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A comparison of the effect of two methods of medical education on the clinical skills of dental students in oral surgery

Submission date
22/06/2021

Recruitment status
No longer recruiting

Registration date
04/08/2021

Overall study status
Completed

Last Edited
04/08/2021

Condition category
Oral Health

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[ ] Record updated in last year

Plain English summary of protocol

Background and study aims
Teaching in the oral surgery field in dentistry has been difficult to achieve, especially when the basic aim is to make learning as practical as possible. Lecture-based learning is a traditional approach where information is delivered in the form of a conventional PowerPoint presentation while the mentor recites the information, so students listen with attention and take notes. Case-based learning is about creating real case scenarios with interesting plots that often contain elements of conflict and need further discussion of the best differential diagnostic patterns and medical care plan. The aim of this study is to compare the effect of case-based learning versus lecture-based learning on the clinical skills of dental students in oral surgery.

Who can participate?
Undergraduate dental students (5th year) at the Damascus University

What does the study involve?
Students will be randomly divided into two groups. Group A will be taught the lectures by lecturers and passive learning. For Group B the monitor will present some clinical cases and scenarios and discuss them with the class as a whole. The duration of the study is about 8 weeks of lectures followed by 2 weeks of follow up. The average grade of each group is using a questionnaire at the start of the study and after 8 weeks of lectures.

What are the possible benefits and risks of participating?
The possible benefit is to help the students build a clinical understanding of medical theories. Efficient learning that is self-reliant and directed is vital to improving the educational environment. In this manner, students' demands will be taken into consideration. There is no potential risk for participating as long as the study does not involve any clinical intervention on patients.

Where is the study run from?
Damascus University (Syria)

When is the study starting and how long is it expected to run for?
May 2021 to September 2021

Who is funding the study?
Damascus University (Syria)

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
1193T/S

Study information

Scientific Title
The effect of case-based learning versus lecture-based learning on the clinical skills of dental students in oral surgery: a randomized controlled trial

Study objectives
The case-based learning (CBL) approach provokes critical thinking, self-teaching, and a more advanced level of understanding of the fundamental ideas, in spite of CBL being a student-focused approach compared to the lecture-based learning (LBL) approach.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 18/05/2021, the medical research committee at Damascus University faculty of dental medicine (University of Damascus Dental School Damascus, Syria; +963 (0)40404840; Osama.aljabban@gmail.com), ref: s/t 1193

Primary study design
Interventional

Study design
Single-center randomized controlled trial

Study type(s)
Other

Health condition(s) or problem(s) studied
Dental education

Interventions
Students who take the curriculum for the first time will be randomly and equally divided into two groups using sealed non-transparent coded envelopes prepared with the letters A or B printed on them. Students names will be covered and numbered in order to avoid any bias when marking the results.

Group A: students will be taught the oral surgery lectures by lecturers and passive learning (lecture-based learning [LBL] group).
Group B: the monitor will present some clinical cases and scenarios and discuss them with the class as a whole (case-based learning [CBL] group)

The duration of the intervention is about 8 weeks of lectures followed by 2 weeks of follow up.

Intervention Type
Behavioural

Primary outcome(s)
The average grade of each group measured using a questionnaire at baseline and after 8 weeks of lectures

Key secondary outcome(s)
1. Level of satisfaction measured by a Visual Analogue Scale (VAS) on a scale from 1 to 100 at baseline and after 8 weeks of lectures
2. Level of confidence measured using a self-report measure on a scale from 1 to 3 at baseline and after 8 weeks of lectures

Completion date
04/09/2021

Eligibility

Key inclusion criteria
1. Female and male undergraduate dental students (5th year)
2. Oral surgery education
3. At Damascus University
4. First time attempter (students who take the curriculum for the first time)

Participant type(s)
Other

Healthy volunteers allowed
No

Age group
Adult

Sex
All

Total final enrolment
60

Key exclusion criteria
1. Postgraduate students
2. Other specialties of dentistry
3. Non-dental students
4. Other universities
5. Students repeating this subject for the second time (not first time attempter)

Date of first enrolment
30/05/2021

Date of final enrolment
30/07/2021

Locations

Countries of recruitment
Syria

Study participating centre
Damascus University
Oral and Maxillofacial Surgery Department
Faculty of Dental Medicine
Mazzeh
Damascus
Syria
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Sponsor information

Organisation
Damascus University

ROR
https://ror.org/03m098d13

Funder(s)

Funder type
University/education

Funder Name
Damascus University

Results and Publications

Individual participant data (IPD) sharing plan
The data-sharing plans for the current study are unknown and will be made available at a later date

IPD sharing plan summary
Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet			03/08/2021	No	Yes