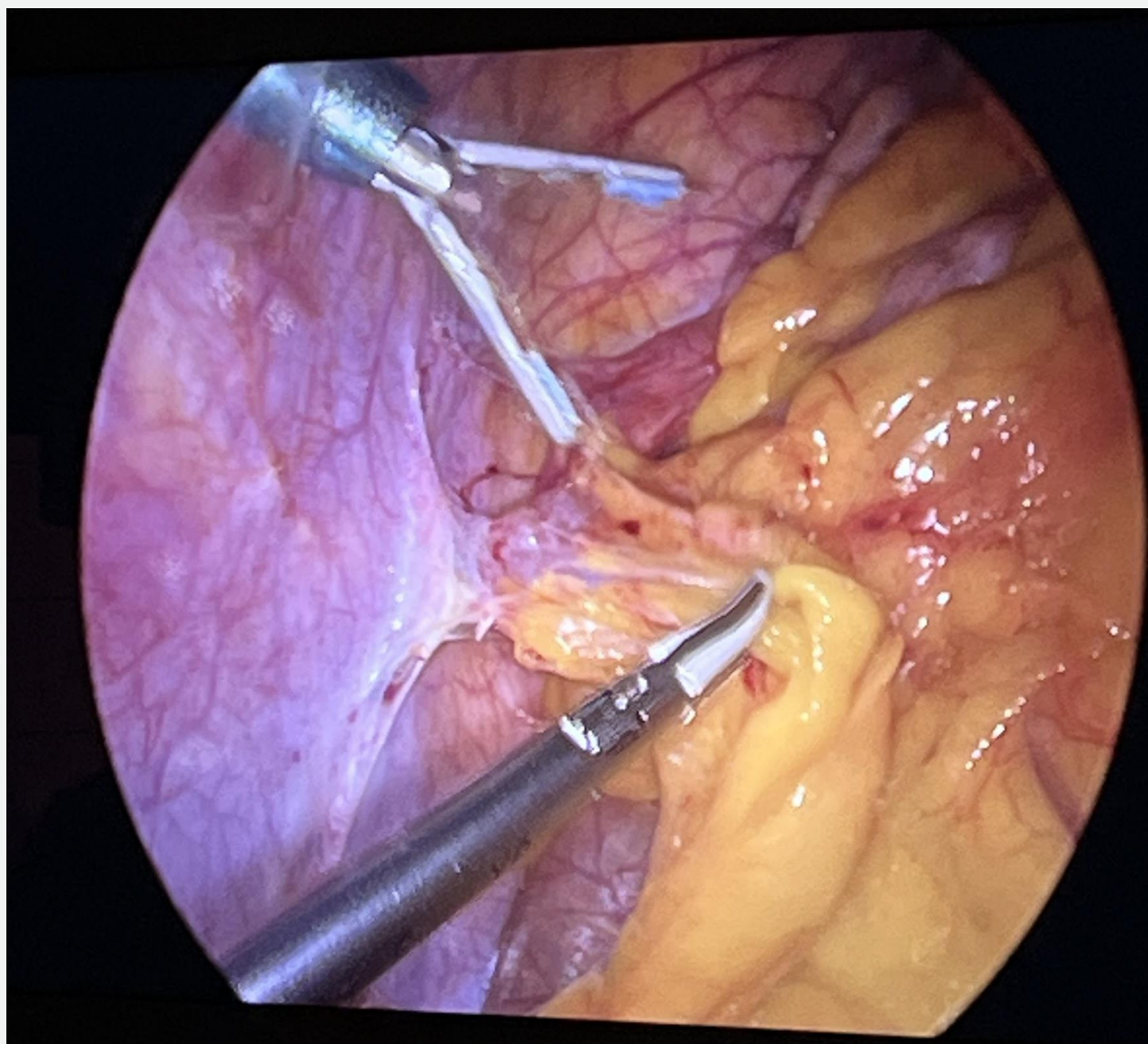
Methods

Time & Setting: May 2025, Cape Coast Teaching Hospital.

Participants: All OBGYN residents and attending faculty.

Curriculum Components:

- Didactic sessions on MIGS principles and instrumentation.
- Hands-on laparoscopic simulation (camera navigation, suturing, knot tying).
- Use of **portable simulation trainers** and **planned live-tissue porcine models** to simulate trocar and port insertion.
- Journal club discussions of recent MIGS literature.
- Emphasis on **sustainability** through reusable tools and local mentorship.



Discussion

- Participants demonstrated measurable improvement in laparoscopic dexterity and confidence, as assessed through structured simulation checklists and self-reported surveys.
 - Residents expressed high satisfaction with the hands-on learning format and requested continued access to simulation resources for ongoing practice.
 - Faculty reported increased interest in integrating routine MIGS
- introduced structured MIGS training to an under-resourced academic setting, improving both skill competency and enthusiasm for laparoscopic surgery among OBGYN trainees.
- The model proved adaptable, sustainable, and feasible with limited equipment, suggesting scalability to other regional training centers. Broader adoption could enhance surgical education and patient outcomes across low-income countries.

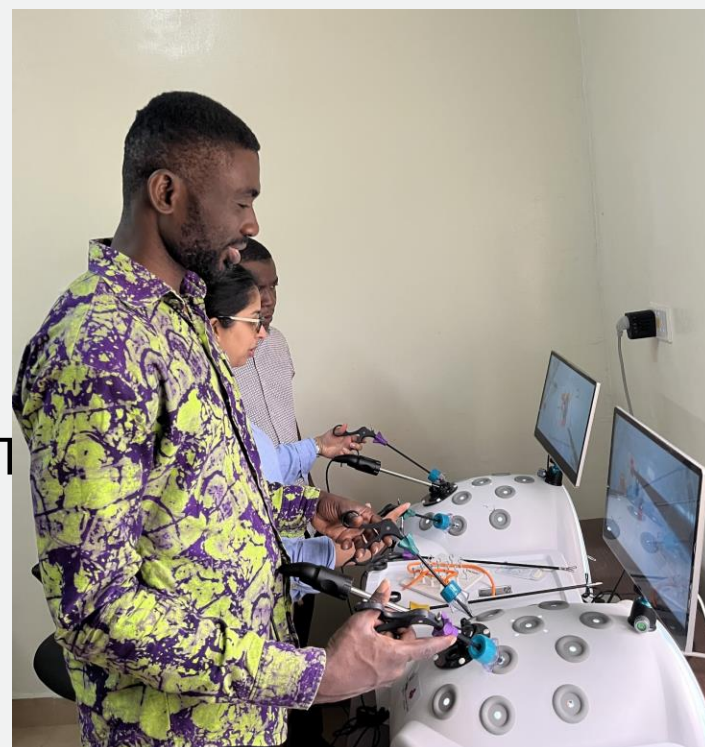


Figure 1 & 2 : CCTH Resident at Laparoscopic Workshop

Conclusion

Future collaborations may incorporate tele-mentorship, live-tissue simulation, and ongoing assessment to further strengthen MIGS education within Ghana’s national OBGYN training programs, advancing global surgical equity and capacity-building.

References/Acknowledgments

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1. Jin X, Ruiz Beguerie J. Laparoscopic surgery for subfertility related to endometriosis: a meta-analysis. Taiwan J Obstet Gynecol. 2014 Sep;53(3):303-8. doi: 10.1016/j.tjog.2013.02.004. PMID: 25286781.Jin X, Ruiz Beguerie J. Laparoscopic surgery for subfertility related to endometriosis: a meta-analysis. Taiwan J Obstet Gynecol. 2014 Sep;53(3):303-8. doi: 10.1016/j.tjog.2013.02.004. PMID: 25286781.