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Impact of simulation training on communication skills in medical students

Submission date	Recruitment status	[_] Prospectively registered
30/10/2024	No longer recruiting	[_] Protocol
Registration date	**Overall study status**	[_] Statistical analysis plan
31/10/2024	Completed	[X] Results
Last Edited	**Condition category**	[_] Individual participant data
21/07/2025	Other	

Plain English summary of protocol

Background and study aims
This study aims to see if a program focused on communication and consent in surgery can improve students' communication skills. The goal is to determine if this training should be a permanent part of the surgical curriculum.

Who can participate?
All surgical students can participate. Non-surgical students are excluded.

What does the study involve?
Participants will watch an actor and a tutor roleplay good and bad consent practices. Afterward, there will be a discussion about what makes good communication when getting patient consent. Students will also take part in a mock consent exercise at the start and end of the week to measure their communication skills.

What are the possible benefits and risks of participating?
Benefits include practicing communication skills, receiving feedback, and helping to improve the surgical curriculum. Risks are minimal but include the possibility that the tutorial may not improve communication skills.

Where is the study run from?
The study is conducted at UCD in the Mater Misericordiae site (Ireland)

When is the study starting and how long is it expected to run for?
October 2023 to October 2024

Who is funding the study?
Investigator initiated and funded

Who is the main contact?
The main contact for the study is Cathleen McCarrick (cathleen.mccarrick@ucd.ie).

Contact information

Type(s)
Public, Scientific, Principal investigator

Contact name
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Additional identifiers

Protocol serial number
LS-C-23-216-McCarrick-Cahill

Study information

Scientific Title
Impact of simulation training on communication skills in medical students- a randomised controlled trial

Acronym
ISTCSMS

Study objectives
That dedicated communication simulation training has a significant effect on medical students' communication skills.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 06/10/2023, Human Research Ethics Committee – Sciences (HREC-LS) (University College Dublin, Belfield, Dublin, -, Ireland; -; research.ethics@ucd.ie), ref: LS-C-23-216-McCarrick-Cahill

Primary study design
Interventional

Study design
Single center interventional randomized controlled trial

Study type(s)
Other

Health condition(s) or problem(s) studied
Communication skills in a student population

Interventions
Communication Skills Training involved a workshop designed for this study adhering to the foundational structure of the Calgary Cambridge Communication Guide to Medical Interviews (CCCM) as adopted and utilized by the Royal College of Surgeons in Ireland (RCSI) in their Human Factors in Patient Safety training for postgraduate surgical trainees. This training incorporates sessions designed to cultivate communication skills in trainees in national core surgical training who are then tested on an annual basis utilising a scoring rubric designed with explicit reference to the CCCM to simultaneously assesses communication content and process skills. For this study, CST workshops comprised an actor and a surgical tutor roleplaying as simulated patient (SP) and doctor respectively. They acted out two scenarios in which the tutor obtained informed consent for an intervention (specifically laparoscopic cholecystectomy). Students were provided with the framework of the CCCM to refer to whilst observing these scenarios. The first scenario was designed to exemplify good communication skills; encapsulating positive aspects of verbal and non-verbal communication; initiating the session appropriately and allowing the patient to express their level of understanding of the procedure in question, empathetic open listening and clear concise communication of the risks in non-medical terminology. This exemplar was then contrasted with a role play demonstration of poor communication. This consent was performed in a rushed and coercive fashion with poor verbal and non-verbal communication coupled with deliberate avoidance of terminology that a patient would readily understand. Highlighting these extreme examples allows for the subsequent development of an in-depth group discussion on the important points of communication within the consent process whilst the tutor referenced the CCCM structural framework for exemplifying good communication and developing a frame of reference for students in constructing a shared mental model so they could self-critique against a common shared standard. Additionally, the actor gave feedback to each interaction lending authenticity as the voice of a patient to the process. Students then voluntarily roleplayed as patients/ doctors consenting each other allowing for the organic encouragement of peer-to-peer learning. The control group continued to receive standard clinical teaching.

Randomisation was done outside of the study by the school administration who randomly assigns students to surgical groups eg clustered randomisation. Following that process the groups were randomly assigned to either the intervention or control using a sealed envelope.

Intervention Type
Other

Primary outcome(s)
Data was collected via the UCD scoring OSCE rubric and the GCRS-Global communication rating scale. Prior to the intervention both groups were given scores by blinded examiners and then after the intervention both groups underwent this. UCD scale is a mark equating to grade e.g. A+, A, A-, B=, B, B-..GCRS is a mark out of 3 for each domain of communication e.g. initiation of session, non verbal communication.

Key secondary outcome(s)
Students' confidence levels measured via anonymous survey before and after training.

Completion date
10/10/2024

Eligibility

Key inclusion criteria
Students attached to surgical teaching

Participant type(s)
Learner/student

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Upper age limit
65 Years

Sex
All

Total final enrolment
122

Key exclusion criteria
Not undergoing surgical teaching

Date of first enrolment
07/10/2023

Date of final enrolment
10/10/2024

Locations

Countries of recruitment
Ireland

Study participating centre
University College Dublin
Mater Misericordiae Hospital
Eccles Street

Dublin 7
Ireland
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Sponsor information

Organisation
University College Dublin

ROR
https://ror.org/05m7pjf47

Funder(s)

Funder type
Other

Funder Name
Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan
Datasets generated during and analyzed in this study will mainly be published and those that are not are avaiable upon request from Cathleen.mccarrick@ucd.ie

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		18/07/2025	21/07/2025	Yes	No